

42ND ANNUAL REPORT 2021 - 2022



Integrated modern solutions for better crop protection

Farmers prosperity through enhanced productivity

Committed to advancing sustainable agriculture



Leadership in product stewardship



CHIEF GUEST Inaugural Session



Shri Narendra Singh Tomar
Hon'ble Minister of
Agriculture and Farmers Welfare
Government of India

CropLife India's 41st Annual General Meeting and Open House - Virtual Conference India@75: Journey of Agrochemical Sector 29th September 2021 (Wednesday)



Dr. Ashok Dalwai
CEO
National Rainfed Area Authority
Ministry of Agriculture
and Farmers Welfare



Dr. S. K. Malhotra
Agriculture Commissioner
Ministry of Agriculture &
Farmers Welfare



Dr. Ravi Prakash
Plant Protection Advisor
Ministry of Agriculture
& Farmers Welfare



Ms. Guilia Di Tommasso
President and CEO
CropLife International



Mr. Christoph Neumann
Vice-President, Regulatory Policy
and Stewardship
CropLife International



Mr. Mayank Singhal
Vice Chairman and
Managing Director
PI Industries



Mr. K. K. Unni
Chairman Emeritus
CropLife India



Dr. K. C. Ravi
Chairman
CropLife India



Mr. Sanjiv Lal
Managing Director & CEO
Rallis India Limited



Mr. Anil Kakkar
Vice Chairman
CropLife India



Mr. Rahoul Sawani
Managing Director - South Asia
Corteva Agriscience



Mr. Ravi Annavarapu
President
FMC India



Mr. Ankur Aggarwal
Managing Director
Crystal Crop Protection



Mr. Asitava Sen
CEO
CropLife India



Mr. Rajvir Rathni
Director - Public Affairs,
Science & Sustainability,
Bayer Crop Science Limited

ABOUT CROPLIFE INDIA

CropLife India is committed to advancing sustainable agriculture and it is an association of 16 R&D driven member companies in crop protection. They jointly represent ~ 70% of the market and are responsible for 95% of the molecules introduced in the country. Our member companies have annual global R & D spend of 6 billion USD and are firmly committed to engaging with the farming community across the World to enable Safe, Secure, Food Supply.

CropLife India members enable farmers adopt new technologies in agriculture, while providing in depth farmer trainings on good farming practices, including responsible use of crop protection products, container management and spraying techniques promotion of safe, responsible & judicious use of crop protection products under Integrated Pest Management approach. CropLife India extensively engages with the farming community including dealers and traders for growing safe, secured and nutritious food committed to responsible crop care and crop production for sustainable development of Indian Agriculture.

CropLife India is a not for profit organization, (registered under Section 8 Companies Act 2013) wholly funded by membership. CropLife India is part of the CropLife International Network; and works closely with CropLife Asia & CropLife International, spread across 91 countries while engaging with diverse stakeholders to drive programs on Anti-Counterfeiting, Product Stewardship, Progressive Regulations, IPR/Data Protection, Policy & Advocacy, Communications & Outreach.



ASSOCIATION REPRESENTING INDIAN PLANT SCIENCE INDUSTRY

OUR MEMBERS

- ◆ ADAMA India Pvt. Ltd., Hyderabad
- ◆ BASF India Ltd., Mumbai
- ◆ Bayer CropScience Ltd., Mumbai
- ◆ Corteva Agriscience India Pvt. Ltd., Mumbai
- ◆ Crystal Crop Protection Ltd., Delhi
- ◆ FMC India Private Ltd., Mumbai
- ◆ Indofil Industries Ltd., Mumbai
- ◆ PI Industries Ltd., Gurugram
- ◆ Rallis India Ltd., Mumbai
- ◆ Sumitomo Chemical India Ltd., Mumbai
- ◆ SWAL Corporation Ltd., Mumbai
- ◆ Syngenta India Pvt. Ltd., Mumbai
- ◆ Dhanuka Agritech Ltd., Gurugram



OUR ASSOCIATE MEMBERS

- ◆ Bharat Certis Agriscience Ltd., New Delhi
- ◆ Nisso Chemical India LLP, Gurugram
- ◆ T. Stanes & Company Ltd., Coimbatore



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KEYNOTE MESSAGE

नरेन्द्र सिंह तोमर
NARENDRA SINGH TOMAR



कृषि एवं किसान कल्याण मंत्री
भारत सरकार
कृषि भवन, नई दिल्ली
MINISTER OF AGRICULTURE & FARMERS WELFARE
GOVERNMENT OF INDIA
KRISHI BHAWAN, NEW DELHI



संदेश

मुझे यह जानकर प्रसन्नता हो रही है कि क्रॉपलाइफ इंडिया अपनी 42वीं वार्षिक आम बैठक के अवसर पर 28 सितंबर 2022 को राष्ट्रीय सम्मेलन का आयोजन कर रहा है। मुझे उम्मीद है कि यह सम्मेलन देश में खेती-किसानी के सतत विकास की यात्रा में अपना महत्वपूर्ण योगदान देगा।

कृषि और ग्रामीण क्षेत्र हमारी अर्थव्यवस्था की रीढ़ हैं। इस क्षेत्र को बढ़ावा देने के लिए, प्रधानमंत्री श्री नरेंद्र मोदी के नेतृत्व में सरकार ने डिजिटल कृषि मिशन पर काम शुरू किया है ताकि किसान पारदर्शी ढंग से सरकारी योजनाओं का लाभ उठा सकें। मिशन की सफलता के लिए सभी का सहयोग अपेक्षित है। कृषि क्षेत्र में अपने दायित्वों को पूरा करने के लिए केंद्र व राज्य सरकारें मिलकर काम कर रही हैं, जिसके सद्परिणाम परिलक्षित हो रहे हैं। किसानों को टेक्नालाजी का लाभ भी पहुंचाया जा रहा है, जिसमें किसान-ड्रोन की शुरुआत अहम है, जिसके लिए केंद्र सरकार विभिन्न श्रेणियों में अनुदान भी प्रदान कर रही हैं।

मुझे विश्वास है कि क्रॉपलाइफ इंडिया किसानों व कृषि क्षेत्र की प्रगति में सहभागी रहेगा। संस्था को वार्षिक बैठक, राष्ट्रीय सम्मेलन व इस अवसर पर जारी की जाने वाली रिपोर्ट के लिए शुभकामनाएं।

(नरेन्द्र सिंह तोमर)

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FROM THE CHAIRMAN'S DESK



It gives me special pride this year as India enters her 75th year of independence to reflect on the immense contribution that our industry has been making to serve our farmers. As mentioned by our Prime Minister, the next 25 years can be the “Amrit Kal” of Indian agriculture and India can feed the world as Indian agriculture is at the threshold of immense opportunities for sustained higher growth trajectory. From a mere 50 million tonnes at the dawn of independence, India is headed towards a record food grains production of 315.72 million tonnes as per the fourth advanced estimates. Rice is estimated at a record 130.29 million tonnes, Wheat 106.84 million tonnes and equally impressive production in Cereals, Maize, Pulses, Gram, Oilseeds among others. This remarkable achievement is not only due to the introduction of quality High Yielding Variety (HYV) seeds but also equally to the inputs of fertilizer and crop protection products.

It is also testimony to the importance of crop protection for farmers to combat climate change as well as other biotic and abiotic challenges that the government has identified agrochemicals as one of the **champion sectors**. While speaking at the last year's CropLife India Annual Conference, **Shri Narendra Singh Tomar** lauded us for having risen to the occasion even during the pandemic and working with the Government to ensure that our farmers get uninterrupted supply of inputs. This year was also quite challenging with heat wave, unpredictable rains and dry spells as well as newer pests and diseases. But our industry continued to work hand in hand with the farmers to overcome the challenges. But there were equally many opportunities in the year gone by. Indian Agriculture saw the further influx of Artificial Intelligence and Digitalization. The grower apps that are being introduced will not only change the way that we will serve our farmers but will also tremendously help in reducing the environmental load by optimal utilization of our scarce resources. The use of Drone which have been allowed for spraying of crop protection products for instance would not only reduce the time, increase productivity, but also conserve the most precious resource water making farming more sustainable. The opportunities are immense in resolving the pain points of the farming community. Our Prime Minister's aim of 'Chhota kisan bane desh ki shaan' can be achieved by deployment of scale neutral technologies and reaching the small farmers to increase their collective strength.

CropLife India was in the forefront of paving the way for the introduction of drones for spraying of crop protection products. We submitted our inputs, suggestions and shared best practices during the deliberation process for expeditious release of SOP and Guideline for spraying of agrochemicals through Drones. The Prime Minister's special focus on introduction of Kisan Drones, I am confident, it will make them our Indian farmer's new best friend helping save time, cost and increasing productivity as well as ensuring safety. CropLife India continued to promote safety as the key driver for resilient and sustainable agriculture during the last year. Recognising our efforts, CropLife India was awarded for Farmers' Awareness Campaign at Agri Business Summit Award (ABSA) 2022 adding another recognition to the one the previous year. CropLife India continued to champion several initiatives for sustainable agriculture, safe food as well as judicious use of crop protection products for the education of farmers even during the pandemic.

The road ahead is clear and we have to make the best use of the “Amrit Kal”. Partnerships and Implementation would be key. CropLife India would reinforce the efforts to work with all stakeholders to ensure a predictable, science based policy and regulatory regime for further enhancing the ability of the crop protection sector to make our farmers and Indian agriculture sustainable - this will be our continued agenda. As always, the Secretariat has been in the forefront of all our activities. A big thank you and compliments to the entire team who worked tirelessly to implement all the initiatives during the year. I am thankful to the leadership and guidance of all Committees / Groups in making the year highly productive for our industry.

I would like to take this opportunity to thank Anil and Srinivasa for their continued support during the year. I thank our Board of Directors for their contribution in making the last year significant one in the backdrop of the pandemic. It is also heartening to note that the CropLife India Board meetings, various Committee meetings, Seminars and meetings with external stakeholders took place with record participation, inspite of restricted movement, thanks to the **digital platforms!** With the situation easing, I look forward to more face to face interactions in the coming months.

I wish all the members continued success and prosperity as we strive together to leverage CropLife India's platform for nation building.

Dr. K. C. Ravi
Chairman, CropLife India

BANKERS

Central Bank of India (GEN)
New Delhi-110021

HDFC Bank Limited
New Delhi - 110066

Punjab National Bank
New Delhi - 110066

State Bank of India (FCRA)
New Delhi - 110001

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Chartered Accountants
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COMPANY SECRETARY

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REGISTERED OFFICE

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E-mail: anjana.sundriyal@croplifeindia.org
Website: www.croplifeindia.org

BOARD MEETINGS:

The Board of Directors met **four times** during the year 2021-2022 to discuss key issues confronting the industry and other agenda items.

DIRECTORS:

Terms of all the Directors expired at the time of Fourty First (41st) Annual General Meeting which was held on 29th September 2021, New Delhi. The following were appointed post elections:-

- ◆ Dr. Karungulam Chandrasekharan Ravi was elected as Chairman.
- ◆ Mr. Anil Kakkar was elected as Vice Chairman.
- ◆ Mr. Srinivasa Karavadi was elected as Second Vice Chairman.

BOARD OF DIRECTORS

Dr. K. C. Ravi

Chairman, CropLife India
Chief Sustainability Officer
Syngenta India Pvt. Ltd.



Mr. Shalabh Jain

Full-Time Director (Operations)
Adama India Pvt. Ltd.



Mr. Anil Kakkar

Vice-Chairman, CropLife India
Vice President-Sales &
Marketing
Sumitomo Chemical India Ltd



Ms. Vedika Kapoor

Head Government & Industry
Affairs - South Asia
Corteva Agriscience India Pvt. Ltd.



Mr. Srinivasa Karavadi

Vice Chairman, CropLife India
Head of Market Development
India Bangladesh & Sri Lanka
Bayer CropScience Ltd



Mr. Ravi Annavarapu

President
FMC India Pvt. Ltd.



Mr. Sanjiv Lal

Managing Director & CEO
Rallis India Ltd.



Mr. N. C. Rane

COO - GLOBAL
Indofil Industries Ltd.



BOARD OF DIRECTORS

Dr. Ajit Kumar

Vice President - Technical & Development
SWAL Corporation Ltd.



Mr. Rahul Dhanuka

Chief Operating Officer
Dhanuka Agritech Ltd.



Mr. Vivek Sharma

Head - Asset Management & Business Lead
Pakistan, Bangladesh, Sri Lanka
BASF India Ltd.



Mr. Prashant Hegde

CEO - Agri Input
PI Industries Ltd.



Mr. Ankur Aggarwal

Managing Director
Crystal Crop Protection Ltd.



ASSOCIATE DIRECTORS

Ms. Lakshmi Narayanan

Wholesale Director
T. Stanes & Company Ltd.



Mr. Sajal Kumar Biswas

Director (Business Development)
NISSO Chemical India LLP



Mr. Dharmesh Gupta

Managing Director
Bharat Certis Agriscience Ltd.



CROPLIFE INDIA SECRETARIAT

The CropLife India Secretariat is led by a dedicated team of professionals, who play an important role in engaging with diverse stakeholders. Domain experts in the fields of Regulatory Affairs, Anti-Counterfeiting, Stewardship, Communications and Accounts, Compliance and Human Resources; hold the mantle of CropLife India. The association has committees for various disciplines, which are represented by member companies' experts. The different committees meet at regular intervals to carry out focussed programs, projects and engagements, to take forward the association's strategic objectives along with its vision and mission. The functional heads at the secretariat ensure that the strategic initiatives are implemented at various levels throughout the year.



