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# **EVENT LOCATIONS**



#### INTRODUCTION



This dossier prepared by Crop Care Federation of India pertains to the period April 2024 till end of March 2025 listing the achievements made in agriculture more prominently in the agrochemical Industry.

Our dossier this year assumes special importance due to Strides made by corporates to put India on the global map for record

Agriculture production with higher exports. The entire credit goes to both men and women farmers, trade channel partners, bureaucrats, our engineers and technicians for pushing agriculture to newer heights.

We have there after elaborated on the farmer training activities conducted during the period with the support of Agricultural Universities and our members companies.

Comparing the Technology in agriculture, we are looking forward to ensure economical sustainability. The global demand for food continues to rise and is projected to increase upto 102% to satisfy the requirements of 9 billion people by 2050.

The Indian agrochemicals industry is a critical pillar of the agricultural sector, which employs over 65% of India's workforce and contributes approximately 16.7% to the country's GDP. The industry is pivotal in reducing crop losses, thus enhancing crop productivity and ensuring food security for India's 1.4 billion population.

Indian agrochemicals market was valued at approximately US\$10.3 billion in 2024 and is projected to reach US\$14.5 billion by FY28, growing at a compound annual growth rate (CAGR) of 9%. Exports have been a significant growth driver, reaching US\$5.5 billion in FY23, with a CAGR of 14%, surpassing the United State to make India the second-largest agrochemical exporter globally. Projections indicate exports could exceed approximately US\$10 billion in the next four years.

Currently, around 22% of India's crop yield is lost to pests, weeds, and diseases, underscoring the critical role of agrochemicals in crop protection.

There is enough space for growth for the industry as domestic consumption remains low at 0.4 kg per hectare as compared to the global average of 2.4 kg/ha. Moreover, India imports nearly 40% of its agrochemical requirements, primarily from China followed by USA at 16%.

The Indian agrochemicals industry is poised for significant growth, driven by favorable policies, export potential, and innovation. However, addressing regulatory, environmental, and supply chain challenges will be crucial to sustaining this trajectory. India needs to increase investment in R&D to focuses on innovation and invention.

Adoption of precision agriculture, drone-based spraying, and digital technologies enhances the field performance.

With strategic reforms and a focus on sustainability, India has the potential to emerge as a global leader in agrochemicals, contributing to both food security and economic growth.

# **ROLE OF CROP CARE FEDERATION OF INDIA**



Crop Care Federation of India is one of the oldest association with over 50 leading Indian companies, not only "Basic Technical Producers" but also major formulators, thus representing the complete gamut of the agrochemical business.

CCFI is an non- profit, non- commercial organization with its mission to build a responsible image for the agrochemical industry, celebrating its 62<sup>nd</sup> year this year.

- Among the other leading activity of CCFI is a 'training and educational services to farmers', to familiarize with the latest technology in agriculture including imparting knowledge on right time and dosage while using agrochemicals.
- CCFI and their members undertake extensive extension activities to supplement the effort by the government. The object is to reverse the widening disparity in rural and urban income by reducing crop losses, improving the yield and quality of the individual cultivators.
- Act as a catalyst from growth and development we are in constant dialogue with the Ministry of Agriculture & Farmers welfare, Ministry of Chemicals & Fertilizers, Ministry of Commerce and Industries, Ministry of Finance, Ministry of Women and Child Development, Minister of Civil Aviation and Ministry of Environment Forest and Climate Change to make them aware of the issues faced by the industry and framing of government policies in the interest of Industry, distribution network and farmers at large.

We are in regular contact with ICAR, IARI, CSIR and regulating bodies, interface with Agriculture Universities, Research stations and specialized government departments like- FSSAI and APEDA. We encourage members to conform to international standards for the exports markets.

Lastly CCFI has reliable statistical data bank on demand supply, crop protection and consumption of major molecules in different crop segments.

We also collate data on exports and imports with major countries globally.

#### **ROLE OF MEMBERS ON "MAKE IN INDIA"**

Our members represent major agrochemical corporate who not only have their manufacturing facilities but constitute almost over 80% of the exports to 167 Countries globally giving credence to the fact that Indian Agrochemicals are well accepted across the world.

This is in line with government policy "Atmanirbhar Bharat" or promoting "Make in India". The effort is to become self-reliant, curtail surge in imports primarily from China which had till now made Indian manufacturing non-viable in certain molecules. The business model of our members is fundamentally focused on not only manufacturing Technical grade but also intermediates and formulations which are presently being imported.

Another area has been innovation in Research & Development where our members have established world class research facilities including Discovery Centres such that newer molecules, biological etc. are easily produced.

The geographical coverage of our members is in deep pockets of the country throughout the consumption season. We give the options to the farmer to use the best possible agrochemicals based on the recommendation in the Package of Practices by Agricultural Universities, Central and State Governments.

- 1. Add Value Agencies
- 2. Agrico Organics Ltd.
- 3. Agrocel Industries Pvt. Ltd.
- 4. Anu Products Ltd.
- 5. Aristo Bio-tech and Life Science Ltd.
- 6. Astec Life Sciences Ltd.
- 7. Atul Ltd.
- 8. Best Agrolife Ltd.
- 9. Bharat Rasayan Ltd.
- 10. Biostadt India Ltd.
- 11. Bhagiradha Chemicals & Industries Ltd.
- 12. Crop Growth (India) Pvt. Ltd.
- 13. Excel Industries Ltd.
- 14. Gharda Chemicals Ltd.
- 15. Godrei Agrovet Ltd.
- 16. Hemani Industries Ltd.
- 17. Heranba Industries Ltd.
- 18. Hikal Ltd.
- 19. HIL (India) Ltd.
- 20. HPM Chemicals & Fertilizers Ltd.
- 21. IFFCO-MC Crop Science Pvt. Ltd.
- 22. India Pesticides Ltd.

- 23. Indofil Industries Ltd.
- 24. Insecticides (India) Ltd.
- 25. Krishi Rasayan Exports (P) Ltd.
- 26. Meghmani Organics Ltd.
- 27. NACL Industries Ltd.
- 28. NATCO Pharma Ltd.
- 29. Nichino India Pvt. Ltd.
- 30. Parijat Industries (I) Pvt. Ltd.
- 31. Punjab Chemicals & Crop Protection Ltd.
- 32. R3 Crop Care Pvt. Ltd
- 33. Safex Chemicals India Ltd.
- 34. Sandhya Group of Companies
- 35, Shriram Fertilizers & Chemicals
- 36. Spectrum Ethers Pvt. Ltd.
- 37. Sudarshan Farm Chemicals India Pvt. Ltd.
- 38. SML Limited
- 39. Sumitomo Chemical India Ltd.
- 40. Swal Corporation Ltd.
- 41. UPL Ltd.
- 42. Vibrant Greentech India Pvt. Ltd.

#### **OUR MASCOT: JAGRAT KISAN - KHUSHAL KISAN**



Crop Care Federation of India felt the need for creating their own 'mascot' symbolizing the end user –Farmer, for whom as an industry we have a commitment to ensure his safety, well-being and generating higher income thereby resulting in his enhanced awareness for long term prosperity. The tag line "Jagrat kisan- Khushal Kisan" truly syncs with the pictorial mascot.

We are an agrarian country with almost 14.5 Cr. farmers, directly involved with agriculture which forms a bridge between rural and urban divide.

The mascot depicts visibility of our federation with the farmer depicting no particular state or culture. It is a costumed character, a prosperous farmer with traditional headgear and attire. It also signifies the power of the farmer!

The mascot is our goodwill ambassador especially for the farming community, trade partners and government. It also creates a physical and emotional bond with our target audience.

It would have significant impact on formulating our promotional and social media strategy.

We have been using this Mascot in our promotional material both in print and in video films. Our bag containing our PPE safety kits also now has this insignia to create awareness among the farming community.

# **CHALLENGES IN INDIAN AGRICULTURE**



Over the years, several legacy issues have emerged in Indian agriculture. One set of challenges is related to increasing labour productivity in the average Indian farm. Many Indian farms are caught in a low labour productivity trap, leading to depleted incomes. Intensification of inputs have been one avenue of increasing land productivity,

which have delivered impressive results. Increase in area under irrigation since the green revolution and increased use of chemical fertilizers and pesticides manifold. This Green Revolution ensured India going from a cereal deficit country to a cereal surplus one. However the intensification of inputs apart from their rising cost to farmers is also posing serious environmental costs to the nation and indeed, the world. This is where the second set of challenges comes into play, which are related to the sustainability of the current set of practices being prescribed in India.

# **Productivity Enhancing Challenges**

Labour Productivity is constrained owing to land sizes. The average farm size in India has been consistently becoming smaller, hampering labour productivity and limiting economics of scale.

Owing to small plot size, the labour productivity of these farms is hampered as mechanization is not a viable option. The gains to labour productivity from mechanization accure at the large land holding level. It makes little economic sense to investment in mechanization for a small and marginal farmer.

Despite significant strides independence a large proportion of farms in India still depend on the monsoon for irrigation, limiting their ability to increase cropping intensity. At the national level, 52% of India gross cropped area (GCA) is under irrigation coverage. Increasing irrigation coverage is also critical to the goal of doubling farmers income.

Despite gaps, there has been a substantial expansion in the availability of technologies such as high- yielding verities of seeds, irrigation, fertilizers, and pesticides to farmers. This resulted in an expansion in land productivity, ensuring India's cereal security and resilience to famines. The public procurement and distribution network ensured cereals were procured from farmers at announced Minimum Support Price (MSP).

# **Dependence on Borrowing**

According to NABARD survey, approximately 30% of all agricultural households had borrowed money from non-institutional sources, which is primarily made up of relatives/ friends or informal money lenders. As per the survey, farmers with smaller plot sizes took a greater share of loans from the institutional lenders than did farmers with larger plot sizes (>2 hectares). This indicates that more small and marginal farmers rely on informal sources of credits than large ones.

A positive relationship has been found with increased formal credit availability and agriculture GDP growth, primarily through enabling greater input use. A 10% increase in institutional credit flow to agriculture leads to a 2.1% increase in GDP, controlling for inflation. A 10% increase in institutional credit leads to a 1.7% increase in fertilizer consumption, a 5.1% increase in pesticides consumption and 10.8% increase in tractor purchases. Therefore, through enabling the use of more inputs, credit should lead to an increase in land productivity, at least to a certain point.

#### Role of Extension Services

Extension services serve the purpose of bringing best modern practices to the level of the farmer. Extension services are perhaps the most critical link in raising land productivity through industrial agriculture. India as one of the largest agricultural research system in the world, and provide an excellent overview of India's network of agriculture extension. Expanded investment in agriculture research and education to 1% of agri- GDP from 0.7% of agri- GDP to boost land productivity.

The committee on doubling farmers income recognized several short comings with the existing system of extension. They recognized that extension services have been focusing more on production aspects, whereas the need of the farmers had shifted to post production aspects. Public extension services are skewed in favour of the crop sector and needed to take more holistic view of the agriculture sector including animal husbandry for instance. Committee also questioned whether the current system of extension was able to discourage inefficient farm practice, such as flood irrigation imbalance in the use of fertilizers and pesticides. They also recognized that extension services were not focused on serving all aspects of the agricultural supply chain. Nor were the targets set for extension agencies outcome oriented.

The purpose of highlighting the underdeveloped nature of extension services in India. Funding constraints lead to manpower constraints. However the effectiveness of the existing extension systems has also been questioned by a government committee. Underdeveloped extension services have not only created a yield gap, but also led to the proliferation of inefficient and unsustainable practices, causing major sustainability challenges.

#### **IMPORTANCE & BENEFITS OF PESTICIDES**



Pesticides are important. They help farmers grow more foods on less land by protecting crops from pests, diseases and weeds well as raising productivity per hectare.

Production of major crops has more than tripled since 1960, thanks in large part to pesticides. For example, rice- which feeds almost

half the people on our planet- has more than double in production. The amount of wheat has increased nearly 160 percent.

In farming it's super important to deal with pest to get increased productivity of crops and makes sure there's enough food for everyone around the world. Pesticides play a big role in protecting crops, but they bring lots of different things to think about in farming. Let's take a closer look at pesticides, talking about how they help, what happens because of them, the different types, and the problems that come with using them.

Without pesticides, more than half of our crops would be lost to pests and diseases. Between 26 and 40 percent of the world's potential is lost annually because of weeds, pest and diseases. Without proper crop protection, these losses could easily double.

Estimates suggest that annual crop losses due to pests and diseases generally range from 10% to 30% in India.

#### **Benefits of Pesticides**

Food crops must compete with 30,000 species of weeds, 3,000 species of worms and 10,000 species of plant eating insects. And threats don't stop once crops leave fieldsbugs, molds and rodents can all cause damage in storage. Pesticides can prolong the life of crops and prevent post-harvest losses.

Currently about 925 million people around the world one in seven of us are going hungry. To reduce hunger, we need to increase food productivity and pesticides help farmers do that.

Pesticides enable farmers to produce safe foods at affordable prices. Crop quantity rely on crop protection. They also help farmers provide an abundance of nutritious, all year round foods, which are necessary for human health. Fruits and vegetables which provide essential nutrients are more abundant and affordable. Grains milk and proteins, which are vital to childhood development, are more widely available because of lower costs to produce food and animal feed.

Crop quantity and quality rely on crop protection. Moreover, pesticides decrease exposure to food contaminated with harmful micro- organisms and naturally occurring toxins, preventing food- related illnesses.

In the dynamic landscape of modern agriculture, the responsible use of pesticides emerges as a delicate art, requiring a nuanced understanding of their benefits, effects, and potential drawbacks. Striking a harmonious balance between reaping the rewards of enhanced agricultural productivity and mitigating environmental and health concerns is imperative for the sustainable future of agriculture.

#### POSITIVE PERCEPTIONS TOWARDS AGROCHEMICAL INDUSTRY



Over the years the agrochemical Industry has worked meticulously to bring about a perceptional change towards use of agrochemicals. We strive to promote and safeguards the positive image of the industry against the onslaught of negative publicity spread by pseudo activists, scientists with ulterior motive and foreign funded NGO's who are

unsuccessfully trying to malign the agrochemical industry, Indian agriculture and our farming community. We strongly feel, this is undermining the effort of the Indian agrochemicals industry and the Indian farmers who have ensured increased quantum production, resulting in self sufficiency of food in the country.

Our member companies over the years have created brands of value with easy recall by the farmer. In fact the sale through the dealers is of brands chosen by the farmer. However in case of "misbranding" pesticides, the origin can possibly be traced by the affected companies as they are sold through a network of distributors and dealers and not directly to the farmers. The move by the government to enforce use of QR code ensures traceability. Though the exact percentage of such pesticides is speculative, it is restricted to certain areas.

CCFI is continuously taking up with the bureaucracy the state government and the farmers at large who have understood the importance & the benefits by use of agrochemicals is not only minimizing the crop losses but also facilitating and increasing production.

It is worth mentioning that the quality manufactured by our members has found acceptance not only in India, but abroad also as the result of sampling prove that only 1.174% of the samples drawn did not meet the specification.

**Source**: As per Hon'ble Minister of Agriculture & FW Shri Narendra Singh Tomar, answered for Lok Sabha Unstarred Question no. 309 dated 15<sup>th</sup> September, 2020.

#### DEMOLISHING MYTHS ON USE OF PESTICIDES IN INDIA



To demystifying the misconception on use of pesticides in India we have listed and logically rebutted the myths for the benefits of readers. These need to be propagated by all scientists, bureaucrats & trade partners.