ASITAVA SEN
Chief Executive Officer
April 2019 - July 2022



ANJANA SUNDRIYAL
Head - Accounts, Compliance
and Human Resources



SONY MAMGAI
Senior Manager - Stewardship
& Anti-Counterfeit Projects



JOYDEEP CHAKRABORTY
Head - Communications



NIRUPAMA SHARMA
Head - Regulatory Affairs

COMMITTEES

NAME	COMPANY
◆ Rajesh Dhawan	Syngenta India Pvt. Ltd.
◆ Anirban Gangopadhyay	BASF India Ltd.
◆ Yuvraj Chopra	BASF India Ltd.
◆ Dr. Ramaiah Valasubramanian	Corteva AgriSciences India Pvt. Ltd.
◆ Arpita Roy	ADAMA India Pvt. Ltd.
◆ R. D. Kapoor	PI Industries Ltd.
◆ Prajwal Nalawade	Indofil Industries Ltd.
◆ Sushil Mishra	Crystal Crop Protection Ltd.
◆ Manoj Lingeri	Bayer CropScience Ltd.
◆ P. Suresh	Bayer CropScience Ltd.
◆ Vijay Jha	Rallis India Ltd.
◆ Ajeet Singh Tomar	Dhanuka Agritech Ltd.
◆ Dr. Anand Jha	SWAL Corporation Ltd.
◆ Dr. Amitava Sanyal	Sumitomo Chemical India Ltd
◆ Deepa Kathuria	FMC India Pvt. Ltd.
◆ Ranjesh Kumar Singh	Bharat Certis Agriscience Ltd.
◆ Nirupama Sharma	CropLife India
◆ Chidambar Phadinis	Syngenta India Pvt. Ltd.
◆ Gunjan Bisht Mehta	BASF India Ltd.
◆ Basavarajappa N	Corteva AgriSciences India Pvt. Ltd.
◆ Dr Ambesh Dubey	ADAMA India Ltd.
◆ Ajay Kumar Gupta	PI Industries Ltd.
◆ N.K. Sangareddy	Indofil Industries Ltd.
◆ C.S. Shukla	Crystal Crop Protection Ltd.
◆ Sushil Desai	Bayer Crop Science Ltd.
◆ Amol Jhadav	Rallis India Ltd.
◆ Ajeet Singh Tomar	Dhanuka Agritech Ltd.
◆ Prashant Argekar	Sumitomo Chemical India Ltd.
◆ Atimanav Gaur	SWAL Corporation Ltd.
◆ Akanksha Saith	FMC India Pvt. Ltd.
◆ Madhukar Chugh	Bharat Certis Agriscience Ltd.
◆ Sony Mamgai	CropLife India

RAG - MENTOR

Mr Anil Kakkar
Rajesh Dhawan - Lead
Manoj Lingeri - Co-Lead

Stewardship and Anti-Counterfeit

Mentor
Mr Ravi Annavarapu
Sushil Desai - Lead
Gunjan Bisht - Co-Lead
Anti-Counterfeiting
Ashraf Ali - Lead

COMMITTEES

NAME	COMPANY
♦ Rajvir Rathi	Bayer Crop Science Ltd.
♦ Ms. Vedika Kapoor	Corteva AgriSciences India Pvt. Ltd.
♦ Raju Kapoor	FMC India Pvt. Ltd.
♦ Himanshu Barsainya	Crystal Crop Protection Ltd.
♦ R. Vaithyanathan	Syngenta India Pvt. Ltd.
♦ Vijay Jha	Rallis India Ltd.
♦ Binod Anand	Dhanuka Agritech Ltd.
♦ H. N. Airi	Sumitomo Chemical India Ltd.
♦ Yuvraj Chopra	BASF India Ltd.
♦ Ranjesh Kumar Singh	Bharat Certis Agriscience Ltd.
♦ Prasun Sarkar	PI Industries Ltd.
♦ Joydeep Chakraborty	CropLife India
♦ Tarun Bhalla	Syngenta India Pvt. Ltd.
♦ Girish Rao	BASF India Ltd.
♦ Phani Goruganthu	Corteva AgriSciences India Pvt. Ltd.
♦ Lalit Tiwari	ADAMA India Pvt. Ltd.
♦ Nilesh Limaye	FMC India Pvt. Ltd.
♦ Gaurav Arora	PI Industries Ltd.
♦ Poovanan Krishnamurthy	Indofil Industries Ltd.
♦ Devendra Joshi	Crystal Crop Protection Ltd.
♦ Nabeel Saleem	Bayer Crop Science Ltd.
♦ Juhi Chaudhary	Rallis India Ltd.
♦ Viraj Srivastava	Dhanuka Agritech Ltd.
♦ Subramaniam Iyer	Sumitomo Chemical India Ltd.
♦ Abhishek Verma	Bharat Certis Agriscience Ltd.
♦ K S Narayanan	Syngenta India Pvt. Ltd.
♦ Prashant Joshi	BASF India Ltd.
♦ Vedika Kapoor	Corteva AgriSciences India Pvt. Ltd.
♦ Srinivasa Rao	ADAMA India Pvt. Ltd.
♦ Soumitra Purkayastha	FMC India Pvt. Ltd.
♦ Mahesh Khambete	Indofil Industries Ltd.
♦ Sachin Mittal	Crystal Crop Protection Ltd.
♦ Rajvir Rathi	Bayer Crop Science Ltd.
♦ Sukhbir Malik	Rallis India Ltd.
♦ Binod Anand	Dhanuka Agritech Ltd.
♦ HN Airi	Sumitomo Chemical India Ltd.
♦ Ranjesh Kumar Singh	Bharat Certis Agriscience Ltd.
♦ Prasun Sarkar	PI Industries Ltd.

Advocacy & Communication

Mentor

Dr. K. C. Ravi

Rajvir Rathi - Lead

Advocacy

Vedika Kapoor - Co-Lead

Raju Kapoor - Co-Lead

Communication

Himanshu Barsainya-

Co-Lead

Legal - Mentor

Mr Srinivas Karavadi

Tarun Bhalla-Lead

Girish Rao-Co-Lead

Nilesh Limaye-Co-Lead

Nabeel Saleem-Co-Lead

State Affairs

Mentor

Sanjiv Lal

Soumitra Purkayastha -Lead

Rajvir Rathi - Co-Lead

Vedika Kapoor - Co-Lead

Sachin Mittal - Co-Lead



REGULATORY AFFAIRS & EVENTS

CropLife India Regulatory Affairs Committee is engaged in promoting scientific approach in Product Regulation and Registration in India. The Regulatory Affairs Group (RAG) has always mooted to adopt International Best Agricultural Practices and policies that has helped and improved Farmers Welfare.

Key Highlights of CropLife India Regulatory Affairs are:

1) Process and Policy Recommendations for New Molecule definition

CIB&RC and Ministry of Agriculture initiated the discussions on New Molecule definition. A subcommittee was formed on the subject. CropLife India Regulatory Affairs Committee made representations to the government stakeholders on the new molecule definition, different parameters to be kept while identifying the new molecule and their faster registrations. It was also requested that the need of the product vis a vis farmer's requirement should be given priority irrespective of domestic manufacturing or import. Since January 2022, three rounds of discussions have happened on the subject. On behalf of CropLife India, a detailed proposal has been submitted.

The initiative to define new molecule was done in January 2022. CLI emphasized to adopt the definition given and proposed by the Satwant Reddy Committee Report dated 31st May 2007 and which read as under- "New Chemical Entity (NCE): An agrochemical product which contains an active ingredient that has not been previously approved in India irrespective of whether the product is patentable or not".

The definition of new molecule by submission of dossier with in 5 years from Global registration is though agreed but not implemented, to grant faster introductions of novel chemistries



2) 3D- Regulatory Reforms meeting with Govt. of India

CropLife India Regulatory Affairs Committee India prepared an elaborate presentation on the 3D regulatory reforms proposing a plethora of specific and general reforms in registration process, modalities for outsourcing of registration application review at external govt institutes/Exports, GLP, 5-Batch Chemical equivalence testing, in process-sampling, minor changes, PRD, TI/TIM & FI/FIM, Custom manufacturing, Chemistry, Bioefficacy, Packaging, Toxicology data requirements, Pesticide Review, Dual use, E-commerce of Pesticides, Uniform infrastructure and checklists for issuance of manufacturing/ sale license, etc. This agenda was later expanded to cover 29 Regulatory issues.

CropLife India participated in 3 full day meetings with the govt on the agenda of Regulatory reforms on 17th, 24th Feb and 3rd March 2021. These meetings brought together the JS PP, Ag Com, PPA, ADG-PP, Secretary, CIB&RC, Experts from CIB&RC, Agriculture Universities and IARI. The meeting was attended by 44 participants including the representatives from Industry Associations such as CII, FICCI, Assocham, PHDCCI, CCFI, PMFAI, HICA, HPMA, CAPMA, etc. Subsequently, CIB&RC regularized 9 regulatory data requirements through 427th RC on 25th March 2021.

On 18th March, CropLife India was invited to an alignment meeting with PPA & Secretary, CIB&RC to finalize the minutes of the 3D- meetings and to formalize the actions to be undertaken by the Industry and the Govt. CropLife India Regulatory Affairs Committee is developed data evaluation templates and draft guidelines as agreed during the 3d- reforms meetings. User friendly Templates of Data requirements and its evaluation for Chemistry, Bioefficacy and Toxicology data were developed, reviewed and finetuned after multiple review meetings.

After joining of Dr Pramod Meherda JS (PP), a meeting of all association was called on 11th October 2021. A follow up letter to call meeting to discuss key issues concerning regulatory reforms of crop protection industry was submitted on 12th October 2021.



A letter from CropLife India requesting joint association meeting on the subject was sent in June 2022. Simultaneously a meeting regarding the same with defined agenda items was called on 22nd July 2022 under the chairmanship of Dr. J. P. Singh (Plant Protection advisor), however, minutes were not issued.

3) **Pesticide Management Bill 2020:**

CropLife India also closely followed up with Parliament Standing Committee (PSC) on Agriculture and made a presentation to the Parliamentary Standing Committee on Agriculture (20-21) on 13th July 2021 highlighting suggestions and recommendations for modifications to be brought into PMB 2020. CropLife India held multiple meetings and aligned with other associations (CII, FICCI, PHDCCI, ACFI) and submitted a comprehensive clause-wise comments, suggestions and feedback on the PMB 2020 on Agriculture to the Parliamentary Standing Committee on 24th August 2021.

The recommendations of the Parliament Standing Committee were released in the winter session of the parliament in Dec 2021 and submitted to DAC for its evaluation and review. These recommendations are not binding and are advisory in nature. The report was closely analysed and it was agreed that point of common interests shall be taken up collectively with other associations. Other areas shall be taken along with higher level advocacy CropLife India leaders with the government.

Subsequently, CropLife India team met Shri Pramod Meharda JS (PP) regarding clause of Offences and Punishments in March 2022. The meetings were positive and a letter has also been submitted mainly to share the basis for request for decriminalisation and CropLife India's proposal. JS also assured that it will be followed by Rules for which also industry shall be thoroughly consulted.

A Joint Task force on the matter connecting all three associations along with few legal team members has been also been started to work in this direction.

4) The Ministry of Agriculture and Farmers Welfare notified the Draft Ban order on import, manufacture, distribution, sale and use of 27 Pesticide molecules on 18th May 2020.

Due to very close follow up by CropLife India Regulatory Affairs Group on this matter at various ministries including the Ministry of Agriculture and Farmers Welfare, Ministry of Chemicals and Fertilizers, Ministry of Industry and Commerce, etc., the government constituted an independent Expert committee in Jan 2021 to review the Stakeholders response/objections and suggestions received on its draft notification to ban 27 AIs. This committee has been entrusted to give its recommendations to the Government for taking appropriate measures.

CropLife India Regulatory Affairs Group reached out to the Chairman of the Expert Committee and its Member Secretary to understand the progress towards the review, seeking a formal hearing for the original registrants/ molecule owners and expressed our support and willingness to coordinate for any data requirement directly from our member companies, who are original registrants/ molecule owners. We have highlighted to the Chairman of the Expert Committee that a large majority of the required data to support the Safety & Bio-efficacy of these molecules has already been submitted by the member companies individually or jointly to the CIB&RC.


The DAC has given some feedback on the report to be considered. Few members have received request from CIB to submit the data submitted earlier in the specified format.

5) Draft Gazette notification on product label and leaflets

CropLife India Regulatory Affairs Group organized several alignment meetings with the Industry Associations, made joint submissions, and held a no. of joint meetings under the Chairmanship of PPA, DPPQS, Department of Agriculture Cooperation & Farmer's Welfare putting forth various suggestions and proposals related to Labelling of Pesticides

The matter is being chased actively since early 2021 and the subsequent joint representations have also been submitted by CLI and CCFI.

The matter was discussed at a length by CLIN delegation with Dr. Pramod K Meherda, JS (PP) and requested to again call an all-industry associations meeting and resolve the issues that are still unresolved. To this request JS expressed the need to check with legal team before getting into discussions with industry when the matter is subjudice.



Due to CropLife India active pursuance a joint meeting was called in JS (pp) office on 27th April 2022. Post those two subsequent rounds of discussions happened in PPAs Office on 27th May and 22nd July along with representatives of CLI and CCFI. On certain anomalies in the minutes of the meeting with PPA, the objections had been raised by CLI and CCFI and in principle have been acknowledged by the CIB experts present in the meeting.

The next hearing on the matter is November 2022, which might not be of relevance as CropLife / CCFI may withdraw their petition with great hopes that by that time matter may be reconciled via issuance of Gazette notification by Government, accommodating all of our requested proposals especially mitigating the issue of impracticable clauses.

6) Pollinator Studies with Neo-Nicotinoids:

The final report from the AICRP was to be submitted by the June 2021, but considering the impact of Covid 19, the DAC has granted an extension of 3 months. CropLife India Regulatory Affairs Group closely followed up with Project Coordinator, AICRP on Honey Bees and Pollinators.

A mid-term project review meeting was organized on 23rd Oct 2021 under the Chairmanship of Dr Balraj, PMU, ACRIP wherein the progress made by each of the centres was reviewed. The minutes of the meeting were shared with the member companies. The study reports were submitted by ACRIP to ICAR on 30th September 2021 and ICAR had submitted it to Ministry of Agriculture with few additions and recommendations. Further, the matter had been referred to a Sub-committee chaired by Dr. S.C Dubey (ADG- Plant Protection, ICAR).

Task force of CLI RAG took follow up meetings with Dr. Dubey and his subcommittee members and their assessment report along with recommendations was submitted in July to CIB&RC. Finally, RC in their 440th meeting, deliberated the agenda and decided to endorse the sub-committee report. In addition, RC also suggested that the label of the container of these neonicotinoids should clearly display the statement of “Do not spray on flowering stage of crop” and asked Sectt. of CIB&RC that same should be communicated to DA&FW for consideration

7) **Restriction on Use of Glyphosate Order, 2020:**

Gazette Notification No. 2268 (E) issued on July 06, 2020: Govt. proposed to restrict the use of Glyphosate only through Pest Control Operators (PCOs). The suggestions and objections on this draft notification were initially invited within a period of 30 days.

CropLife India Regulatory Affairs Group submitted a representation to the Shri Rupala on 19th March 2021 to refer the matter to an independent expert committee (on the lines of 27 AI Expert Committee) for the peer review, of the stakeholder's response as a transparent and neutral approach. Subsequently CropLife India organized a joint meeting of members with the Shri Rupala on 5th April 2021 to reiterate this request and seek further guidance. Shri Rupala advised the stakeholders to identify the alternate models for safe application.

In the 427th RC meeting, the RC agreed to hear the stakeholders before making a final recommendation. Minutes of the 427th RC meeting released on 15th April mention that it was decided that all 9(3) registrants of Glyphosate formulations and other stake holders may be heard to understand their views regarding proposing restriction on use of Glyphosate through pest control operators. Meanwhile, CropLife India held the brainstorming meeting with CropLife Asia and the member companies to identify the alternates of "PCO Only route". A draft document "Road map on safe use of Pesticides" was developed and circulated for comments of the stakeholders. This alternative model of Safe Application of Pesticides draws heavily on spraymen training and their certification (monitoring & enforcement) by involving the stakeholders from Govt, Inspectors of State DoA, SAUs, Industry and Associations.

There is no new update on the matter. However, the matter of having definition of non- cropped area has progressed well i.e. the definition as mutually agreed between Industry and PPA led sub-committee has been finally approved vide 440th R.C. meeting minutes and will be soon updated on website.

8) **Progress on the matter of Barcode implementation on product labels:**

This QR code matter was again brought to the notice of the DAC&FW for a quick decision on this matter during 3d-Regulatory Reforms meeting held on 17th, 24th Feb and 3rd March 2021.



Subsequently, Govt. organized a stakeholder meeting on 8th March 2021 and agreed to uniformly implement the QR codes by allowing further 1 year timeline. Another stakeholder meeting with PPA and Secretary CIB&RC was organized on 16th March where the issue of QR code implementation was discussed along-with the Label leaflet matter, wherein the industry raised the need for clarity on timelines of implementation of QR codes.

On 17th March 2021, CropLife India submitted its formal response to CIB&RC and PPA requesting that the final date of Implementation of QR codes should be clearly communicated by the Govt.

A follow up meeting with PPA involving the CropLife India & other major associations was held on 18th March 2021. During this meeting with various associations, the PPA clarified that the Govt. will give Industry a 1-year time to implement the QR codes. The associations reiterated that MSMEs be given a timeframe of 1.5 years (i.e., additional 6 months) to implement the QR codes. It was agreed verbally, it will be from March 2022

A meeting was organized on 26th May, 2021 with the industry associations during which it was clarified that QR code may be embossed/ printed on any part of the retail pack- on the label or the cap or the bottle or its bottom. CLI requested and submitted a representation seeking to allow printing of QR codes from July 2022 onwards, as PPA was agreeable to implement the revised labeling requirements after 1 year from July 2021.

A representation was submitted on 16th Jan 2022 to allow industry time to comply with printing of QR codes from July 2022 onwards. Small pack challenges with QR code still exists but since the matter is subjudice so no coercive action may take place. Proactively most of the member companies are trying to comply with it.

It has been already agreed that QR Code may be placed anywhere on the retail pack which is traceable.

9) Framing of science-based and progressive regulatory guidelines:

One of the key mandates of CropLife India is to contribute towards the framing of science-based and progressive regulatory guidelines in the country. In this connection, CropLife India Regulatory Affairs Committee hailed the CIB&RC's initiative to revisit the guidelines for registration of products under the category 9(3) and 9(4) of the Insecticides Act, 1968. To proactively support this initiative,

CropLife India made representation to CIB&RC on 13th Sept 2020 sharing the global best practices for registration with the Sub-committee constituted by the CIB&RC in this regard. We closely followed up with the CIB&RC and its Sub-committee on proceedings on this matter. CIB&RC released the draft guidelines on 16th July 2021 for Public comments within 60 days. Public Notice dated 16th July 2021 was uploaded on CIB&RC portal inviting stakeholder comments on “Draft guidelines recommended by the sub-committee under the guidance of Dr. (Mrs.) Sandhya Kulshrestha to review guidelines for registration of pesticides u/s 9(3b)' 9(3) and 9(4) of IA, 1968”.

Dr. Sandhya committee report is finalized and posted vide 440 RC minutes where the Data requirements / Guidelines have been notified for grant of registration under various categories. From CLI RAG team, the guidelines are being monitored and response will be submitted soon where the feedback from CLI has not been accepted.

10) **Open House Meetings with Industry:**

Many Open House meetings were called by the government on various agenda items like new molecule, faster registration, 93(b) registration with commercialisation in the month of January, June and July 2022. The proposal on CropLife India's position has been shared with the government

11) **MRL Fixation Process:**

The delay in matter of MRL fixation was escalated to the Chairperson FSSAI and the CEO, FSSAI on 22nd May 2020 and after close rigorous follow ups, it lead to issuance of letter to CIB&RC allowing it to consider default MRLs for 6 months while approving and issuing the CoR.

It was decided that a representation be submitted to Dr. TP Rajendran apprising him about the concerns of our Industry on MRL fixation and seek a meeting with him. CLI submitted a representation to Dr. TP Rajendran on 3rd February, 2021

In response to CropLife India's follow up with Dr. TP Rajendran, CLI was invited to discussion on fixation of pesticide residues in crops and crops groups. CropLife India made a presentation before the 66th Meeting of Scientific Panel on Pesticide Residues on 24th February, 2021.



Subsequently FSSAI developed and issued the Draft Guideline and SOP for Fixation of Pesticide Residues in Food Commodities on 9th April 2021 with 60 days of comment period. CropLife India organized two alignment meetings of the Task Force with CropLife Asia Product Safety Team to review, discuss and fine tune our representation to FSSAI.

CropLife India also aligned with ACFI and submitted the representation containing the comprehensive suggestions and feedback to FSSAI on 8th June 2021. On 16 Feb 2022, a delegation from CropLife India met the FSSAI Advisor and post that a detailed representation was submitted for consideration by the scientific panel. The guidance document by FSSAI on SOP for Fixation of Pesticide Residues in Food Commodities was published in FSSAI website. The response to the same has been shared by CLI in July 2022.

12) Regulation of Minor changes to Approved Products:

CIB&RC has no separate guidance document for Industry to approve minor changes to approved formulations. This leads to arbitrariness in requirements and long delays in granting of approvals. CropLife India Regulatory Affairs Group has made uninterrupted efforts to expedite the implementation of minor change guidelines in India, which have been implemented in many other countries. A representation on Adoption of Minor Change Guidelines was prepared and submitted by the CropLife India Regulatory Affairs Committee to the Ministry of Agriculture and Farmers Welfare, the most-latest in Dec 2020. A meeting was organized with the PPA/CIB&RC in 9th Feb 2021 wherein it was requested that CIB&RC to kindly revive the committee to review the guideline on Minor changes to approved formulations. Even during the 3D Regulatory reforms meeting held on 3rd March 2021, CropLife India highlighted to the govt to kindly assign a high priority to the development of Guidelines for Minor Change to approved formulations. Follow up representations were again submitted during 15th April. CropLife India continued the follow up with CIB&RC on the progress on the proposal and submitted another reminder has been submitted to the CIB&RC on 9th June 2021 highlighting the fact that 428th RC minutes of meeting state that that during the meeting RC has referred an applicant (from member company) to the CropLife Guideline on Minor Changes on 18th May 2021, while deciding on its application.



CLI again followed up with Secretary CIB&RC on this matter on 25th November 2021 to convince CIB&RC to put up this guideline to RC for suitable adoption. A revised proposal is being drafted to be submitted.

13) CIB&RC Proposal to hike registration fee:

As a result of extensive advocacy on 3-D proposals in 2021, a proposal to increase the registration fee was notified by CIB&RC in January 2022. After extensive industry deliberations with members, CLIs response was submitted along with request to develop the capacity and infrastructure of CIB&RC and timely registrations. Post that, an all associations 'response was also submitted after keeping all associations members' interest in consideration

The matter is being pursued further. The revised approved Fee Structure has been notified in CIB Board Meeting in September 2022.

14) Regulation of Bio-stimulants in India:

Integrated Nutrient Management, a division of the Ministry of Agriculture & Farmers Welfare released the Notification on Biopesticides under the Fertilizer Control Order 1985 on 23rd Feb 2021, creating a mechanism of Provisional registration of existing Bio-stimulants by providing relaxed data within 6 months from the date of notification. It also has a provision for registration of new products.

CropLife India convened two meeting on this notification with an aim to develop a representation to seek clarification on its various aspects impacting registration of new and the existing products in the market. CropLife India submitted on 23rd March 2021, its representation providing various suggestions/recommendations to INM division for smooth implementation of the Bio-stimulant notification for the existing as well as new Bio-stimulants.

While issuing the clarification on 2nd August 2021 to the Associations, the Ministry of Agriculture & Farmers Welfare directed all State and Union territory Governments regarding implementation of the subject notification on Bio-stimulants and issuance of G-2 form for seeking Provisional registration of Bio-stimulants in India

It did not provide provision for Provisional registration for bio-stimulant importers. CropLife India, met JS (INM) Mr Priya Ranjan in October 2021 and tried



to convince him. The matter was discussed with other associations as well and represented aggressively to the office of Union Agriculture Minister and Chairman RC.

After rigorous follows ups made with INM officials , the department notified to allow provisional registration for importers and extended the timeline for it from 31st March to 30 September 2022. However, now the members are facing challenges in terms of three years sales data. The representation to allow three financial years sales data has been submitted in June 2022. The same is being pursued. A representation to relax tox data requirement has also been submitted. The presentation regarding the same was made to Central Bio stimulant committee (CBC) on 9th September 2022.

15) Evolution of Draft Chemicals Management & Safety Rules:

Draft Chemicals Management & Safety Rules were proposed by the Ministry of Chemicals and Fertilizers (MoC&F), Govt. of India on which CropLife India submitted its representation to DPCP on 25th March 2020.

The Ministry again published another draft version of the Chemicals Management and Safety Regulations 20xx and shared it on 7th Sept 2020 for comments of the Industry within 10 days. CropLife India submitted its comments on the final draft rules on 17th Sept 2020.

India is the only major economic body in the world that has not implemented UN GHS yet. Publication of India's first National Chemicals Policy - the final version of India's Chemicals (Management & Safety) Rules 20XX (ICMSR) - is still awaited.

This new regulatory framework will strengthen the management of hazardous chemicals and finally introduce GHS. The Indian Chemicals Management and Safety Rules 20xx will supersede the Import of Hazardous Chemical Rules (MSIHC) Rules, 1989, and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996.

These rules are expected to be displayed on WTO website and will be open to industry comments for 60 days. CLI RAG team is continuously monitoring it.

16) Computerized Registration of Pesticides

CropLife India followed up with member companies to obtain the list of issues pertaining to the online submission portal for various categories of registrations,



deficiency replies, etc and submitted it to CIB&RC again in October 2021. As per the numerous follows ups Centre for Good Governance (CGG) Hyderabad has developed he integrated Web & Mobile based e-Governance Solution of 'Plant Quarantine Management System' (PQMS) and Web based 'Comprehensive Registration of Pesticides'(CROP). This was inaugurated in April 2022

However, there are various industry issues regarding the working of crop portal. Two rounds of discussions have happened along with CGG, CIB&RC, and industry. The issues were also highlighted to JS (PP) and Secretary, CIB&RC. Some challenges are still pending. The RC meeting also got delayed for four months because of this.

The session with CGG, CIB&RC was organised on 8th Aug after sharing all the compiled industry issues, however, it is going to a gradual improvement process .

17) E Commerce - Insecticides (Amendment) Draft Rules 2021:

Draft E Commerce - Insecticides (Amendment) Draft Rules 2021 have been notified on 8th September 2021 and response was to be given in 15 days. On behalf of CropLife India, we have requested JS (PP)for some more time. As per the information from his office, the same is being considered.

The e commerce Task Force of CropLife had two calls regarding the challenges that are anticipated regarding sale of spurious products, last mile delivery challenges and compliance with Insecticide Act. On the basis of discussions, there were some suggestions regarding probable concerns. Subsequently, comments have been submitted from CLI in consultation with CropLife Asia in November 2021.

We have also met and requested Nodal officer to have deliberate discussions involving industry, e-commerce players and government so that the operational guidelines vis a vis compliance with Insecticide Act and rules can be done seamlessly.

No further development has happened in this regard.

18) Deployment of Drones Application of Pesticides in India.

After meticulous efforts of CropLife India, CropLife Asia and CropLife International experts, the proposal were made to Government. Now the draft guidelines have been released and there were two rounds of meeting in Ministry of Agriculture regarding the matter. After rigorous rounds of discussion Industry



has also shared the concerns and recommendations on 2nd November 2021. It is a matter of great recognition for CropLife India, CropLife Asia and CropLife International experts that their inputs have been accepted. Globally India is being seen as one of the best-case study for Drone Regulations.

The government's response is quite positive. Drones SOP were published in end of November 2021. There is lot of push from PMO to have the ecosystem at the earliest and the ministry has also initiated the weekly meetings in this regard to understand the current challenges. The secretary is also keen to encourage start-ups and entrepreneurship in the drone's sector. Government has also proposed to give some subsidy. There are also concerns around the Unique identification number for drone manufacturers from DGCA and they have not started working. CropLife India will continue to request for smaller plot size through reminder sharing that such a large plot size may not be replicated or only one plot may be considered.

19) Draft Bio-pesticide Guidelines:

CIB&RC issued a Public Notice on 7th Jan 2021 for seeking comments of the stakeholders regarding harmonization of existing toxicological guidelines/protocol for registration of bio-pesticides in India within 30 days. From CropLife India, submission of industry comments was done on 16th July 2021.

In Feb 2022, CIB&RC issued a public notice on draft guidelines on all aspects covering Bioefficacy, Toxicology, chemistry and packaging. The comments from CropLife India were submitted on 11th March to CIB&RC after due discussion amongst CLI rag experts and CropLife Asia team.