Myth- Indian farmers use excessive Pesticides



**Reality**- India ranks 2<sup>nd</sup> in the world in agriculture production after China, but it ranks 12<sup>th</sup> in pesticide use. Most other countries including USA and those in the EU such as France, Spain, Italy, Germany etc. use more pesticides then India on per unit area and per unit of output basis (source FAOSTAT).

"Indian farmers use excessive pesticides" is a false propaganda by some vested aimed at reducing market success to our agriculture products globally.

Myth- Agriculture commodities in India carry high level pesticides residues.



**Reality-** Annual studies under All India Network Project on Pesticide Residue show that on average only about 2.2% of the agri commodities show pesticide residues above Maximum Residual Limit (MRL). In other words, 98% of our agri commodities do not carry unacceptable levels of pesticide residue. This compares well with the data from other countries. MRLs are legally imposed commercial standards and not safety standards.

Myth- Pesticides use has led to high cancer cases in India.



**Reality-** Globally India ranks 172<sup>nd</sup> in cancer rates. Australia, New Zealand, Ireland, USA and Denmark are the top 5 that leads in cancer rates. (Source WHO)

The largest incidence of cancer in India are in the states like Mizoram, Meghalaya, Sikkim etc that hardly use pesticides in agriculture. Punjab ranks 24<sup>th</sup> among various states in each standardized cancer rates in India. (Source ICMR)

Group I list of WHO's International Agency for Research on Cancer (IARC) contains 120 substances considered to be carcinogenic to humans. Not a single agrochemical Figures in this list

Singapore with nil area under agriculture has more cancer rates than India.

**Myth-** Accidental exposure to pesticides spray drift affects farmers.



**Reality-** Pesticides are sprayed in ground operations, diluted with water. The water content would be as high as 99% in the pesticides spray when applied to the crops. Accidental short exposures to such pesticides spray drift would not deliver lethal dose to the spraying person.

Of course, it is always recommended that such exposures are avoided by using complete PPE safety kits.

The effects of drift through drones is being studied.

**Myth-** Indian market is full of spurious pesticides.



**Reality-** A misconception (fake/ spurious/illegal/duplicate/counterfeit etc.) are coined words, not figuring in the insecticides Act 1968, damaging the image of the Indian agrochemical industry. In fact on analyzing 3,38,182 sample drawn during last 5 years by Govt only 1.17% were found to be not meeting specification or substandard. There were hardly any spurious samples as propagated by importing lobby.

Myth- India's water system, remain highly polluted with pesticides.



**Reality-** Fish species are highly sensitive to water quality and toxic pollutants.

India ranks the third largest in Inland fish production. This shows that our water system remains conducive to production of fish.

Andhra Pradesh & Punjab have the highest pesticides consumption yet inland fish productivity at 6560 kg per acre of inland water area ,is higher than other states in India.

**Myth-** Pesticides are the primary means to commit suicide.



**Reality-** Self hanging is the most common method for suicide in India. Sikkim that does not allow use of pesticide has suicide rates four times then in Punjab. (Source NCRB) 93% of the suicides in the India are by non- farmers i.e, by people not engaged in agriculture.

Myth- India uses pesticides that are banned in other countries.



**Reality-** Use of pesticides in every country depends on local crops, climate, environment and occurrence of pests and diseases.

Pesticides registration/ use therefore varies from one country to another and are granted after stringent field and laboratory trials, with strong element of sovereignty. The number of registered pesticide in India is 335 as against over 450 in EU.

Myth- Organic and bio- pesticides are safer than chemical pesticides.



**Reality-** All substance used as pesticides whether organic, bio or synthetic undergo the same toxicity, safety and efficacy assessments before allowed for commercial introduction.

Crop protection industry in fact offers a variety of pesticides products- organic, bio and synthetic- to farmers enabling a diverse and inclusive approach to pest control.

Stanford University, USA conducted study and found no evidence for differences in nutritional content for over 15 nutrients between conventional and organic produce. As per AINP vegetable sample (405 samples) were collected from organic outlets across the country. As high as 12.3% among them had measurable crop protection chemical residues.

**Myth-** Indian manufacturers are not able to manufacture quality meeting global standards.



**Reality-** Indian manufacturers produce quality which is in fact superior than imported products in terms of purity profile and efficacy. Our members account for 80% of exports to 130 countries with acceptable quality. The price is also not only competitive but lower by 50-75 % once produced indigenously. However, unethical practices are used in India to see that even after an expiry of the patent, MNCs keep their monopoly and Indian manufacturers are denied registration on some dubious grounds. There are now heavy investment in R&D by Indian companies with world class Researchers centers for innovations.

**Myths-** Introduction of neonicotinoid insecticides adversely affected honey production.



**Reality-** The truth about the effect of pesticides on the honey production in India is to the contrary.

Contrary to the popular perception, the honey production in India steadily increased fter the introduction of neonicotinoids

Honey production over the last three decades has grown steadfast in India from the first part of the 1990s (45,000MT) until last recorded in 2018-19(1,13,000)

We believe that the allegation spread by the environmentalists that use of pesticides in farming is endangering the India's bee colony is totally false and unwarranted.

**Myths-** Pesticides applied for non-agriculture/ house hold is safe.



**Reality-** Pesticides are applied at much higher concentration for non- agricultural pest control, when compared to the ones used against crop pests.

- Household pesticides are toxic pesticides similar to the once sprayed on the field crop.
- Pesticides in the field used on various crop are in open environment whereas sprays and vaporizer used at home are in closed contained spaces.
- The advertisements demonizing pesticides used in agriculture by environmental activists are totally threatening to misguide the public at large.

# **CROP PRODUCTION DATA**



In major crops the production has increased and so has the yield, which is the major task for the country.

Crop	Area 2023-24	Area 2024-25	Production 2023-24	Production 2024-25	Yield 2023-24	Yield 2024-25
Rice	478.28	514.23	1378.25	1490.74	2882	2899
Wheat	318.33	327.61	1132.92	1175.07	3559	3587
Maize	112.41	120.17	376.65	422.81	3351	3518
Barley	5.51	6.05	16.99	18.44	3082	3049
Jower	40.76	39.84	47.37	48.8	1162	1225
Bajra	73.75	72.1	107.16	108.63	1453	1507
Ragi	12.15	12.29	16.7	18.34	1375	1492
Cereals	1045.99	1096.7	3080.52	3287.21	2945	2997
Tur	41.31	43.28	34.17	35.61	827	823
Gram	95.87	96.08	110.39	113.37	1151	1180
Urad	35.36	30.23	23.19	21.06	656	697
Moong	51.87	55.72	31.03	38.19	598	685
Lentil	17.43	17.06	17.91	17.72	1028	1038
Total Pulses	275.05	276.24	242.46	252.38	881	914
Total Food Grains	1321.04	1372.94	3322.98	3539.59	2515	2578
Groundnut	47.07	57.54	101.8	118.96	2163	2067
Castorseed	10.41	9.31	19.59	17.3	1881	1858
Sesamum	15.31	15.33	8.47	8.29	553	541
Nigerseed	0.83	0.51	0.27	0.15	323	292
Soybean	132.55	129.57	130.62	151.8	985	1172
Sunflower	1.51	1.74	1.73	1.96	1144	1129
Rapeseed Mustard	91.83	86.29	132.59	126.06	1444	1461
Linseed	1.75	1.78	1.13	1.13	644	633
Safflower	0.65	0.57	0.5	0.43	768	756
Total oil Seed	301.92	302.65	396.69	426.09	1314	1408
Sugarcane	57.4	53.58	4531.58	4501.16	78953	84006
Cotton	126.88	112.3	325.22	306.92	436	465
Jute & Mesta	6.37	5.71	96.92	87.47	2737	2759
Tobacco	4.1		8.66	_	2109	
Sannhemp	0.09	_	0.4	_	801	
Guarseed	30.89	_	16.65	_	539	

# SCHEMES FOR WELFARE OF FARMERS



#### **CENTRAL SECTOR SCHEMES**

# 1. Pradhan Mantri Kisan Samman Nidhi (PM-KISAN)

PM-KISAN is a central sector scheme launched on 24th February 2019 to supplement financial needs of land holding farmers, subject to exclusions. Under the scheme, financial benefit of Rs. 6000/- per

year is transferred in three equal four-monthly installments into the bank accounts of farmers' families across the country, through Direct Benefit Transfer (DBT) mode. Till now, Rs. 2.81 lakh crores have been transferred through Direct Benefit Transfer (DBT) to more than 11 crores beneficiaries (Farmers) through various instalments.

# 2. Pradhan Mantri Kisan Maan Dhan Yojana (PM-KMY)

Pradhan Mantri Kisan Maandhan Yojna (PMKMY) is a central sector scheme launched on 12th September 2019 to provide security to the most vulnerable farmer families. PM-KMY is contributory scheme, small and marginal farmers (SMFs), subject to exclusion criteria, can opt to become member of the scheme by paying monthly subscription to the Pension Fund. Similar, amount will be contributed by the Central Government.

PMKMY is taking care of the farmers during their old age and provides Rs. 3,000 monthly pension to the enrolled farmers once they attain 60 years of age. Life Insurance Corporation (LIC) is pension fund manager and registration of beneficiaries is done through CSC and State Govts.

#### 3. Pradhan Mantri Fasal Bima Yojana (PMFBY)

PMFBY was launched in 2016 in order to provide a simple and affordable crop insurance product to ensure comprehensive risk cover for crops to farmers against all non-preventable natural risks from pre-sowing to post-harvest and to provide adequate claim amount. The scheme is demand driven and available for all farmers.

#### 4. Modified Interest Subvention Scheme (MISS)

The Interest Subvention Scheme (ISS) provides concessional short term agri-loans to the farmers practicing crop husbandry and other allied activities like animal husbandry, dairying and fisheries. ISS is available to farmers availing short term crop loans up to Rs.3.00 lakh at an interest rate of 7% per annum for one year. Additional 3% subvention is also given to the farmers for prompt and timely repayment of loans thus reducing the effective rate of interest to 4% per annum.

# 5. Agriculture Infrastructure Fund (AIF)

AIF was introduced with a vision to transform the agriculture infrastructure landscape of the country. The Agriculture Infrastructure Fund is a medium - long term debt financing facility for investment in viable projects for post- harvest management infrastructure and community farming assets through interest subvention and credit guarantee support.

# 6. Formation & Promotion of new 10,000 FPOs

The Government of India launched Formation and Promotion of 10,000 Farmer Producer Organizations (FPOs)" in the year 2020. The scheme has a total budgetary outlay of Rs.6865 crores. Formation & promotion of FPOs are to be done through Implementing Agencies (IAs), which further engage Cluster Based Business Organizations (CBBOs) to form & provide professional handholding support to FPOs for a period of 5 years. Further, FPOs are onboarded on National Agriculture Market (e-NAM) platform which facilitate online trading of their agricultural commodities through transparent price discovery method to enable FPOs to realize better remunerative prices for their produce.

# 7. National beekeeping and Honey Mission (NBHM)

Scheme entitled National Beekeeping & Honey Mission (NBHM) was launched in 2020 under Atma Nirbhar Bharat Abhiyan for its implementation in the field for overall promotion and development of scientific beekeeping & to achieve the goal of "Sweet Revolution". Honeybees/ beekeeping have been approved as 5<sup>th</sup> Input for Agriculture. Four World Class State of the Art Honey Testing Labs and 35 Mini Honey Testing Labs have been sanctioned under National Beekeeping & Honey Mission (NBHM) for testing of honey.

# 8. Market Intervention Scheme and Price support Scheme (MIS-PSS)

Ministry of Agriculture & Farmers Welfare implements the Price Support Scheme (PSS) for procurement of pulses, oilseeds and copra. Market Intervention Scheme (MIS) for procurement of agricultural and horticultural commodities which are perishable in nature and are not covered under the Price Support Scheme (PSS). The objective of intervention is to protect the growers of these commodities from making distress sale in the event of a bumper crop during the peak arrival period when the prices tend to fall below economic levels and cost of production.

#### 9. Namo Drone Didi

The Government has recently approved a Scheme for providing drones to the Women Self Help Group (SHGs). With an outlay of Rs. 1261 Crores the scheme aims to provide drones to 15000 selected Women Self Help Group (SHGs) for providing rental services to farmers for agriculture purpose (application of fertilizers and pesticides). Under this Scheme, Central Financial Assistance @ 80% of the cost of drone and accessories/ancillary charges upto a maximum of Rs. 8.0 Lakhs will be provided to the women SHGs for purchase of drones.

Looking into the unique advantages of Drone technologies in agriculture, a Standard Crop Specific Operating Procedures (SOPs) released the for use of drones in pesticide and nutrient application in public domain, which provides concise instructions for effective and safe operations of drones.

#### **CENTRALLY SPONSORED SCHEMES**

## 1. Rastriya Krishi Vikas Yojana

The scheme focuses on creation of pre & post-harvest infrastructure in agriculture and allied sectors that help in supply of quality inputs, market facilities, etc to farmers. It provides flexibility and autonomy to states to implement projects as per the local farmers' needs and priorities from a bouquet of activities in agriculture and allied sectors. The scheme aims to fill the resources gap of agriculture and allied sectors by providing financial support to states for undertaking various activities to increase in overall growth of agriculture and allied sectors and farmers' income.

# 2. Soil Health Card (SHC)

Soil health card provides information to farmers on nutrient status of their soil along with recommendation on appropriate dosage of nutrients to be applied for improving soil health and its fertility. The Scheme rolls out a decentralized system of soil testing which will help in developing a nationwide soil fertility map on a GIS platform that can easily be integrated with the real time decision support systems being developed.

# 3. Rainfed Area Development (RAD)

RAD is being implemented since 2014-15. RAD adopts an area based approach in cluster mode for promoting Integrated Farming System (IFS) which focuses on multi-cropping, rotational cropping, inter-cropping, mixed cropping practices with allied activities like horticulture, livestock, fishery, apiculture etc. to enable farmers not only in maximizing the farm returns for sustaining livelihood, but also to mitigate the impacts of drought,

#### 4. Per Drop More Crop (PDMC)

In order to increase water use efficiency at the farm level through Micro Irrigation technologies i.e. drip and sprinkler irrigation systems, Per Drop More Crop (PDMC) scheme was launched during 2015-16. The Micro Irrigation helps in water saving as well as reduced fertilizer usage through fertigation, labour expenses, other input costs and overall income enhancement of farmers.

#### 5. Micro Irrigation Fund (MIF)

A Micro Irrigation Fund (MIF) of initial corpus Rs 5000 crore has been created with NABARD with major objective to facilitate the States in mobilizing the resources for expanding coverage of Micro Irrigation. The Ministry provides interest subvention on the loan availed by the States which is met from PDMC Scheme.

# 6. Paramparagat Krishi Vikas Yojana (PKVY)

Paramparagat Krishi Vikas Yojana (PKVY) aims to increase soil fertility and thereby helps in production of healthy food through organic practices without the use of agrochemicals. The scheme is implemented in a cluster mode with unit cluster size of 20 hectares. A group shall comprise minimum 20 farmers. Farmers in a group can avail benefit of maximum of 2 ha as per provision of PKVY. 25 such clusters are converted into one large cluster of about 500 ha area to facilitate marketing of organic produce.

# 7. Sub-Mission on Agriculture Mechanization (SMAM)

aims at catalyzing an accelerated but inclusive growth of agricultural mechanization in India with the objectives of Increasing the reach of farm mechanization to small and marginal farmers and to the regions where availability of farm power is low, promoting 'Custom Hiring Centres' to offset the adverse economies of scale arising due to small landholding and high cost of individual ownership, creating hubs for hi-tech& high value farm equipments, creating awareness among stakeholders through demonstration and capacity building activities and Ensuring performance testing and certification at designated testing centers located all over the country.

# 8. Crop Residue Management

Its objectives include protecting environment from air pollution and preventing loss of nutrients and soil micro-organisms caused by burning of crop residue through promoting in-situ management of crop residue. In this regard, it proposes to set up Farm Machinery Banks for custom hiring of in-situ crop residue management machinery. It also aims to creating awareness among stakeholders through demonstration, capacity building activities and differentiated information, education and communication strategies for effective utilization and management of crop residue.

# 9. Agro-forestry

Agro-forestry was conceived on the recommendation of the National Agro-forestry Policy 2014 to promote plantation on farmlands. The restructured agro-forestry under RKVY is aimed to provide Quality Planting Materials (QPM) and the certification in order to promote planting of trees on farm land for improving the livelihood of farmers.

# 10. National Food Security Mission (NFSM)

The Mission aims at increasing production of rice, wheat, pulses, coarse cereals (Maize and Barley) and Nutri-Cereals through area expansion and productivity enhancement in a sustainable manner in the identified districts enhancing farm level economy to restore confidence amongst the farmers and post harvest value addition at farm gate.

# 11. Sub-Mission on Seed and Planting Material (SMSP)

the entire gamut of seed production chain, from production of nucleus seed to supply of certified seeds to the farmers, to provide support for creation of infrastructure conducive for development of the seed sector, support to the public seed producing organisations for improving their capacity and quality of seed production, create dedicated seed bank to meet unforeseen circumstances of natural calamities.

# 12. National Mission on Edible Oils (NMEO)-Oil Palm

in order to promote oil palm cultivation for making the country Aatamnirbhar in edible oils with special focus on North-Eastern States and A&N Islands.

# 13. Mission for Integrated Development of Horticulture (MIDH)

Mission for Integrated Development of Horticulture (MIDH), a Centrally Sponsored Scheme was launched during 2014-15 for holistic growth of the horticulture sector covering fruits, vegetables, root and tuber crops, mushrooms, spices, flowers, aromatic plants, coconut, cashew, cocoa and Bamboo. establishment of new orchards and gardens rejuvenation of unproductive, old, and senile orchards, protected cultivation, promotion of organic farming, pollination support through bee keeping, horticulture mechanization, post-harvest management (phm) and marketing infrastructure etc.

# 14. National Bamboo Mission (NBM)

mainly focus on the development of complete value chain of the bamboo sector. It is envisaged to link growers with consumers with a cluster approach mode.

# 15. Integrated Scheme for Agriculture Marketing (ISAM)

Supports state governments in governing the agricultural produce marketing through creation and improvement of market structures, capacity building and generating access to market information.

National Agriculture Market (e-NAM) is a pan-India electronic trading portal which networks the existing APMC mandis to create a unified national market for agricultural commodities.

# 16. Mission Organic Value Chain Development for North Eastern Region

Aims at development of commodity specific, concentrated, certified organic production clusters in value chain mode to link growers with consumers and to support the development of entire value chain starting from inputs, seeds, certification, to the creation of facilities for collection, aggregation, processing, marketing and brand building initiative in Northeast Region

# 17. Sub-Mission on Agriculture Extension (SMAE)

The scheme aims at making the extension system farmer driven and farmer accountable by disseminating technology to farmers through new institutional arrangements viz. Agricultural Technology Management Agency (ATMA) at district level to operationalize extension reforms in a participatory mode. Digital initiatives taken up in agricultural extension include;

- VISTAAR- Virtually integrated Systems To Access Agricultural Resourcs being developed as a DPI for Agriculture Extension
- Apurva Al- Capturing farmer innovations
- · Wadhwani- Realtime News monitoring
- Kisan Call Centre for direct contact with Agri experts
- RAWE- Integration of Agri students for behavioral interaction
- IMD- Weather forecast integrated along with advisory delivery through VISTAAR
- NRLM- Capacity building on Digital Extension

# SUBSIDIES PROVIDED IN AGRICULTURAL SECTOR



#### SEEDS

The Department is implementing Sub-Mission on Seeds & Planting Materials (SMSP) from the year 2014-15 to promote production and multiplication of quality seeds of agricultural crops, so that the required quantities of seeds

could be made available to farmers in the country. To upgrade the quality of farmers' saved seeds, financial assistance for distribution of foundation/certified seeds at 50% cost of the seeds for cereal crops and 60% for pulses, oilseeds, fodder and green manure crops for production of quality seeds is available /provided for one acre per farmer under the component Seed Village Programme of SMSP. The objective of this scheme is to make available improved /high yielding varieties of seeds to farmers in time and to achieve self-sufficiency in respect of seeds at village level itself and helps in enhancing productivity/production of various crops and also improving profitability of the agriculture sector (farmers' income) in the country.

#### **MECHANIZATION & TECHNOLOGY**

# A Sub Mission on Agricultural Mechanization (SMAM)

A Sub Mission on Agricultural Mechanization (SMAM) is being implemented 2014-15. The SMAM provides a suitable platform for converging all activities for inclusive growth of agricultural mechanization by providing a 'single window' approach for implementation with a special focus on small & marginal farmers with the objectives of Increasing the reach of farm mechanization, Promoting Custom Hiring Centres, Creating hubs for hi-tech & high value farm equipments and Creating awareness among stakeholders

# > Stubble Burning

A special Scheme to support the efforts of the Governments address air pollution due to stubble burning and to subsidize machinery for farmers for in-situ management of crop residue, a new Central Sector Scheme on 'Promotion of Agricultural Mechanization for In-Situ Management of Crop Residue.

### **IRRIGATION**

Subsidy component is only admissible for PMKSY (Per Drop More Crop) Its main focus is on enhancing water use efficiency at farm level through precision/micro irrigation (Drip and Sprinkler Irrigation). The aim is to optimize the use of available water resources. This component also supports micro level water storage or water conservation/management activities to supplement Micro Irrigation.

#### **GODOWNS**

To promote creation of scientific storage capacity for storing farm produce, processed farm produce and agricultural inputs etc., to reduce post-harvest & handling losses, promote pledge financing and market access including marketing infrastructure (other than storage), the DAC&FW is implementing a capital subsidy sub-scheme "Agricultural Marketing Infrastructure (AMI)" of Integrated Scheme for Agricultural Marketing (ISAM) across the country. Under the scheme, the subsidy @ 25% for plain areas and 33.33% for NER, hilly area, Women/SC/ST promoters & FPOs etc is available.

#### **FERTILISER**

Urea is being provided to farmers at a statutory notified Maximum Retail Price (MRP). The MRP of a 45 kg bag of Urea is Rs.242 per bag (exclusive of charges towards neem-coating and taxes as applicable). The difference between the delivered cost of Fertilizers at farm gate and net market realization by the urea units is given as subsidy to the Urea manufacture/importer by the Govt. of India. Accordingly, all farmers are getting Urea at affordable subsidized price. With respect to Phosphatic and Potassic (P&K) Fertilizers, the Department of Fertilizers is providing subsidy on P&K Fertilizers. Further, as far as P&K is concerned, the Government has implemented Nutrient Based Subsidy Policy w.e.f. 1.4.2010 for Phosphatic and Potassic (P&K) Fertilizers. Under the policy, a fixed amount of subsidy, decided on an annual basis, is provided on subsidised P&K fertilizers depending on their nutrient content. Under this policy, MRP is fixed by fertilizer companies as per market dynamics at reasonable level which is monitored by the Government. Accordingly, any farmer including a poor and marginal farmer who is buying these fertilizers is getting benefits of subsidy. Most of the schemes are targeted to benefit the small and marginal farmers, the classification of which is based on the size of their land holding.

# **IMPORTANCE OF PACKAGE AND PRACTICES**



Package of Practices promote the adoption of sustainable farming techniques that prioritize soil health, water conservation, biodiversity conservation, and agro ecological principles.

In Indian agriculture, Package and Practices (POP) are crucial for boosting crop productivity, achieving food security, and promoting sustainable farming by providing scientific guidance on optimal resource

use and risk mitigation.

They guide farmers on recommended owing methods, water conservation, Nutrient management, and plant protection, ultimately leading to higher yields and better crop quality while addressing challenges like declining soil health. Adoption of POP, including modern techniques and traditional methods like natural farming, is crucial for improving farming efficiency and ensuring long- term environmental sustainability.

#### **KEY ASPECTS AND IMPORTANCE**

# **Enhanced Productivity & yield:**

POP provides tailored recommendations for specific crops, ensuring they receive the right inputs and care, which directly translates to higher output.

# **Resource Optimization:**

The guideline helps Farmers optimize the use of water, fertilizers, pesticides and seeds leading to cost reduction and efficient resource management.

# **Risk Mitigation:**

By following scientific practices, farmers can reduce risk association with pests, diseases and adverse weather conditions, ensuring more stable harvest.

# **Promoting sustainability:**

Practices like soil conservation, water harvesting and the adoption Natural farming techniques (using on- farm resources and eliminating Chemicals) contribute to environmental health and long- term soil fertility.

# Food & Nutritional Security:

By boosting productivity and improving crop quality, POP plays a vital role in achieving national goals of food and nutritional security for a growing population.

# **Dissemination of Knowledge:**

POP acts as an authoritative guide for farmers, scientists, and extension officers, disseminating the latest agricultural knowledge and technologies effectively.

# **Modernization & Traditional practices:**

POP encompasses both modern scientific approaches and a renewed focus on traditional practices like biological Nutrient Management and cow dung- based inputs, integrating them for more resilient and cost – effective farming system.

# **Specific Crop Guidance:**

Recommendations cover various aspects of crop cultivation, including:

**Sowing**: Using appropriate seed drills or dibbling for optimal plant stand and spacing.

Water Management: Techniques like mulching to improve soil moisture retention.

**Plant protection**: Applying pesticides and other treatments at the correct time and in the correct dosage to control pests and diseases.

**Soil Fertility**: Rejuvenating soil biology by reducing synthetic inputs and enhancing organic matter through practices like soil cover.

#### **ENSURING SAFE FOOD: MRL DATA ON AGROCHEMICALS**



All India Network Project on Pesticide Residues is a state of the art government agency that routinely checks samples of all types of agriculture commodities from across the country for pesticide residues.

Its annual studies over the last 9 years found that on an average barely 2.82% of the agriculture commodities had pesticide residues above the prescribed Maximum Residual Limits (MRL). In other words, 97.21% of our agriculture commodities have MRL values within the prescribed limits.

The finding is based on sample analyses on all India bases, primarily from food grains, wheat, rice and pulses, vegetables (like cabbage, okra, chilies etc). In the category of fruits sample have been drawn of pomegranate, mango, grapes. In case of others category sample drawn from curry leafs, egg, meat, fish, marine, water, oil seeds, red chili powder, spices, Tea. In the case of Milk the sample had nil traces of pesticides.

This gives us confidence that the Indian food grain vegetables, fruits Milk and other consumable are safe for human consumption even if eaten raw or cooked.

Pesticide residues are traces of pesticides in or on agricultural commodities at the time of harvest. Maximum Residue Limit (MRL) is a cap on such residue that is legally tolerated in food and agricultural products traded. It is often expressed in parts per million (ppm). MRL is not a toxicological safety standard, but only a trading standard.

Agricultural commodities that comply with our national MRLs may often be non-compliant while entering the any country if the 0.01 ppm MRL is applied. This has emerged as the most contentious non-tariff barrier (NTB) between India and the other nation in recent months.

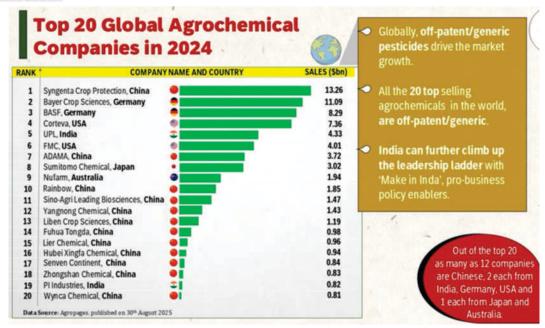
Rejection of exported consignments applying the WTO-inconsistent MRL of 0.01 ppm produces serious consequences on agricultural production, price and farmers income in India.

Our interactions with Indian exporters of spice, vegetables, Basmati rice, etc, to the country show widespread concern about the adoption of the EU standard. It is time for Indian authorities to immediately solve this through bilateral discussions.

#### **TOP 20 GLOBAL CROP PROTECTION COMPANIES**

Rankings of Global Tag. 20 Y-Agenhamod Companies in 17023 Y-Ag

Chinese companies continue to dominate in terms of sales turnover showing the robust growth momentum by injecting fresh vitality into the global market. The top 20 companies as shown in the table:



Among the 20 companies 12 companies are Chinese, 2 companies each from India, Germany &USA, and 1 each from Japan & Australia. It would be worth noting that all the top 20 selling agrochemicals in the world are off-patent / generic which have been responsible for market growth. Among the Indian Companies at no. 5 is UPL Ltd. and PI Industries at no. 19.

With focus on 'Make in India' and with foreign collaboration for specific molecules we do expect Indian companies to do much better and figures among the top 20 in the next 5 years.

#### **TOP 20 INDIAN AGROCHEMICAL COMPANIES IN FY 2023-24**



The agrochemical sector in India has exhibited a remarkable upward trajectory in recent years. In FY2023-24, the Indian agrochemical sector, much like numerous other industries, encountered a series of unfavorable conditions. Market fluctuations, challenging market environments, and unpredictable monsoons introduced a degree of

uncertainty and posed signiffcant obstacles to the industry's steady growth. Notably, the surge in commodity and raw material costs partially neutralized the positive effects of increased sales.

Despite these adversities, the resilience and potential for growth within India's agrochemical industry have remained robust, thanks to innovation, strategic investments, and a supportive regulatory framework. The Indian government has placed a high priority on the agrochemical sector, identifying it as one of the "12 industries with the greatest potential for India to achieve global leadership." Initiatives such as "Make in India" and "Atmanirbhar Abhiyan" have been instrumental in streamlining pesticide industry regulations, bolstering infrastructure, and implementing the Production Linked Incentive (PLI) scheme, all aimed at positioning India as a global hub for agrochemical production and exports.