20) Collaborations with Crop Protection Industry Associations and Standard Setting Organizations:

CropLife India collaborated with the other Industry Associations viz. Crop Care Federation of India (CCFI), Agro Chemicals Federation of India (ACFI), Pesticides Formulators and Manufacturers Association of India (PFMAI), Biological Agri Solutions Association of India (BASAI) & APMA besides the FICCI, CII, PHDCCI, and the standard setting bodies- BIS, GSI. Several meetings were organized by CropLife India to align with the other industry associations for steering a common voice on key regulatory issues of the interest affecting the Industry. It is actively contributing towards development or revision of standards through FAD1 in BIS.

21) Strategic Regulatory Review and Planning (SRRP):

The SRRP meeting was organized by CropLife Asia during 5-6th April 2022. CropLife India Regulatory Affairs Group actively contributed in this annual meeting focused on continuously evolving Regulatory Landscape across the Asian countries. CropLife India shared its country level strategic plan for 2022-23 in relation to India activities and country freedom-to-operate (FTO) challenges. The efforts of the CropLife India RAG team were very well appreciated by the SRPP group

22) Recent challenge of custom clearance due to new requirements:

Custom is asking for permitted BIS tolerances which needs to be requested from CIB&RC and pose hassles of delays in clearing consignments. To make request to CIB&RC to post BIS recommended negative and positive tolerances via public notice.

Representation in this regard has also been submitted in Jan 2022. CIB&RC notified a checklist on 18th Feb 2022. The CropLife India's response on this also has been shared to revise the same. The same has been shared with Dr Sneha Poddar.

The matter was discussed with Dr Subhash, CIB&RC. They are not ready to give general tolerance limit. It was advised to take it up on case to case by sharing BIS tolerance limits for all the products. Members are advised to give list of products along with BIS tolerance limits

The same may be discussed with PPA and new secretary with BIS in loop/ Ms Archana Sinha. Vide 440 R.C. Minutes the slightly modified/improvised guideline (Checklist) for reference of industry and customs through 437 RC has been approved. This has still not taken into cognizance the decision taken via 428th R.C minutes, so another representation was submitted and vide 440th R.C minutes, CLI has been requested to make presentation in upcoming RC. We shall ask for time extension and make a presentation in 442nd R.C meeting.

23) Subcommittee formed to Discuss FI- WRT

A subcommittee lead by PPA was appointed on the subject. This is to update that the after active pursuance by CLI on the matter, Five Associations were called to present the viewpoint and define their respective position one by one in front of the subcommittee on 30 May 2022.



A very well drafted presentation with justification of the stand was very well presented by CropLife India Legal Advisor, Mr. Ankit Virmani along with CEO, Rajesh Dhawan and Mr R.D Kapoor along with CLI secretariat.

The outcome of the report which has come out through RC 440 Minutes is as follows

"The Sub-committee, after going into all possible aspects, is of the view that the Act speaks about the molecule and its formulations, hence registration of technical in all cases should be mandatory. The RC should not allow the registration of FI-WRT/FIM-WRT without registration of technical in all cases."

24) Ban on 10 insecticides by Punjab and Haryana Government

Recently the Government of Punjab and Haryana banned the usage of 10 Insecticides for basmati for 60 days in the wake of requests by Basmati exporters and APEDA regarding concerns of Higher MRL leading to export challenges in EU.

As per the Section 27 of The Insecticide Act, 1968, any registered pesticide may be banned by virtue of its likely risk to human beings or animals, however, the reasons mentioned in the said Notification nowhere specifies as to what kind of risks are there to human beings or animals in using the banned molecules.

The matter of Pesticide MRLs in Export consignments of Basmati Rice cited as a reason in the Notification for banning the molecules is not and cannot be considered as a safety issue, rather the reason cited is purely a trade issue which Section 27 nowhere covers to be a valid reason for banning an approved molecule/formulation.

On behalf of CropLife India, request for immediate relief to Central government has been sent It has been requested to Central government to direct State governments to with draw such bans or limit such Bans to basmati only. Extensive farmer educations programs on waiting period, right GAP etc to be strengthened has been highlighted. Other steps proposed by CropLife India are Pre-shipment residue verification to be ensured by Ministry of Commerce / APEDA, as successfully implemented in case of GrapeNet.

A writ petition has also been filed in Punjab and Haryana high court.No respite in form of interim stay has been granted.

STEWARDSHIP

CropLife India has been a champion of sustainable agriculture, safe food and safe and judicious use of crop protection products, even during the unprecedented times for farmers' education drive on the use of Personal Protective Equipment and on Safe and Judicious Use of Crop Protection Products, which went into digital mode during lockdown.

CropLife India has been in the forefront by way of sharing inputs, suggestions and best practices in supporting the Government for Progressive Policies for Precision Agriculture and Sustainable Container Management.

We are proud recipients of prestigious awards such as Ray Consulting's Agri Business Summit Award (ABSA) 2022, FICCI's "Changing Public Perception" award and CropLife Asia Stewardship Award "Best Digital - Contribution to Indian Agriculture during the Covid-19 Pandemic" in 2021.



KEY HIGHLIGHTS

PPE Behavioral Change Project In India

A PPE Behavioral Change Project in India was jointly commissioned by CropLife International, CropLife Asia & CropLife India.

Ideas42, a global agency was commissioned to conduct a behaviour change analysis of how farmers are responding to messaging on the use of PPE in India. The work builds on a previous project that were carried out in three states, Maharashtra, Andhra Pradesh and Punjab; to raise awareness.

India was chosen as a pilot considering Freedom To Operate (FTO) challenges while the primary objective was to identify the core issues so that the programs be modified for effective technology transfer.

The project was designed & divided into 2 phases.

The 1st phase focused on Problem Definition and Behavioral Diagnosis to get the outcomes.

The 2nd phase is focussing on the Solution Design and Testing activities.

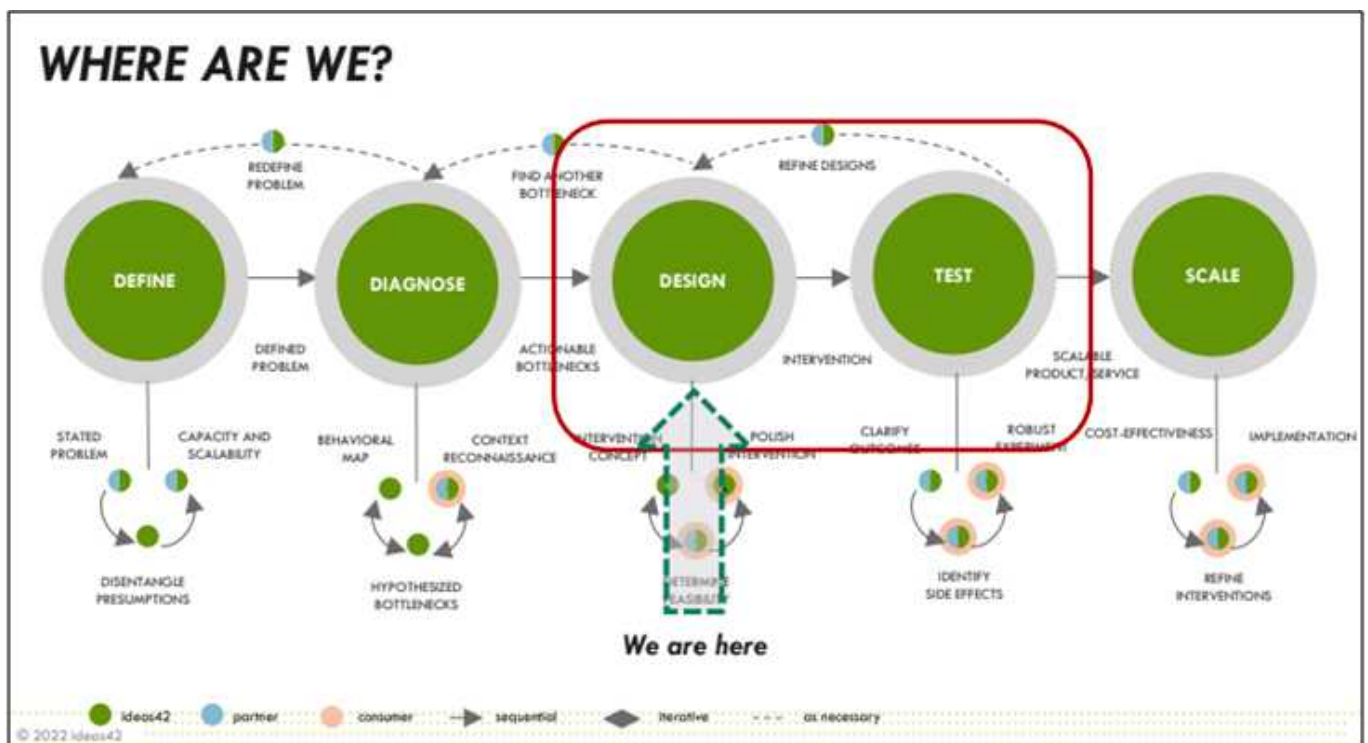
The updates are:

Successfully completed Phase 1 which included the Define and Diagnose stages and made significant progress to understand PPE usage practices and identify the diverse drivers -contextual, psychological, and social - of this behavior. These diagnostic insights are important to follow through on to ensure that steps toward promoting universal usage of PPE are driven by farmer's behavior.



Second phase is in progress wherein as a continuation to support CropLife efforts to better understand and improve PPE uptake and usage in India through a behavioral approach, thus engaged in Solution Design and Testing activities. A productive ideas generation meeting held with respective members to design a behavioral process and some high level and low level design themes shortlisted to address these identified barriers through behavioral interventions. This will be tested into the field with the support of designated implementing partners to further validate the prioritized barriers, eliminate or mitigate the identified barriers and gather the feedback to understand the available design intervention channels better. The objective of this activity is to create and refine solutions to achieve the outcome.

In the next course of action, the discussion will be held on PPE definition desired outcome; Croplife on barriers to focus on; Explore design implementation channels; Ideation, prototyping, and user testing; Support member companies to implement interventions and measure impact and test options.



Ideas42 Methodology*



Container Management In India

CropLife India and its members are committed towards safe and responsible use of crop protection products and its disposal in a sustainable manner to protect the farmers and environment.

Establishment of an efficient and sustainable Container Management System requires strong support of the Government and coordination amongst multiple stakeholders. It is not feasible for Agriculture Input Industry alone to take up all the tasks by itself.

In light of the above, the Container Management Task Force of CropLife India with the support of CropLife International has been working on advocating CL India's position, which highlights the need for mapping roles of each stakeholder in the value chain for a sustainable empty pesticide container management ecosystem. A Roadmap for Sustainable Management OF Empty Pesticide Containers (EPC) in India Position Paper on same was circulated to all the stakeholders.

CropLife India is in the forefront for policy consultations and proposing road map for sustainable management and possible re-classification of EPC as non-hazardous.

CropLife India Container Management Symposium, 25th May 2022

- ◆ CropLife India organized a Virtual Symposium on Roadmap for Sustainable Management of Empty Pesticide Containers in India on 25th May 2022 via Video Conference.
- ◆ The symposium was the first of its kind initiative and the first step towards bringing all concerned stakeholders on one platform, initiate dialogue and multi stakeholder engagement towards the important topic of sustainable management of EPCs.



- ◆ The Symposium was a great success, with over 300 registration by delegates from across the world including Asia, Europe and Africa. Many senior Government officials, retired experts and industry veterans joined.
- ◆ A CropLife India Discussion Paper "**Roadmap for Sustainable Management of Empty Pesticide Containers**" was released during the symposium.
- ◆ The speakers deliberated over the issue of supportive and balanced Policy Framework and Roadmap towards sustainable disposal of Empty Pesticide Containers in India.

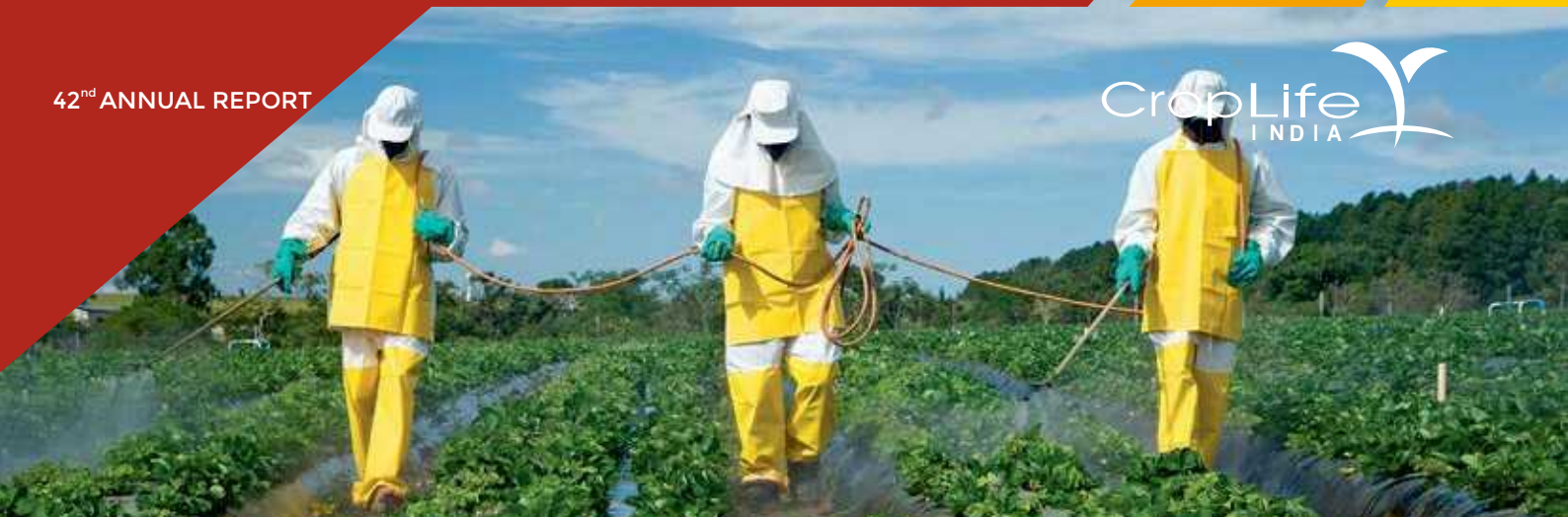
VIRTUAL SYMPOSIUM ON

"Roadmap for Sustainable Management of Empty Pesticide Containers in India"

Wednesday, 25th May 2022 : 1400 - 1715 Hrs

Eminent Speakers

 Dr. S. K. Malhotra Chairman Registration Committee Ministry of Agriculture & Farmers Welfare	 Dr. Ravi Prakash Plant Protection Adviser Ministry of Agriculture & Farmers Welfare	 Dr. K. K. Sharma Former Network Coordinator, All India Network Project on Pesticide Residue, IARI	 Dr. Deepthi Kapli Scientist, HWMD, Central Pollution Control Board	 Mr. Simon-Thorsten Wiebusch Executive Director, Bayer CropScience Ltd.	 Dr. Andrew Ward Stewardship Director, CropLife International	 Dr. Pierre Di Lépinou Director General ADIVALOR (France)	
 Ms. Yaping Liu Executive Director, CropLife China	 Dr. Steven Byrde Waste Management Consultant, CropLife International	 Dr. Friedrich Lideke Consultant and Trainer, Global G.A.P	 Mr. Rahul V. Podaar Managing Director, The Shakti Plastic Industries	 Mr. V. Ravichandran Director, Global Farmer Network	 Mr. Asitava Sen Chief Executive Officer, CropLife India	 Dr. Raju Kapoor Director, Corporate Affairs, FMC India Pvt. Ltd.	 Dr. Mathew Abraham APAC Zonal Regulatory Program Leader Corteva Agriscience India Pvt. Ltd.