# Performance of Indian Agrochemical Companies in FY2023-24 (Agro Pages)

023-24 Company		FY 2023-24 <sup>2</sup>		FY 2022-23*		Change%	Change% (in US dollar)
kings'		₹ in crore	US\$ in million*	€ in score	US\$ in million*	(in rupee)	On US donar
1	UPL	36,567.0	4,417.4	47,228.0	5,961.3	-22.6%	24.9%
2	Pf Industries	6,296.5	760.6	5,254.2	654.3	+19.8%	+16.3%
3	Bharat Group	2,798.2	338.0	2,693.3	335.4	+3.9%	+0.8%
	Sharda Cropchem	2,639.0	318.8	3,348.0	416.9	-21.2%	-23.5%
5	Tagros Chemicals	2,609.0	315.2	2,521.0	313.9	+3.5%	+0.4%
6 pC	Indofil Industries	2,600.3	314.1	2.544.8	316.9	+2.2%	-0.9%
7.	Coromandel International	2,457.4	296.9	2,635.6	328.2	-6.8%	-9.5%
0	Krishi Rasayan	2,419.0	S 292.2	2,339.0	291.3	+3.4%	+0.3%
9	Crystal Crop Protection	2,230.0	269.4	2,597.0	323.4	-14.1%	-16.7%
0	Willowood Chemicals	2,127.6	257.0	2,076.4	258.6	+2.5%	-0.6%
1	Rallis India	2,000.7	241.7	2,414.4	300.7	17,1%	-19.6%
200	Insecticides (India)	1,966.4	237.6	1,801.3	224.3	+9.2%	+5.9%
13	Best Agrolife	1,873.3	226.3	1,745.7.	217.4	+7.3%	+4.1%
4	NACL Industries	1,780.8	G 215.1	2,1160	263.5	-15.8%	-18.4%
5	Meghmani Group	1,770.8	213.9	2,690.5	335.1	34.2%	-36.2%
4	Dhanuka Agritech	1,750.5	212.4	1,700.2	211.7	+3.4%	+0.3%
7	SML Group	1,560.0	100.5	2,050.0	255.3	-23.9%	-26.2%
18 05	Safex Chemicals	1,404.6	169.7	1,161.0	144.6	+21.0%	+173%
19	Heranba Industries	1,274.8	154.0	1,324.4	164.9	3.7%	-6.6%
10	GSP Crop Science	1,226.0	S 148.1	1,309/4	163.1	-6.4%	-9.2%

## **GROWING AGROCHEMICAL EXPORTS AND IMPACT OF IMPORTS**



India's agrochemical exports reached a new high of Rs. 43,224 Cr. for the financial year 2022-23 from Rs. 36,521 Cr. in 2021-22. The growth has been a whopping 108% when India exported Rs. 16,497 Cr. during 2017- 18 worth of agrochemicals. With the government focusing all agrochemical projects, we expect to achieve over Rs.

80,000 Cr. in the next 5 years.

"According to the latest data released by the WTO, India has emerged as the second largest exporter of agrochemicals in the world. The rank was sixth, 10 years ago. This is indeed a remarkable achievement towards the direction of Make in India and AatmaNirbhar Bharat".

The USA is the largest buyer of Indian made agrochemicals followed by Brazil and Japan. This is a testimony to the high quality of Indian made agrochemicals which are used in over 150 countries worldwide.

Globally the agrochemicals market is estimated to be US\$78 bn, almost 75% of this is of post-patent products. India is fast emerging as a preferred global hub for sourcing the post-patent agrochemicals. With favorable policy facilitation, the Indian agrochemical industry is confident of doubling exports in the next three years simultaneously working towards reducing imports.

Though there has been a decline during last 2 years which has been primarily due to global melt down and huge inventory carried by the manufacturers. In terms of exports among the top 2 countries where Indian agrochemicals have been exported, mostly generics are Brazil and USA, accounting for the 45% to 50% of our exports.

Our quality matches global specification and presently our 80% of the exports are done by Indian companies to 167 countries without any rejection which is a matter of pride.

India's Agrochemical Export	2021-22	2022-23	2023-24	2024-25
Export to Brazil (In Rs. Cr.)	9260	10731	8072	9431
Rank	1	2	1	1
India's total Agrochemical Export (In Rs. Cr.)	36498	43164	34707	36141
Brazil's share in India's total Agrochemical Export	25%	25%	23%	26%

Source: Ministry of Commerce

India's Agrochemical Export	2021-22	2022-23	2023-24	2024-25
Export to USA (In Rs. Cr.)	8,199	11,727	7,563	6,494
Rank	2	1	2	2
India's total Agrochemical Export (In Rs. Cr.)	36498	43164	34707	36141
USA's share in India's total Agrochemical Export	22%	27%	22%	18%

Source: Ministry of Commerce

In the mean while import continues to grow primarily by MNCs and the importing traders is resulting in reduction of trade surplus during the last 2 years. Among the top two countries where from India is importing are China & USA which account for 55% of imports.

With the current tariff war with USA where supposedly USA has imposed a tariff of 50% on Indian goods including agrochemicals i.e. from 27<sup>th</sup> August, 2025 the impact both in terms of exports and imports from USA would be severe.

India's Agrochemical Import	2021-22	2022-23	2023-24	2024-25
Import to USA& China (In Rs. Cr.)	7787	7549	6321	7711
India's total Agrochemical import (In Rs. Cr.)	13364	14310	11670	13998
USA & China in India's total Agrochemical import	58%	53%	53%	55%

Source: Ministry of Commerce

### Capacity expansion

The Major advantage has been in term of logistics support with manufacturing plants in state like Gujarat, Tamil Nadu, Maharashtra and Andhra Pradesh who have port facility.

Indian Companies investments are in establishing larger and new production facilities to cater to the domestic and global markets. Backward integration, capacity expansion and new registrations would foster the growth of Indian agrochemical industry.

# > Need for specific HSN codes

Our proposal with government of India is to assign specific HSN Code to all these molecules falling under OTHERS category. Also maintain a delta of 10% in custom duty on import of Technical and formulation which is presently same @ 10% on both giving advantage to importers importing readymade formulations.

#### Our recommendation

Since there is a surge in imports affecting Indian manufacturers we reiterate our stand for upward revision of custom duty to 30% on all formulation imports from USA, China and all across, and 20% custom duty on import of all Technical grades to safe guard the Indian industry for the onslaught from USA and China.

#### NON ESSENTIAL AGROCHEMICAL IMPORTS MUST STOP



Imported quantity by traders is not for their captive use but for resale which has to be curtailed. A false impression is doing created of shortages of agrochemicals in India. Imports under "OTHERS" category are 86% as only 64 molecules are listed in the Custom Tariff Manual. Unfair trade practices & cash rebate by countries like China who have increased the prices of raw material to India and reduced

their formulation prices substantially, which resulted in several Indian producers to stop domestic production of such products. China is been offering 13% to 16% export tax rebate/ cash incentive on export of Agrochemicals to India. Major MNCs have invested in China and have no stakes in India. Import of Agrochemicals this year 2024-25 is estimated at Rs.13998 Cr. from previous five year figure of Rs. 9000Cr. (growth by 50%).

Presently the custom duty on Imports is 10% both on Technical and formulations, which gives no incentive to manufacture in India. There is no value addition in India by importing formulations. There is no utilization of domestic manufacture facility and no employment generation by such imports. To counter this anomaly we suggest revising upwards custom duty on all formulation Imports to 30% and custom duty on import of technical to 20%. India has nearly 35% unutilized formulation capacities with various companies including small scale formulators, India has the technology to manufacture variety of formulation, including EC, WB, WG, EW, SC, Granuals and other modern formulation. Despite capabilities and capacities available, India continues to import large volume of formulations, which needs to be stopped. We have additional capacity for chemicals to be used for grain storage purpose, post-harvest.

To misguide the "CAROTAR" 2020 notification though material is physically shipping from China, showing High Seas Sail (HSS) and invoicing from other countries to avoid disclosing "source of origin" of such consignment.

#### JUSTIFICATION FOR ENHANCEMENT OF BASIC CUSTOM DUTY



No Differential Custom Tariff: Import tariffs for formulations are at the same level as that of the Technical grade i.e. both @ 10%, results in no incentives for establishing formulation activities in India. Import of formulation is mostly done by MNCs and traders who do not have their own or limited manufacturing facilities, depending mostly on tollers for just

repacking with no value addition, investment or employment.

It is suggested surge in Imports prevented domestic manufactures of new Technical grade pesticides as Indian companies could not obtain generic registrations aka Me Too registrations. There has been an increase every year in imported formulations in quantities much higher than actual usage by the MNCs, traders & importers, used mainly for resale at exorbitant prices with profits even upto 200% which is totally an undesired situation.

Newer molecules imported in the country as formulations are 2 to 2.5 times more expensive as compared to their manufacturing done in India. The agrochemical industry has been declared as a "Champion sector" with trade surplus. It is our endeavour to not only meet the domestic consumption but cater to the export demand of over 167 countries.

India's Agrochemical Trade (Rs. Cr.)					
Year	Exports from India (Rs. Cr.)	Imports (Rs. cr.)	Trade Surplus (Rs. cr.)		
2017-18	16,497	8,467	8,030		
2018-19	22,126	9,267	12,859		
2019-20	23,757	9,096	14,661		
2020-21	26,513	12,418	14,095		
2021-22	36,521	13,365	23,156		
2022-23	43,224	14,315	28,909		
2023-24	34,750	11,671	23,079		
2024-25	36,145	13,998	22,147		

Source: Ministry of Commerce Database (Accessed on 19<sup>th</sup> May 2025)

Quantifying the Correct Purity Profile: With increased imports we are unable to quantify the correct purity profile in imported formulations resulting in the supply of substandard material, (possibility of expired stocks) with a toxic profile.

Without proper classification of HSN codes, major imports of agrochemicals are under OTHERS category (estimated > 90%) for which dedicated HSN codes are required to be created on priority by the Dept. of Chemicals & Petrochemicals

India has nearly 35% unutilized capacity and has the technology to manufacturers a variety of other modern formulation. There is a heavy out go of foreign exchange in \$ as compared to import of technical when processed in India. MNCs work on transfer price policy meaning thereby that the profile are parked in the native country before transporting to the country.

Imposition of 30% custom duty on all formulation (ready to use finished goods) imports from China and elsewhere, and 20% custom duty on import of all Technical grades (basic raw material for formulation) is a mandate to be implemented.

In a welcome and logical steps we understand that the government Government has decided not to grant any financial assistance or cash subsidy on imported formulation to deter non-essential imports.

The policy of Atmanirbhar Bharat is totally jeopardised by these clandestine imports. These imports have resulted in severe injury to indigenous manufacturers some of which had to slow down operations, relieving factory workers.

### **IMPORT LOBBY MISLEADING FACTS**



The industry for "Make in India" Government of India policy is all geared up for indigenous production. We would not like to encourage the import lobby on this pretext.

Year	Agrochemicals Import India
2017-18	8,467
2018-19	9,267
2019-20	9,096
2020-21	12,418
2021-22	13,363
2022-23	14,315
2023-24	11,671
2024-25	13,365

Suitable guidelines may be issued from Government of India to stop import of substandard formulations particularly from China. The industry has been demanding since 2018 imposition of ad-valorem duty of 30% on imported formulations.

Indian manufacturers have unutilized capacity in their multipurpose plants, capable of manufacturing these molecules which are presently being dumped in Indian market. It is estimated that only 65% of the installed capacity is utilized.

Inferior and substandard quality products find their way into the country, to the detriment of Indian farmers. The quality of Indian products is found to be even better than that of original producer, in terms of active content and purity profile. As you would appreciate imported pesticides formulation are majorly imported by Multi-National Companies and traders.

The correct percentage of such substandard material is now not at all speculative. Companies have to also organize raids and take legal action whenever such an incidence is brought to their notice to safe guard their brands. Unfortunately in the recent past no such worthwhile activities have been initiated, giving the imprecision that these are being encouraged by vested interests. Yet vested interests are harping on this to our own disadvantage.

Presently all reputed companies are marketing their products through licensed authorized distributors and dealers and it is their responsibility to safe guard their Brand Image.

Products "misbranded" are primarily on account of margin which are as high as 75% on proprietary or monopolistic molecules or brands imported. Agro Input dealers Association also feels that this issue has been exaggerated largely.

#### **ROLE OF MEDIA IN OUR BUSINESS**



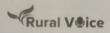
The role of media could be very effective in addressing certain misgiving of agriculture to the community. The report by media is usually seen to be restricted to raising food prices, shortage of food or certain disasters, casualty death etc which needs factual verification. In fact success stories and interviews with the industry by the media can have positive impact on the

policy makers, researchers and consumers.

CCFI has been highlighting their activities both in print and electronic media this gives a lot of impetuous to share the factual information with the bureaucrat an scientist at central and state level.

Internationally CCFI has found place in AgroPages to make our view point know globally.





#### Surge in Agrochemical Imports Alarms Indian Industry, CCFI **Demands Higher Import Duty**

Despite India's agrochemical sector showing strong export growth, a 53% surge in imports, mainly from China, is hurting domestic manufacturers. The industry seeks higher custom duties on formulations and technical-grade imports to protect local investment, curb dumping, and support Make in India and Atmanirbhar Bharat initiatives.

Published Jun 28, 2025 - 13 54Updated Jun 28, 2025 - 17 46



The Indian agrochemical industry is sounding the alarm over a sharp surge in imports, particularly from China, which stakeholders claim is threatening the viability of domestic manufacturers. The Crop Care Federation of India (CCFI), the apex body representing over 50 leading Indian agrochemical manufacturers, has given several representations to the government in this regard. The association has once again reiterated its appeal to the Finance Ministry. In a letter to the ministry, it has asked to increase custom duties on imported agrochemical formulations and technical-grade pesticides, in order to create a level playing field for domestic producers

#### Trade Surplus But Industry Under Pressure

India's agrochemical sector has been designated a "Champion Sector" due to its export strength and growing self-reliance. In FY 2024-25, the industry recorded a trade surplus of Rs 22,147 crore, largely driven by the export of generic agrochemicals, which dominate 93% of the global market.



# India uses pesticides judiciously and more efficiently in agricultural production

Date:07-25-2025

In a study compiled by Crop Care Federation of India (CCFI) considering the top three pesticides users, it was revealed that EU uses 320,941 tons and is the highest consumer followed by China using 235,760 tons & India uses only 40,094 tons of

However, in terms of Agriculture production in terms of Gross Value Added (GVA) China has the highest production \$ 1,270 bn followed by India \$571 bn and the least by EU \$ 307 bn.

"If you analyse the data EU uses more pesticides for every unit of agricultural output produced. It is a fallacy and farmers' use higher quantity of pesticides" stated Mr. Harish Mehta, Senior Advisor CCFI. Keeping in line formulations are produced of quality matching global standards

The EU, which has to be instrumental in influencing government policy, needs to face reality and all delusions

The above data has been accessed from FAOSTAT and World Bank Database which reinforces India's position in world market.



PENTOLOGY VOL. 88 1551-X NO. 2 PERSONAL PROPERTY 2024



### CCFI: COMMITTED TOWARDS ATMANIRBHAR BHARAT

Reacting to the budget Mr Deepak Shah, Chairman CCFI said. "Indian agrochemical industry has resilience and demonstrated it's potential in indigenous manufacturing both in terms of production and quality. Alone exports of Rs.45,000 crore majorly by our members to 152 countries makes us confident that Govt. should work towards making India a manufacturing

However in order to focus on "MAKE IN INDIA" there is an imperative need to increase customs duty on import of agrochemicals, both technical and formulations, for "ATMA NIRBHAR Bharat" and "MAKE IN INDIA" to happen. Hence, the customs duty must be increased both on technical & formulations from existing 10% which is a disministry for indian manufacturers (favourable to importing lobby) and draining our valuable foreign exchange & hence Chinese imports are not floredidumped in India and our own grass root manufacturing industries suffer as only less than 45-50% manufacturing capacity is utilised currently. If would be pertinent to share that we have already made heavy investment in R&D and manufacturing as well as CCFI has reiterated the long pending demand of the Indian agrochemical industry and strongly recommends enhancing custom duty on Technical to 20% and 30% on import of all formulations. OR at least maintain a delta of 10% between the two to minimize import of formulations of NG at least maintain a delta of 10% inches and a second or successions and a second or successions. formulations which has no value addition, and quality of technical used is questional majority of imports are from China.

"Investment in agriculture needs impetus to sustain MSMEs besides incentivise the Indian manufacturers by including this Champion sector under PU scheme with fresh investment of Rs. 12,500 crore in next three years.

Creation of product specific HSN codes for Technical & formulations would ensure curbing of unnecessary imports of products which can be indigenously manufactured, "stated Mr Rajesh Aggarwal Vice Chairman CCFI".

We are confident that the concerned ministries would take action in the annual budget

Deepak Shah Chairman Crop Care Federation of India

AGRICULTURE CROP PROTECTION

# Aerial Spraying of Pesticides: Revolutionizing Indian Agriculture with Drone Technology



#### de of Regulatory Guidelines

second of the control of the control

The Crop Care Federation of India CCF1) and in-companies have been instrumental in primotin technology. Through instatives like field demon-and farmer education programs, CCF1 has facilitated the integration of drones into age practices. Leading agr-input times under the unbertila have also developed specialized for tailored for drone applications, ensuring in efficacy incroprotication.

# Government Initiatives: Empowering Women and Farmers

# Industry Participation and Demonstrations

Several leading agri-input companies, including Meghmani Organies Ltd., Insecticides (India) Limited. DCM Shiriam and UPL have showcased drone efficacy through extensive field demonstrations. These efforts



#### How is India leading Agrochemical Manufacturing and Exports for the World



c as CCF1 members suncerely appreciate the vital mative taken by the Prime Minister towards nation-iding by emphasically focusing on achieving self-tance through Make in India policy. Our members are observed in manufacturing technical grade

Rarie	Addresingradient	Sales (5 mm)	Bened
	Dyphoses	7,898	Herbrode
	Orizontandprote	1,933	President
3	CLhorate	1.333	Herbicole
0	Attaine	3,614	Perfective
5	Amephilian	2.404	Fungione
6	Thanebleam	9,983	Insections
+	Prohounative	1,191	Fungoide
	Metadis	7.799	Herbicate
	Pyracostoler	1,002	Fungorie
10	240	1004	Hertscale
99	instations	909	translate
12	Marcolet	955	Fungade."
10	Person	895.	Perfection:
14	Tetracoracow.	874	Fungasia
18	Duante	340	Perticide
18	Acetochica	MIS.	Herticate
	Lambda-Cyhandron	736	Proching
18	Triflogattabus	887	Furgists
19	Abaneon	882	Funpode
20	Acaptula	0417	Inaction

#### KRISHAK JAGAT क्षेत्रधितं () जीविति

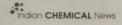
पंजाब हाईकोर्ट ने बासमती धान पर 12 कीटनाशकों के प्रतिबंध पर रोक लगाई

August 15, 20253 min readBasmati Paddy, Punjab Insecticide Banned

16 अगस्त 2025, नई दिल्ली: पंजाब हाईकोर्ट ने बासमती धान पर 12 कीटनाशकों के प्रतिबंध पर रोक लगाई – पंजाब उच्च न्यायालय ने पंजाब सरकार की उस अधिसूचना पर अस्थायी रोक लगा दी है. जिसमें बासमती धान की फसलों में 12 कीटनाशक अणुओं के उपयोग पर प्रतिबंध लगाया गया था। इस मामले को क्रॉप केयर फेडरेशन ऑफ़ ईडिया (CCFI) ने दायर किया था.

इस मामत को काथ कथर कडर शन आफ़ हाडया (CCFI) ने दायर क्या पा, जिन्होंने इस अधिसूचना को मनमानेपन और वैज्ञानिक प्रमाणों के अभाव का हवाला देते हुए चुनौती दी थी। यह मामला 30 जुलाई 2025 को चंडीगढ़ बंच में सुना गया। CCFI की ओर से वरिष्ठ अधिवक्ता आधिष कोठारी और उनकी कानूनी टीम ने 10 मई 2025 की अधिसूचना के खिलाफ विस्तृत दलीलें पेण की। प्रारंभ में इस अधिसूचना में 11 आमतोर पर इस्तेमाल होने वाले कीटनाशकों पर प्रतिबंध लगाया गया था, जबकि बाद में हेक्साकोनाज़ोल को 12वें कीटनाशक के रूप में शामिल किया गया। उद्योग प्रतिनिधियों का तर्क था कि यह आदेश केवल अनुमानित जोखिम पर आधारित था. बिना किसी प्रयोगशाला जांच, कीटनाशक अवशेष स्तर के आंकड़े या माल की अस्वीकृति के प्रमाण के।

CCFI ने यह भी बताया कि पिछले वर्षों में बुवाई के मौसम से पहले इसी तरह की अधिसूबनाएँ बार-बार जारी की जाती रही हैं, जिससे उद्योग को प्रतिक्रिया देने में कठिनाई होती है और न्यायिक समीक्षा की प्रक्रिया चुनौतीपूर्ण हो जाती है। फेडरेशन ने कहा कि इस तरह की कार्रवाई औपचारिक शक्तियों के दुरुपयोग के समान है और यह पंजीकृत फार्मूल पर निर्भर किसानों और कृषि रसायन उद्योग के अधिकारों का उल्लंघन करती है।



Punjab High Court grants stay on ban of 12 pesticide molecule

CCFI sought quashing of the impugned Notification as a blatant abuse of statutory powers

By ICN Bureau | August 12, 2025

After several adjournments, Punjab insecticides ban issue, was finally listed on 30th July 2025 when Crop Care Federation of India (CCFI) appeared along with Senior Advocate at High Court, Chandigarh.

During the hearing, CCFI presented detailed submissions challenging the Notification dated 10.05.2025 issued by the State Government under Section 27(1) of the Insecticides Act, 1968, banning the use, sale and distribution of 11 commonly (Hexaconazole was added later) used agro-chemical formulations on Basmati rice for

It was argued that the Notification was arbitrary and illegal as it was issued solely on speculative risk without any supporting investigation, laboratory reports, or data indicating exceedance of MRLs as fixed by FSSAI. No details on consignments rejected of traces of which molecules found, remained unanswered all these years.

Multiple previous notifications banning similar products were already under challenge and were being issued repeatedly just before the sowing season, with limited window of application, in a manner that defeats judicial review and the repeated exercise of the emergent powers by the State of Punjab, year after year, was wholly outside the scope of Section 27(1).

Accordingly, CCFI sought quashing of the impugned Notification as a blatant abuse of statutory powers and violate of the rights of the petitioner and the agrochemical industry

In view of the above submissions, the Hon'ble Court had, on the previous hearing directed the State of Punjab and UOI to seek instructions on the pending report and the reasons for delay on the part of the State of Punjab in sending the report to UOI, despite the ban being repeatedly invoked since 2018.

To this, the State of Punjab again, today, reverted to justifying their arbitrary actions without placing on record any reasonable grounds for delay on their part. The UOI, on the other hand, handed over the Minutes of the 465th Meeting of the RC dt. 10.07.2025



### ਭਾਰਤ ਦਾ ਐਗਰੋਕੈਮੀਕਲਜ਼ ਉਦਯੋਗ ਕਿਸਾਨਾਂ ਨੂੰ ਸਹਾਈ ਹੋ ਰਿਹੈ-ਰਾਜੂ ਸ਼ਰੌਫ

ਦਾਸ)- ਭਾਰਤ ਵਿਸ਼ਵ ਦੇ 2.4 ਫੀਸਦੀ ਮਕੋੜਿਆਂ ਤੇ ਬਿਮਾਰੀਆਂ ਤੋਂ ਹੋ ਰਹੇ ਨੁਕਸਾਨ

ਜ਼ਮੀਨ ਅਤੇ 4 ਫੀਸਦੀ ਪਾਣੀ ਦੇ ਸੋਮੇ ਹੋਦੇ ਹੋਏ ਵਿਸ਼ਵ ਦੀ 18 ਫੀਸਦੀ ਜਨਸੰਖਿਆ ਨੂੰ ਖੁਰਾਕ ਮੁਹੱਈਆ ਕਰਦਾ ਹੈ। ਵਿਸ਼ਵ ਦੇ 16 ਫੀਸਦੀ ਪਸ਼ ਵੀ ਭਾਰਤ ਦੀ ਜ਼ਮੀਨ ਤੋਂ ਹੀ ਆਪਣੀ ਖੁਰਾਕ ਲੈਂਦੇ ਹਨ।

ਵੱਧ ਰਹੀ ਆਬਾਦੀ ਦੀ ਲੋੜ ਨੂੰ ਪੂਰਾ ਕਰਨ ਲਈ ਤੇ ਨਿਰਯਾਤ ਵਧਾਉਣ ਲਈ ਖੇਤੀ ਉਤਪਾਦਨ ਤੇ ਉਤਪਾਦਕਤਾ ਵਧਾਉਣੀ ਲੋੜੀਂਦੀ ਹੈ। ਤਕਰੀਬਨ 15 ਤੋਂ 25 ਫੀਸਦੀ ਪੈਦਾਵਾਰ ਕੀੜੇ ਮਕੋੜਿਆਂ ਤੇ ਬਿਮਾਰੀਆਂ ਦਾ ਸ਼ਿਕਾਰ ਹੋ ਜਾਂਦੀ ਹੈ। ਇਸ ਘਾਟੇ ਦੀ ਪੂਰਤੀ ਲਈ ਉਤਪਦਕਤਾ ਵਧਾਉਣ ਦੀ ਲੋੜ ਹੈ। ਯੂ.ਪੀ.ਐਲ. ਦੇ ਚੇਅਰਮੈਨ (ਇਮਰਟਿਸ) ਅਤੇ ਕਰਾਪ ਕੇਅਰ ਫੈਡਰੇਸ਼ਨ ਆਫ ਇੰਡੀਆ ਦੇ ਸਾਬਕਾ ਚੇਅਰਮੈਨ ਪਦਮ ਮੁਹਈਆ ਕਰ ਰਿਹਾ ਹੈ।

ਪਟਿਆਲਾ, 12 ਫਰਵਰੀ (ਭਗਵਾਨ ਭੂਸ਼ਣ ਰਾਜੂ ਸ਼ਰੌਵ ਕਹਿੰਦੇ ਹਨ ਕਿ ਕੀੜੇ

ਨੂੰ ਘਟਾਉਣ ਲਈ ਸ਼ੁੱਧ ਕੀਟ ਨਾਸ਼ਕਾਂ ਤੇ ਪੈਸਟੀਸਾਈਡਜ਼ ਦੀ ਵਰਤੋਂ ਜ਼ਰੂਰੀ ਹੈ। ਵਿਸ਼ਵ 'ਚ ਖਪਤ ਕੀਤੇ ਜਾ ਰਹੇ ਐਗਰੋ ਕੈਮੀਕਲਜ਼ ਵਿਚੋਂ ਕੇਵਲ 2 ਫੀਸਦੀ ਦੇ ਕਰੀਬ ਹੀ ਭਾਰਤ 'ਚ ਵਰਤੇ ਜਾਂਦੇ ਹਨ। ਉੱਝ ਭਾਰਤ ਵਿਸ਼ਵ 'ਚ ਕੈਮੀਕਲਜ਼ ਦਾ 6ਵਾਂ ਵੱਡਾ

ਉਤਪਾਦਕ ਹੈ। ਸੈਂਟਰਲ ਇਨਸੈਕਟੀਸਾਈਡਜ਼ ਬੋਰਡ (ਸੀ. ਆਈ. ਬੀ.) ਵਲੋਂ ਡੂੰਘੀ ਤੇ ਲੰਮੇ ਸਮੇਂ ਦੀ ਪਰਖ ਤੋਂ ਬਾਅਦ ਪੈਸਟੀਸਾਈਡਜ਼ ਤੇ ਕੈਮੀਕਲਜ਼ ਨੂੰ ਕਿਸਾਨਾਂ ਦੀ ਵਰਤੋਂ ਲਈ ਪਵਾਨਗੀ ਦਿੱਤੀ ਜਾਂਦੀ ਹੈ। ਭਾਰਤ ਦਾ ਐਗਰੋ ਕੈਮੀਕਲਜ਼ ਉਦਯੋਗ ਨਵੇਂ-ਨਵੇਂ ਪੈਸਟੀਸਾਈਡਜ਼ ਖੋਜ ਕਰਕੇ ਜੋ ਬਿਮਾਰੀਆਂ ਵਿਰੱਧ ਪਭਾਵਸ਼ਾਲੀ ਹੋਣ, ਕਿਸਾਨਾਂ ਨੂੰ

#### PROMOTIONAL AND AWARENESS CAMPAIGNS: DEMYSTIFYING MYTHS



Normally awareness campaigns are a measure of how well known a brand, firm, or product is perceived by the end user. CCFI adopted promotional tools like educational video films to showcase the activities undertaken by us and our members. We have exclusively developed animation films in different regional languages highlighting various precautions

while using agrochemicals right from the time they are procured from authorized dealers, their transportation and storage. Importance of label and leaflet was of immense importance for knowing crop pest matrix, the dosages recommended, steps to make spraying solution etc.

CCFI prepared an 8 min video film demystifying the myths about pesticides use in India this was to counter to deliberate and deceptive narratives pushed to negatively influence the bureaucracy, trade, households, the farming community and the scientific fraternity.

#### The area of focus was on myths like

- 1. Indian farmers use excessive Pesticides
- 2. Agriculture commodities in India carry high level pesticides residues.
- 3. Pesticides use has led to high cancer Cases in India
- 4. Accidental exposure to pesticides spray drift affects farmers
- 5. Indian market is full of spurious pesticides.
- 6. India's water system, remain highly polluted with pesticides
- 7. Pesticides are the primary means to commit suicide
- 8. India uses pesticides that are banned in other countries
- 9. Organic and bio- pesticides are safer than chemical pesticides
- 10. Indian manufacturers are not able to manufacture Quality meeting global standards.
- 11. Introduction of neonicotinoid insecticides adversely affected honey production.
- 12. Pesticides applied for non-agriculture/ house hold is safe.

In all our events we emphasized to totally avoid tobacco, smoking and drinking during spraying operation particularly by the contract labour. We also discouraged mixing of two or more molecules in the field. Rather the farmers should be using recommended registered combination products available in the market. We distributed safety kits and ran a competition in several states to reward those operators who used them while spraying.

We have also released four Radio spots, of 30 Sec each, which have also been aired on FM channels.

Crop Care magazines, our safety posters and hand bills in other languages were distributed for easy recall of safety aspects by the farmers. We also prepare our pocket Directory for use by our members listing important government contacts in Center and States.

#### IMPACT OF EDUCATIONAL FILM CAMPAIGN

Several video films like Trail Blazing Visionary, Enriching Lives, Unsung Champion and Demystifying Myths on use of Pesticides have been made in the past basically for the farming community trade channel partners, housewives and the bureaucracy.

As has been observed these video films not only impart technical knowledge but also highlight the achievement of the Indian farmer with the support from CCFI.

We have covered majorly the safety aspects during spraying operations, quality of pesticides manufactured resulting in exports to over 150 countries, the misconception and myths in the public mind, the usefulness of PPE kits in terms of saving human lives and the commitment of our members to focus on Make in India and to endorse government policy of "Atmanirbhar Bharat".

The video "Invaders from the West" was specially brought out on the national pandemic when Locust invaded Rajasthan and Western State.