Triple Rinsing Study With AINPPR, IARI, New Delhi

A study has been undertaken by the All-India Network Project on Pesticide Residues (AINPPR), Indian Agricultural Research Institute, New Delhi, Government of India, regarding estimation of Pesticide Residues in Empty Pesticide Containers following Triple Rinsing Approaches.

The purpose of this study is to provide a balanced body of contemporary certainty, supplemented by research and analysis to initiate a process enabling the Indian Government to decide on a reclassification of decontaminated primary pesticide packaging in India; and establish Triple Rinsing as a sustainable method for management of empty pesticide containers.

The results are in preliminary stage. The final result will be used to support potential reclassification of triple rinsed EPCs and to help formulate sustainable policy for EPC management in India.

Inter-ministerial Committee to review the use of Insecticides and hazardous chemicals -constituted by Cabinet Secretariat

It is also important to note that Department of Agriculture & Farmers Welfare has recently formed an Inter-ministerial sub-committee/working group to work on the important topic of collection and disposal of empty pesticide containers.

The first meeting of the Sub-Committee constituted by PP-Div. DA&FW, Ministry of Agriculture and Farmers Welfare on the "Inter-Ministerial Committee to review the use of Insecticides and Hazardous Chemicals- Constituted by Cabinet Secretariat." under the Chairmanship of the Plant Protection Adviser, DPPQS was held on 28th July 2022 and second meeting on 16th Aug. 2022 through online mode.

The high powered inter-ministerial sub-committee meeting was the outcome of CLI's representation to the concerned authorities and international symposium dated 25th May 2022.

The Container Management symposium helped to bring all concerned stakeholders on one platform, initiate dialogue regarding multi stakeholder engagement towards the important topic of sustainable management of EPCs. Most of the stakeholders/topics have been captured for deliberations wherein Triple rinsing study has generated lot of positive interest.

The meetings terms of reference are to discuss and decide the responsibility for collection and disposal of the empty containers of Pesticides. And to suggest about creation of required infrastructure or linking with existing infrastructure setup for the disposal of hazardous plastic waste pesticide containers.

On the basis of the discussion held during these meetings, a task force has been formed by the committee to work on the draft modalities/possible way forward.

In the next course of action, the committee will review the representation and proceed accordingly.

CropLife India Women's Day Program

CropLife India celebrated 'International Women's Day' with Women Farmers and State Govt. officials on 07th March 2022 in Ayodhya, Uttar Pradesh.

- ◆ Through this workshop-cum-training program, CropLife India recognized the invaluable contribution of women farmers in agriculture and also conducted some skill development training activities.
- ◆ Apart from the State Govt. authorities, KVKs, SAUs, member representatives, more than 200 women farmers participated and trained by subject matter specialists.



- ◆ The Chief Guest Shri Lallu Singh, Hon'ble Member of Parliament, Ayodhya, Faizabad District presided the function and even shared on his Facebook and Twitter pages.
- ◆ In addition, CropLife India also collaborated with Indian Farmer, (Mr. Santosh Yadav with more than 2M followers) for enhancing our social media presence. The video was posted in YouTube, Facebook and Instagram for outreach to the farming community.
- ◆ CropLife India also developed theme based poster & amplified at various platforms.
- ◆ The program received extensive media coverage both online & offline.



Responsible Use & Anti-Counterfeiting Awareness Campaign

- ◆ CropLife India has launched its Safe & Responsible Use & Anti-Counterfeiting Awareness Campaign in Agra District of Uttar Pradesh on 20th July 2022.
- ◆ The project aims to disseminate information on Safe & Responsible use of agrochemicals as well as skill development sessions for the welfare of the farmers.
- ◆ Information about newer technologies like Drones and Precision Agriculture would be disseminated.
- ◆ The project is ongoing in five blocks/villages in Agra district in a cluster model.



Chili Thrips Management Awareness Campaign

- ◆ CropLife India has developed the Advisory on Chili Thrips Management (including both species). The advisory has been printed in different languages and advocated at various platforms.
- ◆ CropLife India has also initiated an awareness program in two districts (Guntur & Prakasam) of Andhra Pradesh from 13th July 2022.
- ◆ The project aims to train the trainers, FPO representatives, farmers in regards to the management of chili thrips in the critical state of Andhra Pradesh.
- ◆ The key step is to involve the State Government officials/extension workers, FPOs engagements to enhance the reach and disseminate the information more effectively.



Orientation Program on Chili Thrips Management

The event was organized by CropLife India with the help of the implementing partner EFFORT on 25th August 2022 in Guntur District, Andhra Pradesh.

The key dignitaries Dr. Sujatha, Deputy Director of Horticulture, Government of Andhra Pradesh, being the Chief Guest. Present on the occasion were officials and entomologists of Dr. YSR Horticulture University of Andhra Pradesh, Scientists of Krishi Vigyan Kendra and Extension Officers, Farmer Producer Organizations (FPOs), distributors, retailers, member companies and other officials.

During the event, the key speakers spoke at length on key issues such as management of thrips in chili crops, recommendations to be followed, nursery management practices, land preparation, IPM approach, soil testing, bee keeping etc.



A Drone session was part of the event wherein one of the well-known Drone Service provider, Marut Drones, introduced the technology with the farmers and conducted the demonstration part to make them well aware about the technology. The session was well received by the participants.

FRAC India Workshop

CropLife India Fungicide Resistance Action Committee (FRAC) organized a workshop on 21st January 2022 virtually. Dr. P. K. Chakraborty, ICAR & Dr. Sujoy Saha, NRCC Scientist participated along with some global speakers.

Dr. Sujoy Saha shared resistance challenges and opportunities faced in vegetable and fruit crops. He suggested few recommendations during the session. Dr. P. K. Chakraborty shared his long experiences and regulatory perspective of the industry. He emphasized that IPM practices are critical for sustainability and chemical control management an important pillar.



MOA Labelling Update:

- ◆ CropLife India urging the concerned authorities for mentioning the Mode of Action as mandatory requirement on product Labels and Leaflets and an important stewardship tool for resistance management.
- ◆ In this regard, CropLife India has already made a representation to the concerned authorities and planning to organize a one day multi-stakeholder workshop to address the subject in detail.

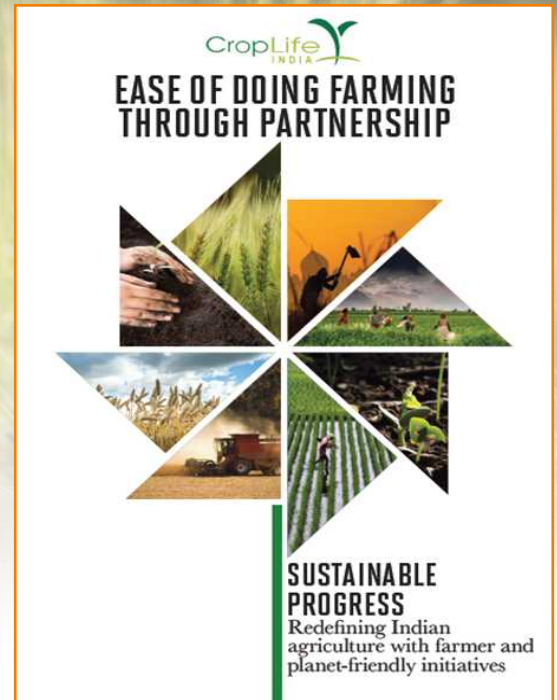
CropLife India Stewardship Kit

A Joint Initiative

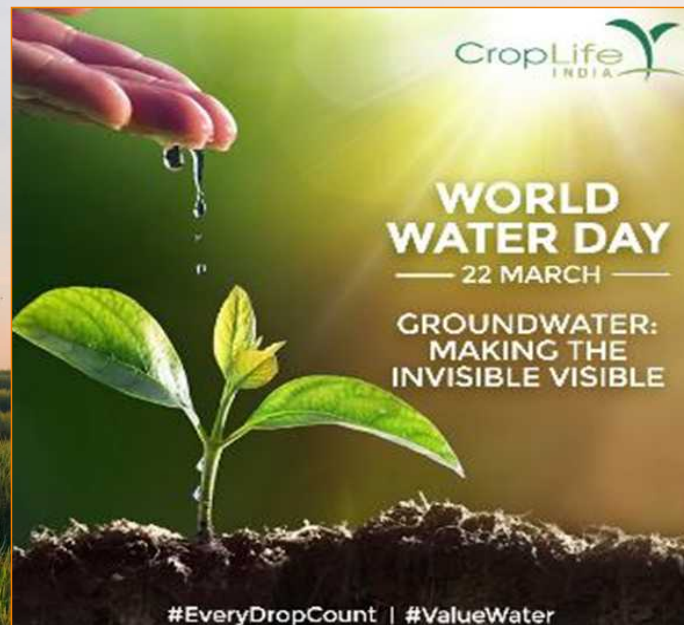
CropLife India Stewardship Kit containing a film and a brochure - a project to showcase "Ease of Doing Farming through Partnership". This project was conceived to collate, organize and exhibit the significant contributions of CropLife India and its member companies towards welfare and development of India's agricultural sector, to key stakeholders in and outside India.

This Stewardship Kit intends to enhance the image of the agrochemical industry, to effectively demonstrate its efforts.

The Kit was well appreciated by the key stakeholders.



WORLD WATER DAY 2022



Cognizing the importance of water in agriculture and allied sector, UNO has declared 22nd March as World Water Day. Taking forward, "World Water Day" was celebrated by CropLife India with the message that Judicious & responsible usage of water is imperative for the sustainable future.

KEY CROPLIFE INDIA PARTICIPATION

AINPPR 30th Annual Review Meeting

CropLife India was honored to receive the invitation from Dr. Vandana Tripathy, Network Coordinator, AINPPR, Pusa to join the 30th Annual Review Meeting of AINPPR on 20-21 June 2022 at Dr. Y.S.P. University of Horticulture & Forestry, Nauni, Solan in hybrid mode.

This was the first time when CropLife India was invited to share its views during the session - Interaction with Industry stakeholders.

Apart from various state agricultural universities, ICAR, Industry representatives were also present during the meeting.



♦ Virtual Summit on 'Designing and Implementing Brand Protection Solutions'

CropLife India participated as a panelist in the Virtual Summit on 'Designing and Implementing Brand Protection Solutions' organized by ASPA & Messe Frankfurt - 08 April 2022.

Mr. D'Arcy Quinn, Director-Anti-counterfeiting, CropLife International presented his views during the program.



CropLife International's Festival of Plant Science Stewardship

CropLife International organized the first edition of the “Festival of Stewardship” webinar on the 8, 9, 10 February 2022 to feature the progress in CropLife over the last 10 years and strategy moving forward.

The objective for the festival was to inspire the strengthening of stewardship around the world and speakers to share their own experiences from their learning.

The ‘break out room’ function was also held for more informal interactions on the topics of the presentation and used social media to continue the interactions beyond the Festival event.

CropLife India was part of the highlights along with other regions to share their best practices and also invited to share learning and views on "Going beyond product stewardship" on 10th February. The second edition is proposed to be held on February 2023.



Andhra Pradesh Agritech 2022

CropLife India participated in AgriTech Andhra Pradesh 2022 from 14 - 16 March, 2022 at Government Arts College, Rajahmundry, Andhra Pradesh.

- ◆ Showcased CropLife India's stewardship initiatives and screened Farmers' training film at the conference.
- ◆ Key State Govt. Authorities visited and addressed the gatherings during the event.



Tools for Digital Knowledge

- ◆ Sharing even with the restrictions, CropLife India Stewardship came out as an active voice and support for farmers' welfare.
- ◆ Developed a CropLife India Farmer's Training Film and widely circulated.
- ◆ Celebrated World Water Day digitally.
- ◆ Developed a video for Health Practitioners' education and well disseminated.
- ◆ During the Locust attacks in the country during the crisis, CropLife India had issued an advisory for farmers and spray management agencies
- ◆ CropLife India took the opportunity to promote drones to control locust, resulting in government to lift restrictions on drone use in agriculture, which continue to advance today.
- ◆ Farmer Education Poster on "Safety points in farming during Covid-19 pandemic" and a video was designed and shared digitally.
- ◆ Felicitating Farm Heroes
- ◆ Advisory on Chilli Thrips Management.
- ◆ Resistance Management and White Fly advisory for some general guidelines
- ◆ FAW poster for management of invasive pest.
- ◆ Extensive social media outreach - Facebook | Twitter | Youtube | Instagram | LinkedIn

FAW-Asia IPM Guide

The CIMMYT, MAIZE CGIAR and USAID have jointly prepared and recently published the FAW-Asia IPM Guide 2021.

The significant step is that the manual includes CropLife India's poster on "Three Anti-Counterfeit Questions" under the topic - Pesticide Application, Safety, and Selection criteria for FAW control in the guide.

CropLife India is honored to be a part of such important initiatives taken by these leading organizations.

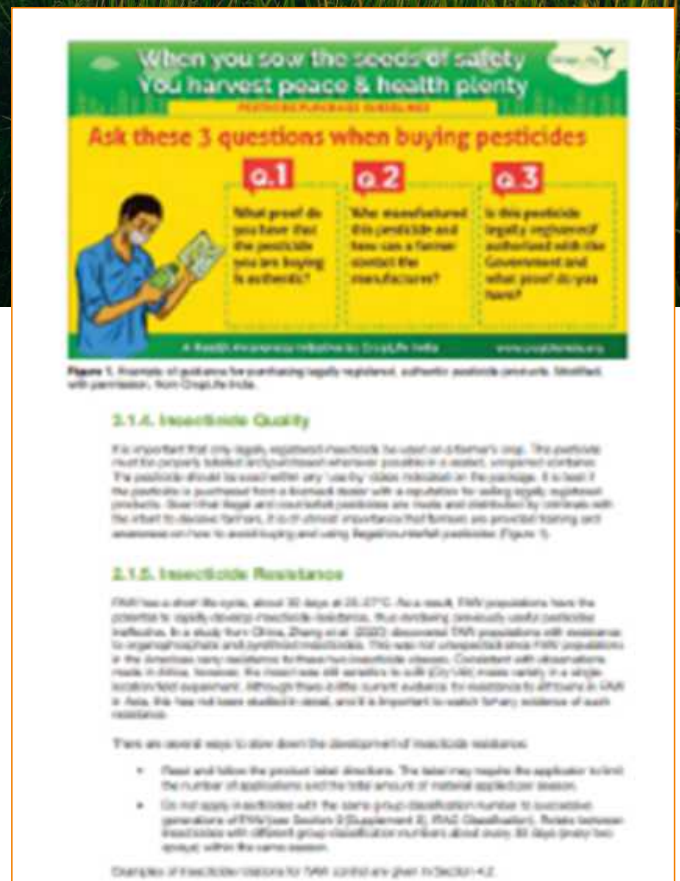
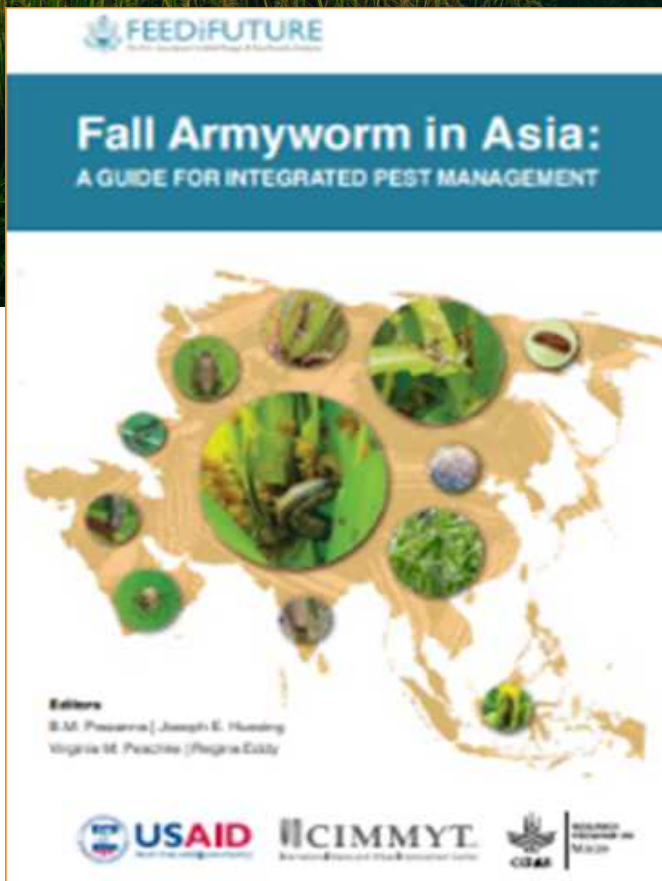


Figure 1. Examples of guidance for purchasing legally registered, authentic pesticide products. Identified, with permission, from CropLife India.

2.1.4. Insecticide Quality

It is important that only legal, registered insecticides be used on a farmer's crop. The pesticide must be properly labeled and formulated whereas products in a market, unapproved containers. The pesticide should be used within any validity dates indicated on the package. It is best if the pesticide is purchased from a trademark dealer with a reputation for selling legally registered products. Since the legal and successful pesticides are made and distributed by contracts with the effort to reduce farmers' risk of almost uncertainties that farmers can purchase, buying and awareness on how to avoid buying and using illegal/unlabeled pesticides (Figure 1).

2.1.5. Insecticide Resistance

EWV has a short life cycle, about 30 days at 25-27°C. As a result, EWV populations have the potential to rapidly develop insecticide resistance. But, farmers who usually apply pesticides frequently, in a study from China, Zhang et al. (2020) discovered that populations with resistance to organophosphate and pyrethroid insecticides. This was not unexpected since EWV populations in the Americas carry resistance to these two insecticide classes. Consistent with observations made in Africa, however, the insecticide class resistance to EWV (WV) means variety in a single location/field experiment. Although there is little current evidence for resistance to EWV in India, this has not been studied in detail, and it is important to watch for any evidence of such resistance.

There are several ways to slow down the development of insecticide resistance:

- Clean and follow the product label directions. The label may require the applicator to limit the number of applications and the total amount of material applied per season.
- Do not apply insecticides with the same group classification number to successive generations of EWV (see Section 2 (Stewardship 2) EWV Classification). Rotate between insecticides with different group classification numbers about every 30 days (only two sprays) within the same season.

Copyright © Pesticide Information for EWV (2020) by joint IN/ICRISAT/CIAR

♦ **CropLife India’s Stewardship Articles**

CropLife India’s articles published in the July & September Issues of Agriculture Today titled "Role of Stewardship in Agrochemical Industry"

FICCI published CropLife India’s article on it’s newsletter 2021.

CropLife India’s views also echoed in the Agriculture Today magazine recently in August 2022.

♦ **Stewardship Annual Report 2021**

CropLife India releases its Annual Stewardship Report every year for advocacy & outreach.

The CropLife India's Stewardship Key Initiative Brochure, enlists key activities and achievements, which was released and disseminated.



♦ The Impact...

- ♦ CropLife India became the active voice amidst the disruptions caused by the pandemic, earning recognition from the Government as a trusted partner.
- ♦ Partnerships with local NGOs & more emotional yet informative relationship with farmers leading to trust.
- ♦ Global partners sought our input to be used for local stewardship efforts.
- ♦ Various thought leadership articles were contributed and CropLife India was quoted in leading business dailies and magazines through the Year.
- ♦ Better alignment with CropLife Asia and CropLife International.
- ♦ Revamped CropLife India website: www.croplifeindia.org gaining attraction; which has a separate page for Resistance Management.



AWARDS & ACCOLADES

CropLife India's programs to various corners of the country and touching lives of the Indian farmer have been noticed and applauded at numerous occasions. CropLife India has received several appreciation letters/messages from different State Governments & Industry associations for the activities carried out in view of the benefit of the farmers & farming community.

♦ Agri Business Summit Award 2022

CropLife India received the prestigious Ray Agri Consulting's Agri Business Summit Award (ABSA) 2022 under the category Best NGOs / Society - Agri Development for sustainable stewardship initiatives.

The award was conferred for the farmers' education drive on the judicious use of agrochemicals, not even deterred by lock-down. The award was presented by **Shri S. Niranjan Reddy**, Hon'ble Minister of Agriculture, Telangana State.

More than 70 nominations were received under 22 award categories; and the awardees were judged by an eminent jury chaired by Dr. (Mrs.) Bhagyashree P. Patil, Chairperson - Rise N Shine Biotech Pvt. Ltd.; Shri Deepak P Shah, Chairman & MD - Sulphur Mills Group, Dr. P. Chandra Shekara, Director General - MANAGE; Mr. Ram Kaundinya, Co-Founder - ThinkAg; Mr. S. Shivakumar, Group Head of Agri& IT Business of ITC Ltd; Prof. Vasant P. Gandhi, Visiting Professor - IIM A.





◆ FICCI Chemicals and Petrochemicals Awards 2021

CropLife India was awarded for Commendable Work for Changing Public Perception in India Chem 2021; an event jointly organized by Department of Chemicals and Petrochemicals, Government of India and Federation of Indian Chambers of Commerce; Industry (FICCI).

The award was presented by the Hon'ble Minister of State, Ministry of Chemicals & Fertilizers, in the presence of Secretary, Department of Chemicals & Petrochemicals, Government of India.



◆ CropLife Asia Stewardship Award 2021

CropLife India was awarded for the Best Digital Contributions to Indian Agriculture during Covid-19 pandemic in 2021 organized by CropLife Asia.

25,000
TELEMATICS
DEVICES33 MILLION
PAID FOR
ACRES8,500
WEATHER
STATIONS

ADVOCACY & COMMUNICATIONS

The CropLife India's Advocacy & Communication Committee, intends to elevate the engagement with Stakeholders on a wider and deeper level; to become a proactive participant in key policy dialogues. We hope to expand our breadth & depth by reaching out to all stakeholders including politicians, policy makers, civil society amongst others, both at Centre and State level; through enhanced communication & outreach including media.

12th Agriculture Leadership Conclave

CropLife India's views were shared during the 12th Agriculture Leadership Conclave 2021 organised by the Agriculture Today Group.

CropLife India participated in the Panel Discussion themed as **Augmenting India's Agriculture Competitiveness in Global Trade**, scheduled on 21st October 2021.

The fellow Panelists were -

- ◆ Sh. Tarun Shridhar - Former Secretary, Department of Animal Husbandry, Government of India
- ◆ Sh. Sanjeev Chadha - Managing Director, NAFED
- ◆ Mr. Vijay Sardana - Advocate, Arbitrator and Techno - Legal Expert for Food & Agriculture
- ◆ Dr. Sudhanshu - Secretary, APEDA

CropLife India was an eminent member of the **Jury Panel** as well, for the 12th Agriculture Leadership Awards while the Chairman of the Jury Panel was Dr. Ramesh Chand, Member NITI AYOOG.

Industry Round table - Drone Applications in Agriculture - Agrochemical Spraying Conducive Ecosystem Development

Think Ag along with CropLife India organized an Industry Round table - Drone Applications in Agriculture - Agrochemical Spraying Conducive Ecosystem Development; which was held on Wednesday 09th March 2022.

The Round Table was a grand success with over 200 participants joining across India, Asia and the rest of the world. All concerned stakeholders involved in drones ecosystems shared great perspectives and insights.



The banner features the following information:

- Event Title:** Drone Applications in Agriculture - Agrochemical Spraying Conducive Ecosystem Development - Industry Roundtable
- Platform:** AgClinic
- Date:** 09 MARCH WEDNESDAY
- Time:** Online Panel Discussion 4:00 PM to 6:00 PM (IST)
- QR Code:** Scan to Register
- Speakers and Moderators:**
 - Dr. Ravi Prakash:** Plant Protection Adviser, Ministry of Agriculture & Farmers' Welfare, Govt of India
 - Asitava Sen:** Chief Executive Officer, CropLife India (MODERATOR)
 - Dr. Vidhu Kampurath P:** Joint Director (PHE), National Institute of Plant Health Management
 - Shailendra Singh:** Director, Baraula Farmer Producer Co. Ltd
 - Dinesh Sharma:** Grower Digital Connect Lead, Bayer CropScience
 - Ashish Jangale:** Head - Precision Farming, Farm Division, Mahindra & Mahindra
 - Baskar S. Reddy:** Executive Director, Syngenta Foundation India
 - Smit Shah:** President, Drone Federation of India
 - Deepak Bhardwaj:** Co-Founder & CEO, IoTechWorld Aviation
- Contact Information:**
 - www.thinkag.co.in
 - info@thinkag.co.in
 - communications@croplifeindia.org
 - www.croplifeindia.org

Dr. Ravi Prakash, Plant Protection Adviser, Directorate of Plant Protection, Quarantine & Storage, Ministry of Agriculture & Farmers' Welfare, Government of India; said, "Drone deployment for agrochemical spraying although new in India but imminent for crop protection, is affordable for farmers, helps in superior produce, and a major tool for food security in the country. The DGCA, Agriculture Ministry and CIB&RC is working jointly to fast track applications and adoption of drones in the agriculture sector, including crop health monitoring and spraying of soil nutrients. The Registration Committee has received information for trials from 8 crop protection companies seeking approval".

CropLife India, shared, "It's a perfect time as the policy framework is in place; we should look into how all stakeholders can work together to help develop a Conducive Ecosystem for Drone Applications in Agriculture and specifically Agrochemical Spraying. It is a well-established fact that we have little experience available for agrochemical applications by drones in India; the learning curve is steep for all stakeholders".



Bharat Drone Mahotsav 2022

Bharat Drone Mahotsav 2022, organized by Drone Federation of India was inaugurated by Shri Narendra Modi, Prime Minister of India on 27th May 2022. The two day drone festival, which was later extended to a third day as well, witnessed the congregation of all major drone players and allied organizations in the country.

Shri Narendra Modi, Prime Minister of India **flew a drone at Drone Mahotsav** and **shared his thoughts** on how Drones will be a **game changer in the agriculture industry**.



Courtesy - Hindustan Times



The Ministry of Agriculture and the Ministry of Civil Aviation were present in full fervour during the event. Both, Smt. Shomita Biswas, Joint Secretary (M&T), Ministry of Agriculture and Shri Amber Dubey, Joint Secretary, Ministry of Civil Aviation were present even during the wee hours of the event and interacted with multiple stakeholders.

The Drone Festival witnessed the presence of multiple member companies of ours; further strengthening the collaboration with Drone manufacturers and service providers.

Organizations like Map My India, Drona Maps are currently working with multiple State Governments for detailed mapping of the agriculture landscape of our country. These data points will be extremely beneficial for Drone manufacturers / service providers for crop protection products usage and they are willing to collaborate.

Agribot, India's first Government approved drone, a product of Iotech World has been modified to be transported on a motorcycle. This would revolutionize the Agriculture drones and will catapult the growth of agriculture drones in rural India as a two-wheeler is a favoured and affordable transport.

The Drone ecosystem will be undergoing multiple changes however the interest of large organizations in the sector is providing a fillip in the sector.