#### Beside other videos were:

- Invaders from the West
- > The unstoppable
- > The Kit is a Hit
- Enriching Lives
- Unsung Champions

#### IMPORTANCE OF RESEARCH AND DEVELOPMENT IN AGRICULTURE SECTOR



The future of crop protection chemicals sector in India is heavily reliant on Research and development (R&D) to drive innovation and sustainability. R&D efforts are crucial for developing new formulations, technologies, and sustainable solution to address evolving pest and disease dynamics, enhance crop yield, and minimize

environmental impact. The Indian agrochemical industry is experiencing strong growth, with exports reaching \$ 5.5 billion in 2022.

The crop protection sector has played an important role in bringing this change from subsistence farming, low growth in crop and grain production to the green revolution that propelled surplus production from 1980 onwards.

However not much said about the important role played by the backend R&D in the agrochemical sector, which is playing an important role in making this this transition possible. Crop Protection Chemicals, with a domestic market size of approximately Rs. 37000 Cr. plays a key role in enhancing India's agricultural capability. The agrochemical sector thrives on a purely scientific basis that gels well with the traditional farming practices. While in the initial days, collaboration was a part and parcel of this scientific journey, with the pandemic, Indian companies are fast becoming interested in upgrading their research and development capabilities and facilities to harness their power independently. In the process, they are not only bolstering Indian manufacturing but are reorienting themselves from being a manufacturer to a solution provider.

Hence, it is obvious that Indian agrochemical companies will increasingly focus on introducing new generation formulations in their R&D capabilities and product mix to have an edge. Indian agrochemical companies are also making significant strides in developing technicals, especially in the wake of the pandemic when its main exporter China had to shut down operations. Estimates show that the Indian agrochemical industry is expected to maintain a CAGR of 9-10 % in the future. This is a major movement towards attaining self-reliance in the industry.

It is estimated that the Indian companies are reinvesting approx. 4% of their turnover internal research including setting up of 'Discovery Centres' to develop innovative products catering to Indian climatic condition and crop pest segment.

In the resent development the composite list of molecules developed (Agromission-1) and process development under way (Agromission-2) at IICT, Hyderabad (Nodal laboratory) and other CSIR participating laboratories;

- CSIR Agrochemicals Mission-1 (12 molecules)
- 1. Flonicamid (NIIST)
- 2. Flubendiamide (IICT)
- 3. Pymetrozine (IICB)
- 4. Spirotetramat (NIIST)
- 5. Epoxiconazole (IHBT)
- 6. Picoxystrobin (NEIST)
- 7. Penflufen (NCL)
- 8. Prothioconazole (IICT)
- 9. Glufosinate (IICB)
- 10. Pyroxasulfone (NCL)
- 11. Penoxasulam (NEIST)
- 12. Tembotrione (IICT)

- CSIR Agrochemicals Mission-2 (20 molecules)
   Molecules proposed -20
   Molecules synthesized -19
- 1. Chlorantraniliprole (50g)
- 2. Flumioxazin (50g)
- 3. Propaguizafop (20g)
- 4. Fluxapyroxad (20g)
- 5. Thiencarbazone methyl (15g)
- 6. Cyflufenamide (10g)
- 7. Benzovindiflupyr(15g)
- 8. Topramezone (20g)
- 9. Indaziflam (10g)
- 10.Tetflupyrolimat (10g)
- 11. Halauxifenmethyl (20g)
- 12. Isoxaflutole (15g)
- 13. Mandipropamid (15g)
- 14. Trifloxystrobin (20g)
- 15. Spiropidion (20g)
- 16. Sulfoxaflor (20g)
- 17. Fluopicolide (20g)
- 18 Pinoxaden (15g)
- 19. Pyroxsulam (10g)

Any interested corporates can approach them for commercializing the molecules.

#### ORGANIC FARMING CANNOT DRIVE SUSTAINABILITY



India and the world at large was following practically organic agriculture until 1950s. The organic agriculture is not therefore, the state of art technology. Organic products are grown under a system of agriculture without the use of chemical fertilizers and crop protection chemicals.

However, globally only 1.6% of the agricultural land is under organic agriculture. Two third of the organic agricultural land gross to support livestock while the balance one third grows primary food for our direct consumption.

Globally organic agriculture has grown very sluggishly in the last 23 years from 0.03% to 1.6%in 2022- 23. EU has 15.6mn ha of organic agriculture, out of which nearly 60% under personal grassland and green fodder, only proving the fact that under organic agriculture the focus is on feed crops instead of food crops. Organic agriculture cannot

feed large population but is an will continue to remain a niche market for the rich and affluent.

In India the figures is 0.6% of cultivated land. Organic farms have been found to have a crop yield 30% less than conventional farms, with other studies suggesting that the number would be as low as 50% in India. Besides the cost of production is prohibitive with an product higher by 60% as compared to conventional produce.

#### **GST COUNCIL MAINTAINS 18% GST ON AGROCHEMICALS**



Crop Care Federation of India who are the largest manufactures and exporter of pesticides are of the firm view that present GST of 18% on pesticides is logically good. The Indian manufactures will suffer as all the raw materials are levied plants machinery, PPE kits, promotional material has 18% GST. This would have

resulted in inverted duty structure' which would be detrimental to Indian manufactures who have the capacity and the capability to manufacture locally, quality pesticides rather than depends on imports. This rate covers more than 90% of the final products and the services sold by the industry across the value chain, are at this rate of 18% with the aim to provide a balancing and seamless flow of credit and its utilization.

The GST council in its wisdom feels that for the pesticides which are imported, if they have lower GST, they will have a distinct advantage against indigenous manufacturers. The step would against the policy towards Atmanirbhar Bharat through 'Make in India' This is will result in increase in imports of agrochemicals which during 2022-23 touched Rs. 14315 Cr. mainly from USA, China, Japan, Israel, Thailand, Europe, Hong Kong etc.

Indian manufacturers are responsible for 80% of our agrochemicals exports to over 167 countries with acceptable quality specification. In fact we have exports pegged at Rs. 43,000 Cr. higher than domestic consumption of Rs. 37,000 Cr.

The fact that reduction would result in loss of revenue estimated at 4500 Cr. annually to the government, besides blocking of working capital which would increase cost of business. Also as has been observed, the government has been lately working to prune GST exemptions during their GST council meeting.

The logic that reduced benefit would be passed to the farmers is misleading as the importer and traders normally bill the pesticides including GST and as such farmer would not have any advantage at all.

CCFI is grateful to the members of GST council and nodal ministries for accepting our contention and maintain 18% GST for the present.

#### NO DATA EXCLUSIVITY: FOR AGROCHEMICALS



Data exclusivity refers to protection of data submitted by originator (MNC from developed countries) to the regulatory authority for market approval of agrochemicals.

Data exclusivity is different from patent protection, which is an exclusive right that prevents others from commercially exploiting the patented innovation for 20 years under TRIPS agreement India allows this protection.

Crop Care Federation of India (CCFI) opposes the renewal attempts by multinational companies (MNCs) and importers to achieve data exclusivity regime in India.

The agrochemicals industry in India is export intensive, earning valuable foreign exchange byway a of trade surplus. In last five years Indian agrochemical industry earned a trade surplus of over Rs. 94,030 Cr. to the country.

Data exclusivity is independent of and can be either in addition to or in lieu of patent protection. It could operate outside the realm of product patent for patentability. It is one of the prime means for product monopoly beyond patent protection. Data exclusivity delays the entry of generic version agrochemicals. It creates a Monopoly condition in favor of MNCs.

Based on our representation to oppose data exclusivity the government has dropped this issue for the benefits of Indian agriculture.

In 1995, India joined the WTO and the TRIPS agreement. Indian laws do not provide data exclusivity for pharmaceutical and agrochemicals this is perfectly legitimate. Remember the TRIPS agreement does not require countries to grant data exclusivity.

#### APPLICATION ON USE OF DRONES NEEDS GOVERNMENT SUPPORT



In 2022, the Government of India has launched Kisan Drones for crop assessment, digitization of land records, spraying of insecticides and nutrients.

The Ministry of Civil Aviation, Govt. of India has formulated and notified the operational guidelines for the effective

operation and smooth implementation of the Production Linked Incentive (PLI) scheme.

To facilitate further growth, the government has approved the Production Linked Incentive (PLI) Scheme for Drones and Drone Components in India. The Production Linked Incentive Scheme (PLI) for Drones and Drone Components has been notified.

The Scheme has come into effect from the date of its Gazette Notification. For the implementation of this scheme during 2022-23 to 2024-25, a corpus of Rs 120 crore has been allocated.

The guidelines have been notified on 29th November 2022 for the information of all the stakeholders and the public. These guidelines inter-alia cover the following: Definitions; Qualification and Eligibility; Application, Online Portal, Project Management Agency (PMA), Empowered Group of Secretaries (EGoS), and Competent Authority.

To make India a global hub for the research and development, testing, manufacturing, and operation of drones under the Atmanirbhar Bharat Abhiyan the liberalised Drone Rules, 2021 were released to create a growth-oriented regulatory framework for drones.

Even as industries have supported the move, there are certain concerns too. When sprayed from Drones, pesticides have to be in concentrated form. In ground spraying as much as 400 liters of water is used per hector of spraying. Through drones, it would be not more than 20 liters. This means that highly concentrated pesticides will be sprayed in the open fields.

It was informed that the coverage by drones would be @ 7min. per acre. There is minimal requirement of water and 4-6 acre would be sprayed with one charging. There was possibility of precision spraying on any hotspot.

The companies will be solely responsible for any accidental case involving human or animals. Drones are an accepted application abroad but it needs scientific vetting on all recommended crops. The final approval will be given only after two years of operations. Much needs to be worked out about the cost too as farmers may need to be subsidized.

#### REUSE & DISPOSAL OF CONTAINERS: EFFORT BY CCFI MEMBERS



Agrochemicals are usually toxic and can pose significant environmental risks when stored in bulk storage systems, mainly when accidental spills occur. The use of the agrochemicals in many countries has become highly regulated and permits provided by the government may be necessary for purchasing and applying approved agricultural products. Misuse, including unsafe storage leading to

chemical leakage, chemicals washing, and chemical spills, may impose significant penalties. Where such chemicals are used, they also fall under the mandatory rules and regulations, proper storage facilities and marking, emergency clean- up equipment, emergency clean-up protocols, protective equipment, as well as protective methods for treating, applying and disposing off.

Indian agro chemical companies have initiated work on those lines by engaging private contractors and agencies to collect and segregate used pesticides containers in selected cities.

This is also taken up meticulously during the Farmers training program by our members on reuse / safe disposal of containers.

#### **VIKSIT BHARAT @ 2047**



Viksit Bharat@2047 represents the government of India's ambitious vision to transform the nation into a developed entity by the centenary of its independence in 2047. Encompassing diverse facts of development such as economic prosperity, social advancement, environmental sustainability, and effective governance. This vision underscores the critical juncture at which

India currently stands. Realizing this vision demands unwavering dedication, a firm belief in India's destiny and a profound recognition of the vast potential talent and capabilities of its people, particularly the youth. With the largest demographic share, the youth are positioned as the vanguard in leading India towards recessive Bharat by 2047. In response to the nation's call, the Prime Minister has extended an invitation for the youth to actively engage in a transformative agenda through a youth movement called "Ideas from Youth for Viksit Bharat@2047". A dedicated web page, Idea for the vision of Viksit Bharat @ 2047, has been established by mygov.in, providing a platform for the youth to contribute their suggestions and shape the collective vision for a developed India by 2047.

#### Prime Minister addresses the Viksit Krishi Sankalp Abhiyan

"Under this campaign our team of scientists will go from lab to land providing information about modern agriculture to farmers with all the data to help the farmers before the season starts. This campaign resolves to make Indian agriculture the mainstay of Viksit Bharat. India must not only fulfill its own needs but also emerge as a global food supplier. Viksit Krishi Sankalp Abhiyan will open new avenues of progress for farmers driving modernization in agriculture" Hon'ble Prime Minister Shri Narendra Modi

The Prime Minister Shri Narendra Modi addressed the Viksit Krishi Sankalp Abhiyan he remarked that the launch of the Viksit Krishi Sankalp Abhiyan as a significant initiative for farmers and a unique effort to support agricultural development. 2000 teams consisting of scientists, experts, officials, and progressive farmers will travel across 700+ districts and reach millions of farmers across villages.

India's agricultural sector also requires significant transformation. Indian farmers have achieved record production, filling grain reserves, but the market dynamics and consumer preferences are evolving. He asserted that it is imperative to bring modern reforms to agricultural systems in collaboration with states and farmers.

Progressive farmers who have successfully experimented with new techniques, achieving impressive yields. Underscoring the importance of ensuring that scientific research and successful farming practices reach the broader farming community, "Viksit Krishi Sankalp Abhiyan presents a valuable opportunity to bridge this knowledge gap, enabling farmers to benefit from cutting-edge agricultural insights, ensuring fair prices for farmers' produce, strengthening the agricultural economy, and aligning crop production with national requirements not only its own need but also emerge as a global food supplier.

He urged all participants in the campaign to maximize farmer awareness, ensuring they are well-informed about modern agricultural advancements, initiatives aimed at expanding opportunities for farmers. He remarked that installing solar panels along field boundaries can generate additional revenue. He noted the impact of the Sweet Revolution, stating that beekeeping is benefiting farmers and must be expanded to involve more participants. Convert agricultural residues into energy, transforming waste into wealth. He highlighted the significance of identifying suitable areas for cultivating 'Shri Anna' (Millets are now known as 'Shree Anna) and enhancing value addition in agricultural products.

#### **VIKSIT BHARAT 2047: AGRICULTURE**



India's Viksit Bharat 2047 vision calls for self-reliant, prosperous, and inclusive society, with rural development and agricultural modernization at its core, Agriculture employs over 55% of India's workforce while the share of agriculture and allied sectors in India's total gross value added has a long term trend of around 18%. However the share has

fluctuated over the years. Transforming the rural sector requires empowering farming communities particularly women, who form a significant part of the agricultural workforce.

The empowerment of women in agriculture is another essential pillar of Viksit Bharat. Women, who make up a substantial portion of India's agricultural workforce, often face challenges such as limited access to land, finance and information. By focusing on women farmers India can create a more inclusive and sustainable agricultural economy providing with better access to credit land rights, and technology will foster an environment where they can actively participated in decision- making and innovation.

In line with the United Nations Sustainable Development Goals, India's agricultural strategy for a developed 2047 focuses on building a sustainable, tech- enabled and resilient sector. As India moves towards its 2047 goal, the transformation of agriculture into a modern efficient, and technology-driven sector will be pivotal.

The digital infrastructure in rural areas are geared towards uplifting the agrarian economy. Rural communications will pay a crucial role in bridging knowledge gaps and providing farmers access to critical information about weather patterns, market prices and best practices. By facilitating two-way communication, empowering farmers with real time data and promoting knowledge sharing India can unlock the full potential of its rural workforce. Providing with better access to credit land rights, and technology will foster an environmental where they can actively participate in decision- making and innovation.

#### **EMPOWERING INDIAN FARMERS**



Agriculture is at the heart of India's economy and culture, sustaining millions and shaping the nation's identity. India's agricultural sector has under gone a profound transformation, rooted in the philosophy of 'Beej Se Bazar Tak' (seed to market).

This transformation champions inclusivity, supporting small farmers, women-led groups and allied sectors, while making India a global agricultural leader. The farmer has become central to policy with a proactive, technology- driven approach ensuring income security, sustainability and resilience.

From modern irrigation and credit access to digital market places and agri-tech innovations, India is embracing smart farming and reviving traditional practices. Allied sectors such as dairy and fisheries are also flourishing driving rural prosperity and climate- smart agriculture.

Above all, the mindset has shifted, farmers are also recognized as key stakeholders and drivers of India's growth. As India enters Amrit Kaal, its empowered farmers stand ready to lead the nation from food security to global food leadership.

#### **Diversifying Farmers Income**

In addition to agriculture, diversification helps farmers manage risks, reduce dependency on unpredictable factors, and improve their standard of living. The government is promoting allied activities like livestock, dairy, fisheries and food processing, along with non- farm employment, to create multiple income sources.

#### Food processing sector: A key driver of farmers Income Growth

Over the past years the food processing sector emerged as a powerful enabler of farmers income enhancement. By creating robust farm to market linkage, reducing post-harvest losses, and expanding value addition through modern processing infrastructure, the sector has increased the profitability of agricultural produce. Government initiative, particularly under the Pradhan Mantri Kisan Sampada Yojana, have driven exponential growth in processing capacity and exports, while also generating substantial off- farm employment, further supporting rural livelihoods.

#### MANDATORY REGISTRATION OF TECHNICAL PRIOR TO FORMULATION IMPORT

In the recent judgment from the Ahmadabad High Court on 13<sup>th</sup> September, 2023 it has been decided that it would be mandatory for registration of Technical prior to import of formulation mainly imported by traders and MNCs. Registration Committee has already accepted these recommendation in 442<sup>nd</sup> RC meeting.

Also suggested to increase the import duty of Technical grade pesticides to 20% and formulations to 30% or a delta of 10% between custom Duty of technical and formulation. This will boost local manufacturing and support India's Atmanirbhar Bharat initiative.

Technical manufactured in India are continuously monitored by our Govt. agencies for its purity, impurities, shelf-life etc. and are also monitored for raw- materials, manufacturing processes.

On the other hand a Formulation manufactured in a foreign country is neither monitored nor the Technical is checked for its quality. It is quite likely that a formulation may contain expired Technical. This is a huge risk to human/ animal health, environment and product efficacy.

Curtailment in imports of Formulations without registering Technical: It would be pertinent to mention that Import of formulation without registration of Technical is illegal and not permitted in several developed countries like the USA, European Union, Brazil, Australia, Argentina, and even in China.

#### **BUSINESS MODELS**



#### Regulatory Reforms

- a) Changes to Industry Structure
- b) Exploring New Business Avenues
- c) Global Manufacturing Hub
- d) Research Opportunities
- e) Make in India

However the agriculture value chain remains mainly unstructured and fragmented with many tiers of intermediaries and middlemen. While 86% of India's small and marginal farmers continue to provide the majority of the country's food and nutrition, they face challenges like landholding of less than two hectares and restricted access to technology, inputs, financing money and markets.

Agritech innovation can address a lack of infrastructure, inefficient supply chain and poor digital adoption that has historically prevented the sector from reaching its full potential.

Business models in the agritech industry are based on:

- Margin- based model: This model operates in market linkage- Farm inputs, supply chain technology and output market linkage where the agritech operators gets a margin by developing market place linkage on the information or output side and by delivering the promised service.
- Subscription- based model: Agritech players in areas like precision agriculture and farm management and quality management and traceability use a subscription- based model to offer a mix of hard ware, software and service based solutions throughout the year and collect monthly or annual subscription fees from their customers.
- Transaction- based model: this is used by agritech firms that provide financial services. It is based on the number of loans or insurance policies offered.

With India's ever increasing internet penetration and rural areas as the critical engine of this growth, the country is well positioned to adapt to changing agriculture techniques and moves from traditional business models to new innovation business models

This industry is still emerging in India, with roughly 20-40 companies now operating in this field.

### PRODUCTION LINKED INCENTIVES (PLI) SCHEME

PLI scheme

India's production —linked incentive (PLI) scheme to encourage domestic manufacturing has generated investment commitments of 2.34 lakh Cr. across 14 Sector.

The programe, launched two years ago offers a cash incentive for three to five years on the incremental sale of goods made in India over the determined base year sales. Additionally the identified beneficiaries are required to commit to a certain minimum investment in India.

In the next few years PLI units will have additional production to sustain exports on a sustainable basis, Companies will procure more from domestic source which will help our ancillaries to grow and maintain necessary standards to eventually become suppliers to the world.

#### **Highlights of PLI**

- The frame work of the PLI scheme is to reward increased production.
- Due to the niche and specificity of PLI linked sectors, that mostly involve careful
  and attentive focus on man force and creating PLI can enhance building systems
  to adjust to climate change and even essentially reverse it in the many years to
  come.
- The PLI scheme can also bring back old designs and product customs that can contribute heavily to the diversity.

Indian agrochemical Industry as a 'Champion Sector' has submitted a detailed proposal to the nodal Ministry during December, 2020, followed by revised proposal during May, 2023 our proposal include

Our dossier included Annexures I to IV

- 1) Annexure I List of 35 intermediates which are currently being imported.
- 2) Annexure II List of 81Technical grade products which are currently being imported.
- 3) Annexure III List of 89 Formulations currently being imported by MNCs & traders.
- 4) Annexure IV List of 31 Technicals being imported in India despite having indigenous manufacturing capacity.

It would be pertinent to mention that delay in announcing PLI scheme for agrochemicals is hampering fresh investment, which is expected to be Rs. 12,000 Cr. in the next 3 years. This scheme is applicable to those Indian manufacturers who have their own production facility, investment in land plant and machinery coupled with latest equipments for R&D and not on imported agrochemicals.

#### **GENERIC CROP PROTECTION PRODUCTS**



#### What Is a Generic Crop Protection Product?

A generic crop protection product is manufactured and sold by a company other than the original manufacturer, but contains the same Active Ingredient(s) (AI). Generic chemicals usually enter the market 12 -20 years after the initial discovery of the active ingredient(s) once the original product's patent expires.

Most major crop protection molecules available today have had their initial patents expire and farmers have more choice than ever with all of the generics entering the market.

### Are Generic Products Held to the Same Level of Regulatory Scrutiny as Branded Products?

Yes! Regardless of whether you're a farmer in the U.S. or Canada, the regulatory agencies follow the same regulation, guidelines, and review process for a generic product or for the original branded product registration.

#### Do Generic Products Work as Well as the Equivalent Branded Products?

From a regulatory standpoint, generic versions of branded products must have the same Al components to be registered by the government regulator. The Al carries the pesticidal activity but the co-formulants, including surfactants and adjuvants, have a big impact on performance by improving the penetration of the pesticide, allowing targeted application, etc.

#### Are Generic Products Identical to the Branded Products?

Not always. Generic products usually mirror branded products as closely as they can. However, they are not always identical and can have different uses on the label, different concentrations of Al and other differences.

The label is the best place to find the specifics on a product.

Here are the basics on generics vs. branded products:

- A generic product is usually similar to a branded product but made by a different company.
- Generic active ingredients are held to the same regulatory standards as branded active ingredients.
- Branded companies may purchase active ingredients from the same manufacturing plant as generic companies.
- Generic chemicals tend to cost less than their branded equivalents.
- Competition is good for farmers! Generic products give farmers more options and lead to lower input prices.

When choosing to use generic products instead of branded products, it's about understanding what you get for the higher price you pay. Is the brand premium you pay worth the extra cost for you? If you're interested in exploring cost-saving and performance-enhancing strategies and don't want manufacturer bundles, generics might be for you.

#### IMPORTANCE OF FARMERS TRAINING



Farmers training and awareness program has been our key focus area non other association has taken such a lead on proper and judicious use of agrochemicals both as part of training and field demonstration. We are grateful to our member companies who have been our fourth coming in not only deputing their field representative but also funding

towards the cost of complete PPE kits. We distributed free kits in an eco-friendly jute bag comprising of Headgear, Goggles, face mask, Gloves and Apron. It also included a branded T- shirt of CCFI carrying mascot with the theme "Jagrat Kisan – Khushal Kisan" and our logo.

As part of training we have conducted live dummy demonstration using water, with critical precautions in making spray solution, type of nozzle used, upkeep of spraying equipment, following direction of wind, explain label and leaflet etc. Knowledge on various pest and disease on cotton, rice vegetable, sugarcane, soybean, wheat to name, few are shared with gathering. Focusing on sucking pest like white fly and borer like pink ball worm which have been the most critical pest on cotton. On paddy the focus was on stem borers, leaf folders and brown plant hoppers.

The use of Agrochemicals has increased considerably primarily due to the fact that they are extremely effective in controlling various pest disease and weeds. We are happy to note that the adoption of using safety kits has resulted in minimal inhalation cases ensuring farmers health wellbeing.

The role agriculture universities, subject matter specialists and scientists have facilitated imparting technical knowledge to the farming community, Government officials supported our initiative on crop recommendation as per Package and Practices the correct dosage, time of application etc.

Over the last year CCFI has distributed free of cost complete safety kits. Total number of CCFI events and training programs so far are above 90 on PAN India basis and we have trained more than 1,45,000 of farmers and their contract labour for judicious use of agrochemicals.

CCFI has trained thousands of farmers, their contract labour, and women have been trained on safe practices on proper methods of storage of grains. We have also ensured that the participating farmers during our Farmers Training Program are also given certificates for participation. This certificate as we understand is very beneficial for the farmer to get loans and for education of their children.

# Farmer's Workshop: Proper use of Agrochemicals Jobner, Rajasthan



Farmer training program was organized with Sri Karan Narendra Agriculture University (SKNAU), Jobner- Jaipur, Rajasthan on 23rd August, 2024.

The theme of the training was on safe and judicious use of agrochemicals. The chief guest of program Dr. Sudesh Kumar, Director Extension, briefed the audience on crops grown during kharif season and their varieties, besides use of agrochemical for weed and pest control.

Dr. M. R. Choudhary, Dean and Faculty Chairman, was the guest of honour who highlighted the importance of role of agrochemical used at different stages of crop cycle.

Nirmala Patharawal, explains the role of member companies to promote productivity of Indian farmer by adopting crop protection measures. There has been a rapid increase in agriculture production due to timely control of pest disease and weed in all crop of economic importance.

Harish Mehta elaborated on the proper use backed by audio visual aids for the farmers. Over 160 farmers present were given live demonstration on spraying techniques and safety measures right from the time of purchase till post-harvest period.

Subject matter specialist Dr. Dev Ram Bajiya spoke on pest control of groundnut and Bajara, whereas Dr. Shailesh Godika spoke on the diseases affecting these crops. The students from the agriculture faculty conducted a 'Nukkad Natak' which was well appreciated. Since the session was interactive farmers' express their view on the role of agriculture inputs to increase their productivity.

Salient feature of the proceeding was the oath taken by all those present to wear PPE kits while using of pesticides. All the farmers were given safety kits and certificates for attending this training program. Dr. Basant Kumar Bhinchhar, Dr. I.M. Khan, Dr. Santosh Devi Samota and Dr. Ram Avtar Sharma were also present.



Ms. Nirmala Pathrawal presenting the welcome bouquet to the Chief Guest



Mr. Harish Mehta addressing the gathering



Women farmers with safety kits along with CCFI Executive Director



Happy farmers with safety kits after the training



### Safety Workshop & Distribution of Protective Gear for Stakeholders At ICAR- Directorate of Floricultural Research (DFR), Pune

For the first time in collaboration with ICAR- Directorate of Floricultural Research (DFR), Pune conducted "Hands on training on farm safety for ornamental Nurserymen" on 30<sup>th</sup> September, 2024 at Sortapwadi, Tal- Haveli, District, Pune. On second day i.e, 1<sup>st</sup> October, 2024 CCFI conducted "Sensitization Workshop on Farm Safety Hygiene" at "ICAR- DFR, Pune" focusing on contract labour and their safety.

In his welcome address Dr. Prashant Kawar, Pr. Scientist, ICAR-DFR, Pune, emphasised the need on use of agro chemicals on floriculture crops. Among the other dignitaries who addressed the gathering was Dr. Kaushik Banerjee, Director, ICAR-National Research Centre on Grapes, Pune, who was of the view the pest control is necessary on floriculture crops on all location in India, so as to educate on proper use of chemicals in this field.

Dr.K.V Prasad Director, ICAR- Directorate of Floricultural Research, Pune, was emphatic that specific recommendation needs to made right from nursery so that combining of chemicals arbitrarily is avoided.

Ms. Nirmala Patharawal and Mr. Harish Mehta explained about pivotal role played by CCFI and their member is safeguarding the crops. Maharashtra is one of the most important states with practically all the crops grown by the farming community. The use of PPE kits was emphasized which till now, was not used in floriculture.

In floriculture the focus on farmers as resulted in high production of variety of flowers with superior quality capturing global market with exports.

The farm workers were trained through agri collage and organization like CCFI, so that there are no incidences during field operations.

A special session was on snake bite prevention in the field operation was conducted by *Sarpamitra* Sh. Rajendra Perdeshi. He explained both poison and non-poisons snakes. majorly identification of Cobra, Vipers and Grass Snake was explained. In certain cases these snakes didn't drink milk, but survived on rats, frogs, lizards, eggs and fish. For this purpose CCFI has included Gum boots as a part of PPE kit.

The management highly appreciated CCFI to have included gumboots which would we major safeguard against snake bites.



Memento presented during taking sessions



Farmer using CCFI Safety kit in field operation

### Agrovision 'India's Premier Agri Summit' Nagpur, Maharashtra



Agrovision 'India's Premier Agri Summit' was held at PDKV Ground, Dabha, Nagpur, Maharashtra from 22nd to 25th November, 2024.

Agrovision, the illustrious 4-day annual event is held in Nagpur, stands out as exceptional platforms for farmers from across India to exchange knowledge and expertise. Pioneered 14 years ago under the distinguished leadership of Chief patron Shri Nitin Gadkari, Hon'ble Union Minister of Road Transport & Highway, Agrovision has continuously elevated its significance and influence with every subsequent edition. This momentous movement aspires to educate encourage, and empower farmers by introducing them to cutting- edge farming technologies and allied agribusiness that amplify their income and ensure a sustainable livelihood. Its unparalleled success and significance make it the most highly anticipated agri- festival in central India, attended by the cream of the agricultural community.

CCFI participated in the exhibition which attracts diverse range of participants, including corporates, Central and state government Department, public sector undertaking, NGOs, R&D organizations, educational institutes, financial institutes, MSMEs and Self-Help Groups. This national expo, which blends the latest technology, expertise, experience, and business, draws lakhs of farmers every year, and its popularity continues to skyrocket with each edition. As the esteemed national expo, Agrovision seamlessly blends the latest technology, expertise, experience, and business. As the esteemed national expo, Agrovision seamlessly blends the latest technology, expertise, experience and business. Beyond its role in updating agriculturist through the country, one important fact is that the expo offers tremendous business opportunities.

Our main effort was to create awareness of safe use of agrochemicals advising the farming community, precautions to be taken right from time of procurement till the time of actual spray and precautions thereafter. It was highlighted that farmers should use only the recommended pesticides at the specified dose, so as to get desired results.

Our PPE kit includes Cap, Goggle, Nose mask, Apron, Hand gloves, Gum boots and T-shirt in an ecofriendly bag. With a new addition of Gumboots very useful to prevent snake bites and in standing water conditions.