ThinkAg and CropLife India Ag Lab – Connecting Innovators with Corporates – Drone Applications in Agriculture and Crop Protection

ThinkAg and CropLife India Ag Lab – Connecting Innovators with Corporates – Drone Applications in Agriculture and Crop Protection was organized by **Think Ag** along with **CropLife India** on Wednesday 29th June 2022.

“The purpose of the webinar was to offer a ‘Focused and Neutral Platform for partnerships’ between the start-ups and Agrochemical / Agriculture input companies for knowledge sharing.

Partnerships amongst stakeholders is critical to overcome the challenges and leverage the opportunities that this new technology offers”. The Ag Lab was a grand success with over 200 participants joining across India, Asia and the rest of the world. Six Drone manufacturers and “Drone as a Service” providers shared their evolution in the Agrochemical Drone segment, trials being conducted across the country and the opportunities of collaboration. All concerned stakeholders involved in the drone ecosystem shared great perspectives and insight.



ThinkAg **CropLife INDIA**

Connecting Innovators with Corporates
Drone Applications in Agriculture & Crop Protection

29 WEDNESDAY June 2022 | Mark Your Calendar
| Online Panel Discussion | 4 PM TO 6 PM (IST)

AgLab

CLICK TO REGISTER

www.thinkag.in | info@thinkag.in

www.croplifeindia.org | communications@croplifeindia.org

 Smt. Shomita Biswas Joint Secretary (M&T), Ministry of Agriculture & Farmers' Welfare, Government of India <small>MEMBER</small>	 Asitava Sen Chief Executive Officer, CropLife India <small>MEMBER</small>	 Hemendra Mather Co-Founder, ThinkAg <small>MEMBER</small>
 Prem Kumar Vislavath Founder & Chief Innovator, Marut Drones <small>MEMBER</small>	 Amandeep Panwar ED & CEO, BharatRohan Airborne Innovations <small>MEMBER</small>	 Raja Raman CBO & Board Member, Druksho Unmanned Systems <small>MEMBER</small>
 Prayas Saxena Founder & CEO, Skyline Dronetech <small>MEMBER</small>	 Pradeep Palalli Co-Founder & CEO, Tharvik Technologies <small>MEMBER</small>	 Deepak Bhardwaj Co-Founder & Director, InTechWorld Aviation <small>MEMBER</small>



Smt. Shomita Biswas, Joint Secretary (M&T), Ministry of Agriculture & Farmers' Welfare, Government of India; shared, "It is time to make drones accessible for farmers. There are 200+ start-ups, engaged in manufacturing and providing drone services in agriculture, who would play a pivotal role. Empaneling with the State Governments and becoming custom hiring centres themselves; are the critical next steps for start-ups.

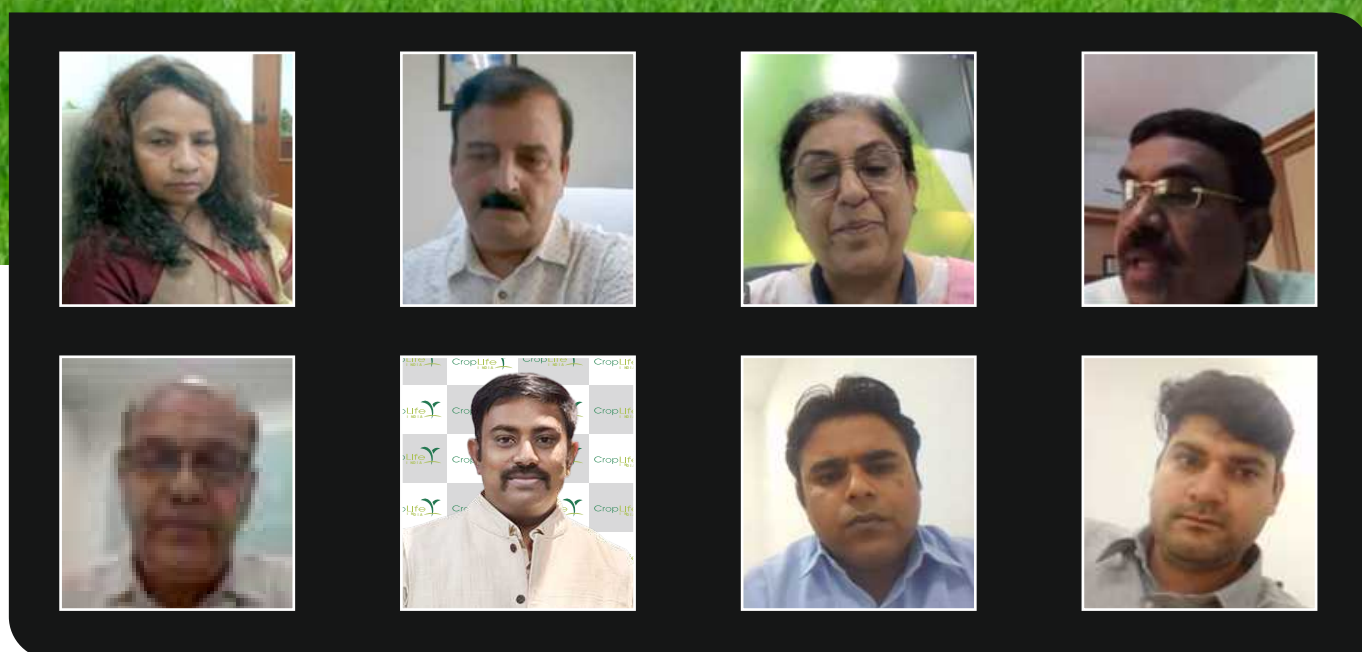
The Government of India has added another intervention involving the rural youth. Just with a Bachelor in Science - agriculture degree, he/she can open a custom hiring centre, own a drone, and be an entrepreneur; employing others. Youth will be the ambassadors of Drone technology and hence we must leverage this segment. Start-ups in this sector can engage with the youth and other partners at village level and help the growth of agricultural economy."

CropLife India is committed to help develop a conducive ecosystem and quick adoption of Kisan Drones in India. Collaborations between innovators and agrochemical companies would play an imminent role in flattening the learning curve.





Virtual Meeting for Kisan Drones



A Virtual Meeting under the Chairpersonship of Ms. Shomita Biswas, Joint Secretary (M&T), Ministry of Agriculture, Government of India was scheduled on 6th July 2022 to address the various issues and problems for application of Kisan Drones.

The objective of this meeting was to decide on a Plan of Action regarding experiment of Drone for the use pesticides during the upcoming Kharif season on area (District/Block) of operation, Type of drone, target beneficiary, duration, No. of trials, etc.

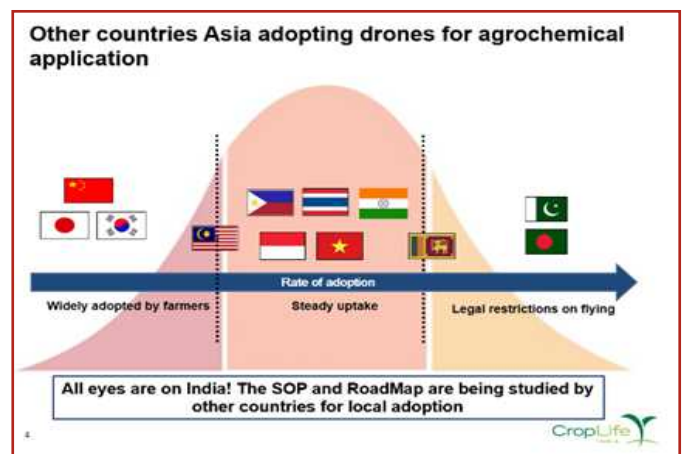
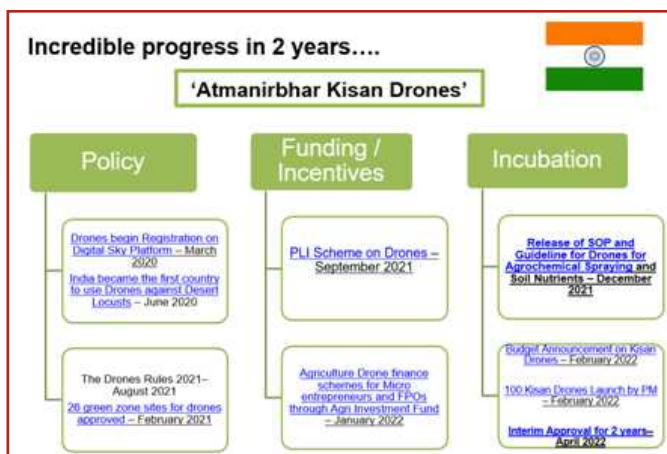
CropLife India played a major role in this meeting as all our member companies along with partner Drone Manufacturers are engaged in advanced level of drone trials across the country. We congregated the various on-ground report and presented the same to the Ministry apart from sharing our thoughts on the way forward.



National Conference on Promotion of Kisan Drones

CropLife India was invited by the Government of India to participate and share views in the **National Conference on Promotion of Kisan Drones: Issues, Challenges and Way Forward** scheduled on 2nd May 2022 at A.P. Shinde Hall, NASC Complex, New Delhi.

The Conference was presided by Shri Narendra Singh Tomar, Hon'ble Minister for Agriculture and Farmers Welfare. A Special Address was delivered by Shri Kailash Choudhary, Hon'ble Minister of State for Agriculture and Farmers Welfare.



CropLife India was invited to present the **“Way Forward on Kisan Drone - Views from Agrochemical Industry”** in the day-long conference.

The presentation was shared in the **Technical Session I - Industries issues - Skilling and certification** moderated by Sh. Amber Dubey, Joint Secretary, Ministry of Civil Aviation. Shri Manoj Ahuja, Secretary - Agriculture & Farmers' Welfare and Smt. Shomita Biswas, Joint Secretary (M&T), Department of Agriculture, Cooperation & Farmers Welfare were present on the dais among other dignitaries and industrialists.



International Summit on “Artificial Intelligence & Digital applications in Agriculture”

FICCI’s Agriculture Desk organised its 2nd edition of the “International Summit on “Artificial Intelligence & Digital applications in Agriculture”, on May 19-20, 2022. The programme was jointly organized with the German Agribusiness Alliance, and Knowledge Partner Pricewaterhouse Coopers (PwC).

CropLife India was privileged to be invited as a Strategic partner for this prestigious program. CropLife India shared its views during the virtual panel discussion “Sustainable agriculture with AI and Digital applications” on 19th May (Day 1).

The second day of the event was held physically on 20th May 2022 at Federation House, FICCI; which included an exciting panel discussion and Valedictory Session with senior Government officials.

2nd Edition of International Summit
ARTIFICIAL INTELLIGENCE & DIGITAL APPLICATIONS IN AGRICULTURE
 Virtual Program | 19 - 20 May, 2022

Join us for interesting discussions with eminent speakers on "Sustainable agriculture with AI and Digital applications"

 Mr. Hemendra Mathur Chairman, FICCI Task Force on Agri Start-ups & Venture Partner, Bharat Innovation Fund	 Smt. Anna Roy Senior Adviser (DM&A, Industry) Niti Aayog	 Smt. Preeti Maithil Noyak Director - Farmer Welfare & Agriculture Development & Cooperative, MP	 Mr. Shiva Prakash T.H.M Commercial operations (India) Xarvio, BASF Digital Farming GmbH	 Mr. Rishikant Moudgal Zonal Program Leader & Portfolio Manager, Asia Pacific, Corteva Agriscience	 Mr. Astitava Sen Chief Executive Officer, CropLife India	 Prof. Dr. Dimitrios S. Parasforos Head of Institute for Technology at Gießenheim University & Project Coordinator German Digital Experimental Field "Dhawkopter"	 Mr. Munish Soni Head Strategy & Digital, Crop Science division, Bayer India, Bangladesh & Sri Lanka
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Principal Partner aws	Event Partners TAFE, nature.iam	Co-Partner XIVIO Digital Farming Solutions	Associate Partners BAYER, CORTEVA	Supporting Partners BayWa, HarvestPlus, BASF	Knowledge Partner pwc	Strategic Partner CropLife
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For Conference Agenda: Ms. Neha Mathur, Consultant - Agri Division
 For Registrations: E: agriculture@ficcicom, M: 9312153937

Advocacy with State Governments

The Advocacy & Communications Committee of CropLife India has been engaging with State Governments for 'Ease of Doing Business' and outreach.

GLIMPSES

Advocacy with the Government of Maharashtra

A Senior Delegation from CropLife India met Shri Dadaji Bhuse, Honourable Agriculture Minister, Maharashtra on 15th March 2022.



Advocacy with the Government of Punjab

CropLife India has been advocating about not to engage in Ban of agrochemicals and creation of Basmati Net and to work towards educating and training basmati rice farmers / dealers in the State on responsible use of agrochemicals.

A delegation comprising of representatives from member companies met Shri Sarvjit Singh, Additional Chief Secretary Agriculture, Punjab on 25th July 2022 at Chandigarh.



A Senior Delegation from CropLife India met Shri Kuldeep Singh Dhaliwal, Honourable Agriculture Minister, Punjab on 10th August 2022.

Advocacy with the Government of Uttar Pradesh

A delegation comprising of representatives from member companies met Shri Surya Pratap Shahi, Honourable Agriculture Minister, Uttar Pradesh on 31st August 2022.



Croplife India's Journey on Social Media

CropLife India's social presence was activated in September 2017 with the vision to gain voice-share in what has become the primary destination for news and updates for audiences across a variety of issues and topics.

We began with the posting of updates of the on-ground events on stewardship and then graduated to designing our Social Media calendar. Over the past one year, CropLife India has gained **203,671** reach on Facebook, alone. Since October 2021, we have **56000+** views across social media channels. We have extensively disseminated our posts across various groups to garner more views and Engagement. Tagging our partners across posts has also increased post shares. For YouTube we have adopted a robust strategy to improve the number of Subscribers, the YouTube channel link is shared across maximum posts with a 'Subscribe' call-to-action.

In the first step of the campaign, we conducted a semantic and thematic analysis of existing content archives and extracted keywords that would help us target the right kind of audience.

We identified the CropLife ecosystem and followed and engaged with their posts. We then researched the most relevant content and scheduled new posts from CropLife India at an optimized time of the day for maximum reach and even engineered its frequency.