Shri Nitin Gadkari, Hon'ble Union Minister of Road Transport & Highway inaugurated the Summit. Among the other members who participated included UPL LTD, SML Limited, Sumitomo Chemical India Ltd, Parijat Industries (I) Pvt. Ltd., Insecticides (India) Limited.

Ms. Nirmala Pathrawal and Mr. Harish Mehta also spoke on proper use of agrochemicals and importance of using PPE kits which have to be a savior during field operations.

Besides distributing 1800 kits we also distributed calendars for 2025 which list in details the safety measures to be taken right from inception from the time a farmer purchased pesticides from the dealers shop till the time field operations are over.



Distribution of safety Kits after registration of farmers



Women Farmers with safety kits along with CCFI Executive



Farmers Rush at our stall for registration

# Training Program on Awareness on Proper use of Agrochemicals Valsad, Gujarat



Sandhya Organics, an Esteemed member of the Crop Care Federation of India organized a Training Program on Awareness and on Proper use of Agrochemicals, at Fansa village located in Umbergaon taluka of Valsad district in Gujarat, India.

The event was witnessed by Local MLA, officials from Directorate of Agriculture and Scientists from Navsari University. More than 1000 farmers were present who took advantage of this event. The Farmers in this region primarily grow Vegetables and Mangoes.

There were Scientists from Navsari University to train the farmers on Package and Practice on Vegetables and Mango cultivation and measures to protect the crops from insects and pests.

On behalf of Crop Care Federation, we compelled Farmers on right practices for use of Agrochemicals, importance of Agri input, bills for purchase from dealers, cleaning the tank, nozzle and spray tank, disposal of used containers and on the importance of the Label & Leaflet information provided by manufacturers.

The program ended by distributing Free Safety PPE kits to the farmers, which was appreciated by the entire gathering

The Professors of Navsari Agriculture University and Farmer requested the organizer's to host such training programs more occasions educate the Farmers on the right use of Agrochemicals. The news of our Program was widely circulated by all local news agencies.



Inauguration by lighting up of lamp



Demonstration on making spray solution



A glimpse of the farmers present



Audio visual film presentation



Farmers with PPE kits seen along with Nirmala Pathrawal

### ASSOCHAM Uttar Pradesh Agro Pradarshani Lucknow, Uttar Pradesh



ASSOCHAM Uttar Pradesh Agro Pradarshani cum exhibition, conference workshop was organized on 17th to 20th December, 2024, at Indira Gandhi Pratishtahan, Lucknow, Uttar Pradesh.

ASSOCHAM one of the leading chamber for commerce and Industry were the sponsors, supported by Ministry of MSME government of India under the procurement and Marketing Support (PMS) Scheme.

Uttar Pradesh plays a significant role in India's agricultural base, diverse agro climatic conditions, and contribution to the production of key crops. Uttar Pradesh's agriculture sector plays a crucial role in India's agriculture growth by contributing to crop production, food security, rural livelihoods, and economic development. The state's agricultural potential, coupled with supportive policies and initiative, positions it as a key player in shaping the countries agricultural landscape.

Agriculture is still the main stay in UP and the living condition, fortune and survival of people depend on it. Despite the considerable progress made, agriculture in India still has a long way to go when it comes to global bench marks. To attain global standards, there is need for modernization of farms, adoption of latest technologies along with substantive investment in irrigation, seed and fertilizers and new technologies coupled with a shift into high value commodities such as horticulture, fisheries, poultry and dairying. It becomes increasingly important drive necessary and timely interventions at industry, institution, FPOs and individual farmer level for transformation of agriculture sector.

Uttar Pradesh Agro Pradarshani was a platform to showcase best and latest Agri inputs, products, services and technologies that would drive the agriculture of the future. The Expo serves as a platform to convene some of the best minds from across the globe in the space of agriculture along with key representative from government, industry, academia and the farming community to discuss, deliberate, identify priorities and propose an agenda for the growth of the agriculture sector in the country.

Among the main objective of this pradarshani was to create

 An national meeting point in Uttar Pradesh for all the players in agro sector to network and interact with each other.

- To act as a platform for sharing and spreading awareness regarding the technical advancements that can exponentially increase the efficiency of the industry.
- To enable farmers and others to change from traditional practices and commercialize one's local business leading to generation of additional income and upgrade standard of living.
- To help Uttar Pradesh to reach a trillion Dollar Economy with the promotion Agro entrepreneurship adoption of technology, promotion of investment etc.
- To create awareness on safe and judicious use of agrochemicals.

There was a heavy rush at CCFI stall during the three days where 1000 kits were distributed. The positive side was the farmers were specially brought from the potential districts by the FPOs.



Ms. Nirmala Pathrawal, explaining the concept of safe use of agrochemicals



Harish Mehta addressing on the event



Dignitaries addressing the farmers at Technical session

# Training Program on right and safe use of agrochemicals College of Agriculture Kolhapur



A program was jointly conducted by Agriculture Technology Management Agency (ATMA), Rajarshee Chhatrapati Shahu Maharaj, College of Agriculture, Kolhapur for two days training program.

CCFI along with UPL Ltd. sponsored the event on 23<sup>rd</sup> to 24<sup>th</sup> December, 2024 at College of Agriculture, Kolhapur.

The Training Program coincided with National Farmers Day ie. 23<sup>rd</sup> December, 2024, in which selected farmers were called on 2<sup>nd</sup> consecutive day to be trained on safe and judicious use on agrochemical. The program was interactive with farmers sharing their experiences of crops like sugarcane, paddy (rice), and oilseeds like groundnut and soybean.

Ms. Nirmala Pathrawal Executive Director, CCFI conducted the training program highlighting the importance of pesticides for reducing crop losses and interim increasing productivity. The importance of 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. 100 safety kits were distributed.

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



Address by Subject matter specialist



Explaining the importance of packing leaflet



Happy Farmers posing with Safety Kits



Farmers with safety kits after the training

# Farmer Training workshop at Badnapur Jalna, Maharashtra



Farmers Training workshop at Agriculture Research Station Badnapur, Jalna, Maharashtra. A one day training program was conducted by CCFI on 9<sup>th</sup> January, 2025.

Maharashtra is an important state in term of verity of crash and commercial crops namely jowar (sorghum), bajra (pearl millet), wheat, pulses (like moong, tur, urad), cotton, sugarcane, and groundnuts. Scientist from the Agriculture Research Station are facilitated in conducting the technical session.

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

The mandate of the Agriculture Research Station Badnapur is to generate the production technology for the boosting production of different pulse crop along with genotypic specification. To undertake research for 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 spoke on the importance of agrochemicals in one of the major state 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 safe application of pesticides. A live demonstration was conducted for the benefits of the participants which include female farmers.

Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani (Maharashtra) provide education in agriculture, allied sciences and humanities. Provide research base to improve the productivity of important agri-horticulture, livestock, fisheries and agri-allied activities of Marathwada region. It also develop 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, conduct demonstrations and develop appropriate communication network.

Standardize technologies for crop production, protection, harvesting, marketing, postharvest utilization as also for livestock, fisheries and allied agro-communities for improving the living status of farmers, farm workers and Women of Marathwada. Provide the necessary production support of nucleus, breeders and foundation seed of important crops of the region and also generate revenue through large farms for sustainable growth of the University.



Dignitaries with Ms. Nirmala Pathrawal for inaugural session



Demonstration on use of PPE Kits before farmers



View of the farmers at the event



Farmers displaying their safety kits

### 'Indus Food, Agri- Tech Dwarka, New Delhi



'Indus Food, Agri- Tech an exhibition organized by Trade Promotion Council of India (TPCI) was organized between 9<sup>th</sup> to 11<sup>th</sup> January, 2025, the venue of the event was at Yashbhoomi (IICC), Dwarka, New Delhi.

The program was supported by Ministry of Commerce and Industry, Ministry of Agriculture & Farmers welfare, Ministry of Fisheries, Animal Husbandry and Dairying. 200 farmers visited our stall, which were given safety kits after verification of their Aadhar cards.

CCFI had put up stall 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 inheritance advantage and safety factors were well explained so as to totally avoid accidental cases during field operations.

Ms. Nirmala Pathrawal 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 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 of misinformation on spurious pesticides should be stop totally, so as to maintain the positive image of the agrochemical fraternity.

Nirmala Pathrawal, Executive Director, CCFI in her vote of thanks explained on the training program conducted and the impact on farmers where ever such programs are conducted.



Progressive Farmers with PPE kits along with CCFI Executive Director



Mr. Harish Mehta addressing the gathering

## Bharat Agri- Tech Krishi Mela Indore, Madhya Pradesh



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

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

CCFi was given a frontal stall such that farmers could queue up for registration and distribution of safety kits. The response was overwhelming 600 kits were distributed during the event.

Ms. Nirmala Pathrawal and Mr. Harish Mehta participated in the program. The farmers were briefed about the proper usage particularly the use of face mask and gumboots for safety in slush and against snakes.

We took this opportunity to distribute our 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., UPI Ltd. and Heranba Industries Ltd. contributed in providing promotional support by sponsoring kits.

The back drop of the stall had list of our members with their logos. We also highlighted in map of India with event location of training program conducted so far. Another interesting feature was our display of "Myths vs Reality" on us of pesticides in India.

The program was inaugurated with a replica of Ramlala at the entrance of krishi mela. We were awarded/ presented with a trophy by the organizer in appreciation of our effort to promote safe and judicious use of pesticides for the farming community.

Agriculture Research Station provide education in agriculture, allied sciences and humanities. Provide research base to improve the productivity of important agrihorticulture, livestock, fisheries and agri-allied activities of Marathwada region. It also develop appropriate plans for conservation of natural resources and sustainable use.

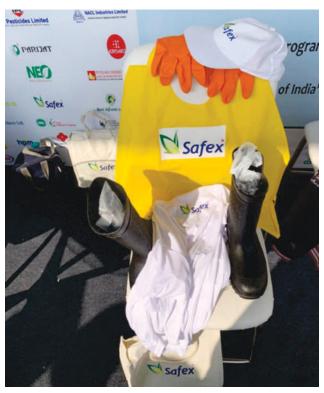
To undertake and guide extension education programmes, first line transfer of technology, extend services of training, conduct demonstrations and develop appropriate communication network.

Standardize technologies for crop production, protection, harvesting, marketing, postharvest utilization as also for livestock, fisheries and allied agro-communities for improving the living status of farmers, farm workers and Women of Marathwada.

Provide the necessary production support of nucleus, breeders and foundation seed of important crops of the region and also generate revenue through large farms for sustainable growth of the University.



Token of appreciation presented by organizers



Complete safety Kit sponsored by our member company Safex Chemicals India Ltd.



Registration of farmers for safety kits

#### Pusa Krishi Vigyan Mela New Delhi



Pusa Krishi Vigyan Mela 2025 organized by ICAR- Indian Agricultural Research Institute (IARI) New Delhi was held at IARI Mela Ground Pusa Campus from 22<sup>nd</sup> to 24<sup>th</sup> February, 2025. The theme of this Mela was "Unnat Krishi- Viksit Bharat".

Sh. Shivraj Singh Chouhan Hon'ble Minister of Agriculture and Farmers Welfare was the Chief Guest and inaugurates the Mela on 22<sup>nd</sup> February, 2025. Hon'ble Minister of State, Agriculture and Farmers Welfare Sh. Ram Nath Thakur was Guest of Honour and Dr. Himanshu Pathak, Secretary, DARE and Director General, ICAR presided over the function.

During his inaugural address the Hon'ble Minister before the farmers gathering expressed his concern over availability of quality inputs like fertilizers, seed and pesticides. He advised the scientists from ICAR and IARI to develop new technologies to facilitate in increasing farmers income.

The focus of the government was on:

- 1. Agricultural schemes so that farmers would avail the benefits.
- 2. Crop diversification and climate Resilient Agriculture to take care of any unforeseen climatic changes.
- 3. Entrepreneurship development of youth and women for partnering for growth in rural areas.
- 4. Agricultural Marketing, Farmers Organizations and Start-ups, in an area lacking focus.
- 5. Digital Agriculture, a new concept fir younger generation.
- 6. Farmers innovations included new technologies, new adaptation of research findings and measures to increase profitability.

CCFI used this occasion to display their activities besides free distribution of PPE kits sponsored by our member companies like Safex Chemicals India Ltd., Best Agrolife Ltd., Parijat Industries (I) Pvt. Ltd., Insecticides (India) Ltd., SML Ltd., Nichino India Pvt. Ltd. and UPL Ltd.

Farmers from adjoining states like Uttar Pradesh, Haryana, Punjab, Rajasthan and Bihar showed keen interest knowing about safety measures to be adopted during spraying operations especially crops like sugarcane, rice, wheat, Paddy, cotton, vegetables crops, pulses mustard, maize and bajara. 1500 kits were distributed after recording details of their Aadhar card, mobile contact etc.

New Year calendar were distributed depicting precautions to be taken right from time of purchase, storage, actual spraying and disposal of containers.

Valedictory function was held on 24<sup>th</sup> February, 2025 where Hon'ble Minister of State, Agriculture and Farmers Welfare Sh. Bhagirath Choudhary was the Chief guest and Dr. Himanshu Pathak Secretary, DARE and Director General, ICAR presided over the function.



Inauguration of Pusa Krishi Vigyan Mela 2025 by Sh. Shivraj Singh Chouhan Hon'ble Minister of Agriculture and Farmers Welfare



Farmers queuing up for registration and verification of Aadhar card







Farmers with safety kits in front of CCFI stall

# Field Day event of Centre for Agricultural Technology Assessment and Transfer (CATAT), ICAR-IARI at Kanvi Village, Hapur, Uttar Pradesh



Field day celebration was organized at Kanvi Village, Hapur, UP on 20<sup>th</sup> March, 2025. CCFI was invited by Dr N V Kumbhare, Principal Scientist (Agri. Extn) & Incharge ATIC, ICAR- Indian Agricultural Research Institute, New Delhi

IARI had adopted four villages (Kanvi in Hapur; Nidana in Rohtak; Basoli in Bagpat; Maholi in Palwal) for assessment of IARI technology and extension interventions at farmers' field. As a part of extension activity, IARI organized a 'Field Day' at Kanvi Village in Hapur district of Uttar Pradesh on 20<sup>th</sup> March 2025.

We participated at Kanvi village wherein about 100 farmers were present in the training program.

Ms. Nirmala Pathrawal conducted the program wherein proper use and awareness about pesticides was explained. Several scientists spoke on the crop pest complex of wheat, barley, mustard, and potatoes and measures to control them in that area.

Live demonstration was also done in the field so as to give the farmers practical feel of spraying operations.

This was one such program where there was direct interface of scientists and the farming community



Nirmala Pathrawal explaining the importance of Agrochemicals



Dr. N V Kumbhare, addressing the farmers



Farmers with safety kits and New Year calendars.



Field visit to see the crop condition for pest etc.

### **Collage of Important Events During the Year**































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Shivraj Singh Chouhan 🥏



आज नई दिल्ली स्थित कृषि भवन में वित्तीय वर्ष 2025-26 के बजट के लिए कृषि एवं किसान कल्याण मंत्रालय की योजनाओं, गतिविधियों तथा कार्यक्रमों के बजटीय परिव्यय पर स्टेकहोल्डर्स के साथ विस्तारपूर्ण विचार-विमर्श किया।



Dilip R Uppu and 1.1K others

**△** 1k

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