The top-performing posts are reposted for maximum optimization of our content and resources. Our approach has yielded the below reach and impact -

MILESTONES

(Oct 2021 - Sept 2022)

CROPLIFE INDIA EARNED

142,386 Impressions,
233,524 Reach and more than
56,000 Views across social media platforms.



11,446
Profile Visits

76,175
Total
Impressions

348
Tweets



203,671
Page Reach

744
Profile Visits

348
Posts



2,424
Visitors

66,211
Impressions

348
Posts



41,800
Views

155.5 hr
Watch Time

99
Videos

Croplife India Newsroom

THE ECONOMIC TIMES | Industry
English Edition • Today's Paper

India 4th largest producer of agrochemicals, huge potential for growth: Agriculture Minister Narendra Singh Tomar

Synopsis

Earlier, Agriculture Minister Narendra Singh Tomar stressed on making the agriculture education system multi-disciplinary, multi-dimensional and job-oriented.



Agriculture Minister Narendra Singh Tomar

India is the fourth-largest producer of **agrochemicals** in the world, and the sector has a huge potential for growth with the help of research, innovation and a speedy registration system, **Agriculture Minister Narendra Singh Tomar** has said. Addressing the 41st AGM of **CroplifeIndia**, an apex body of 15 Crop science companies, **Tomar** said

the Centre has launched a digital agriculture mission and focusing on the use of drones in the farm sector.

"India is the fourth-largest producer of agrochemicals. Seeing the potential of this sector, the government has included the agrochemical sector among the 12 champion sectors where India can play an important role in the global supply chain," Tomar was quoted as saying in a statement issued by Croplife.

"There is a lot of potential to be a leader in the chemical sector with the help of innovation, speedy registration system, early crop protection research and digitisation drive," the minister said.

State farmers worried as pests gain resistance to insecticides

PARTHA SARATHI BISWAS
PUNE, FEBRUARY 23

A RECENT worry for farmers in the country is the slow resistance pests and insects are developing for commonly used chemicals to control them. As patented and costlier molecules come to the rescue, farmers fear that the cost of pest control would go up in the near future.

Rakesh Dogra, CEO of Godrej Agrovet Limited (GAVL), an agribusiness company, said nearly 70% of the insecticides in use are generic while the rest are patented molecules. These chemicals are widely used by farmers with multiple companies producing and selling them. As to be expected, their cost is much lower than patented molecules. On an average, farmers take five sprays of generic insecticides as compared to a single spray of patented

one during the normal crop cycle. However, these economical molecules, which so far have been the farmer's weapon against pests, are slowly losing their efficacy as pests develop resistance to them.

Asitava Sen, chief executive officer of Croplife India, pointed out that of the 280 registered molecules in the country, over 40 are in use for over 55 years. "Climate change and new invasive pests have accentuated the problem," he said.

Dogra mentioned chemicals like organo phosphates and organo chlorinated hydrocarbons as chemicals which are losing their efficacy. The size of India's crop protection market is said to be Rs 25,000 crore, of which insecticides corners 39%.

While generics are slowly losing their sting, introduction of new molecules is not an easy work. Sen pointed out that in-

roduction of new product/molecule takes over Rs 2,000 crore investment and it requires nearly 10-12 years of research. "One of key missing elements in India is lack of legal provisions to support innovation and new products registrations," he said.

Companies like GAVL have entered into agreements with molecule generation giants like Nissan Chemicals which allows them to introduce new and advanced molecules developed in Japan. Crop scientists say research is necessary to develop chemicals which would change the mode of action and thus help farmers fight pest. With climate change becoming more and more pronounced, pest attacks have become longer and more common. For the farmer, this can hardly be good news given the extra cost they have to incur to fight pests.

FORTUNE
INDIA

ENTERPRISE

Kisan drone makers have a business model

Drone companies are looking at a rental service model, which would enable farmers to rent a drone to spray on their crops by paying ₹350-450 for a spray.

By AJITA SHASHIDHAR, Mar 31, 2022 | 7 min read



Drone technology has proved to be viable in other Asian countries with smallholder farms similar to India.

Imagine a drone flying over a 2-acre paddy field dropping fertilisers, pesticides or even nutrients on the crops. For a small farmer in rural India, it would be almost like watching a Star Trek film. But how would it really help him? Drone manufacturers are certain that aerial spraying would not just be more focused and effective, it would substantially reduce input costs, increase the quality and quantity of yield as well as make agriculture more sustainable.

With the central government in Budget 2022 giving impetus to 'kisan drones', drone start-ups as well as large corporates such as Mahindra Farm Equipment, are busy putting together their agri drone strategy. After all, India has 160 million hectares of arable land and this certainly is an enormous amount of scale for drone manufacturers and the agri ecosystem at large (agro-chemical and farm equipment companies as well as village level entrepreneurs). The government expects the Indian drone sector to be a ₹15,000-crore market by 2026. The challenge, however, would be to convince the extremely price sensitive Indian farmers to embrace drone technology. Indian farmers have just about started embracing farm mechanisation equipment like specialised tractors, rice transplant machines etc. An aerial equipment like a drone surely comes with a perception of being out of their reach.

Promise of Affordability

Despite the government offering a subsidy to the tune of 70% to a rural entrepreneur to buy a drone, convincing a farmer to opt for a basic pesticide spraying service on rent is going to be far from easy. The drone manufacturers claim their business models are centred around solving problems of the farmers in a cost-effective manner. "We have come up with technology that is affordable for farmers and can help them increase their yield and reduce their costs," says Agnishwar Jayaprakash, founder and CEO, Garuda Aerospace.

BusinessLine

Budget 2022

Agri industry reacts to FM Sitharaman's Budget speech

AJ Vinayak | Updated On: Feb 01, 2022



Finance Minister Nirmala Sitharaman holds a folder containing the Union Budget 2022-23 as she poses for a group photograph with MoS Finance and officials of the Finance Ministry, at North Block, in New Delhi | Photo Credit: KAMAL NARANG

Here are a few industry reactions to the Union Budget

Anil Chaturvedi, President of the Solvent Extractors' Association (SEA) of India, said SEA of India had been constantly representing to the Government that India's edible oil imports are skyrocketing and seriously compromising edible oil security of the nation needing urgent policy intervention.

He said the announcement made by the Finance Minister

was a relief for the industry.

Agri activists miffed over idea of natural farming

Shishir.Arya@timesgroup.com

Nagpur: The Union Budget has left farm activists from the region disappointed, including Padma Shri Subhash Palekar, whose zero budget farming method had got a mention in 2019.

In the budget of 2019, zero budget farming had a prominent mention as a means to double agriculture income. Four years down the line as once again the finance minister Nirmala Sitharaman spoke of natural farming, Palekar says there seems to be no consistency.

AGRICULTURE

As activists and farmers have expressed doubts over its efficiency, even Palekar has turned down the current idea of natural farming, calling it disastrous.

Palekar told TOI, "It's not my natural farming method which the government seems to follow. There appears to be a shift to a Japanese method by Masunobu Fukoka which cannot be a success. My method is specially known as Subhas Palekar Natural Farming on which there has been hardly any consultation from the government's side."

Meanwhile, activists, who still back the conventional method of farming, say natural farming is going to be an impractical solution.

Anil Ghanvat, president

of Shetkari Sangathana, said announcements on direct transfer of MSP for paddy and wheat procurement has been made keeping in mind elections in Punjab and UP. Farmers of rest of the country have been left out.

"The idea of natural farming also seems to be impractical as it would lead to a major dip in the output. If the government wants pesticide-free farming then genetically modified crops should be allowed," said Ghanvat, who was also a member of court-appointed committee on the now defunct farm laws.

Vaibhav Kashikar of Ankur Seeds said the government must think about the practicability of natural farming as it also impacts the output. Although the idea of using artificial intelligence and machine learning in the sector is a welcome step.

"The announcement on natural farming seems to be a diversion from core issues like agriculture subsidy. There is no word on increasing farm income or wages of farm workers," said Vijay Jawandhia, a veteran farm activist.

Asitava Sen, CEO of Crop Life India, said the idea of spraying agro-chemicals through drones is appreciable. The finance minister also spoke of developing natural farming on a 5-km corridor along the Ganga.

Full report on www.toi.in

my KOLKATA

NEWS PLACES PEOPLE LIFESTYLE EVENTS FOR

Training programme on application of kisan drone technology in West Bengal

The two-day training and demonstration programme was held at Navroddipur

PHOTOGRAPHS BY: S. S. S. S. S.



Representational image

CropLife India, an association of 16 RSD-driven crop science companies, conducted an awareness and training programme on the application of Kisan Drone Technology in agriculture throughout West Bengal on September 15 and 16.

The training and demonstration programme was organised jointly with the agriculture department and State Agricultural Management and Extension Training Institute (SAMMETI), government of West Bengal.

ONE PLANET

RECYCLE, REUSE

Benefits of Legalizing recycling of properly rinsed and inspected empty pesticide containers – a robust roadmap towards sustainable management

Single-use plastic ban in India has kicked in from July 1, 2022. It is time to review the policy for empty pesticide containers in India. Primary pesticide packaging is essential to ensure safe handling, storage and application of agrochemicals throughout the value chain and beyond. Post consumption of the pesticide these packs become waste (Empty Pesticide Container or EPC). Because of current pattern of use and management of pesticides, the volume of EPCs generated is increasing. As pesticide containers are mostly produced from plastics, they contribute to the increasing mountain of plastic waste in India often dumped recklessly into the environment, burned, or buried near farms. These discarded EPCs bear the risk of soil and ground water pollution owing to contamination with residues of the pesticide. Consequently, they can be hazardous for the community and the environment. The problem is further aggravated in view of their potential for

reuse in illegal counterfeit products. The International Code of Conduct of the distribution and use of agrochemicals (WHO/ FAO 2008) provides general guidelines on the management options for empty pesticide containers to minimize potential health and environmental impacts associated with their disposal.

Triple-Rinsing of EPCs
The FAO recommends triple-rinsing of EPCs as one effective practice for farmers to remove pesticide residues from the containers. Cleaned pesticide containers are classified in many countries as "non-

hazardous" waste. The European Waste Catalogue suggests that where the hazardous component in the waste is less than 0.1 percent, the waste is no longer perceived as 'relevant' and the packaging is classified as "non-hazardous".

In Australia, triple rinsed containers are allowed to be recycled and classified as non-hazardous while containers that are not cleaned and properly rinsed are classified as hazardous waste.

The effectiveness of triple rinsing has been further demonstrated through a recent study undertaken by the All India Network Project on Pesticide Residues (AINP/PFR) of Indian Council of Agriculture Research, GOI. The interim results indicate that irrespective of container type, formulation type, pack size, toxicity, etc., the pesticide residues tend to decline by more than 99%. It is reasonable to expect that the remaining active ingredient content in waste composition after rinsing will serve as the basis to address classification criteria (toxicity) and the defined thresholds/cut-offs defined in the Waste Framework



CropLife India is an association of 16 R&D driven member companies in crop protection. We jointly represent more than 70% of the market and are responsible for 85% of the molecules introduced in the country

ONE PLANET



Directives.

This study is a balanced body of contemporary certainty, supplemented by research and analysis to enable GOI to decide on a reclassification of decontaminated primary pesticide packaging in India and establish triple rinsing as a sustainable method for management of empty pesticide containers.

Strict Compliance With Reasonable Safety Measures

In this context, the framework for Extended Producers Responsibility under the Plastic Waste Management Rules 2016 of the Union Ministry of Environment, Forest and Climate Change (MoEF&CC) gains pre-eminence. The regulations demand from all producers, importers and brand owners of pesticide products without exemption the installation and/or financial contribution to a waste collection system. However, strict compliance with reasonable safety measures to minimize any potential risk for exposure during collection, storage, transport, and recovery of used and possibly contaminated EPCs requires a thorough planning of the reverse logistic process including recycling/ disposal steps which is complex and time-consuming.

Collection and recovery programs for empty pesticide containers especially of small containers cannot be initiated before destination value chain of the collected material is established and

Virtual International Symposium on EPC Management

CropLife India organized a Virtual International Symposium on Empty Pesticide Containers (EPC) Management in India - Roadmap for Sustainable Management of Empty Pesticide Containers on May 25. It was attended by delegates from across the world including Asia, Europe and Africa.

Establishment of collection and disposal of EPCs/Container Management is a stepwise approach which requires strong support of the government and coordination amongst multiple stakeholders. There is an imminent role of every stakeholder in the value chain – government, manufacturers, channel partners, farmers, Producer Responsibility Organizations, recyclers and end-users. CropLife International has successfully initiated and established independent Container Management Systems organizations and activities in 83 countries, which has removed over a million tonnes of agriculture waste plastic from the environment between 2005-2020.



the recycling application developed and approved by relevant authorities.

Seven-Step Roadmap For Sustainable Management Of EPCs

In February 2021, CIBARC issued a public notice inviting comments from all stakeholders for classification of empty pesticide containers and disposal thereof. In response to the public notice, CropLife India had submitted a detailed seven-step roadmap for sustainable management of EPCs through shared responsibilities of all stakeholders. Further, the 429th meeting of the Registration Committee held in June 2021 decided to formulate a working group/task force comprising experts from DPP&S/CIBARC, CPCB, State Governments, MoEF&CC, ICAR and Pesticide industry associations stakeholders to work upon deciding the responsibility for collection and disposal

of the empty container & suggest about linking/incentive etc. of necessary infrastructures setup.

CIBARC's cognizance, and consideration to develop a framework for safe disposal of EPCs is therefore welcomed and perceived as a promising first step in the right direction to add India to this success story.

CropLife India hopes that the Ministry of Agriculture & Farmers Welfare (MoA&FW), Ministry of Environment, Forest & Climate Change (MoEF&CC), Central State Pollution Control Boards, Central Insecticide Board & Registration Committee (CIB&RC) and industry can jointly facilitate a supportive mechanism to promote an effective empty pesticide container management system in India. CropLife India is highly motivated to support the process, as industry's stewardship commitment.

KJ KRISHI JAGRAN Home News Agriculture World More

Success Stories Interviews Featured Events Commodity Product Launches Farm Mechanization

INDUSTRY NEWS

ThinkAg and CropLife India Come Together to Make 'Kisan Drones' Available for Farmers

It's time to make drones available for farmers, according to Shomita Biswas, Joint Secretary (M&T), Ministry of Agriculture & Farmers' Welfare, Government of India. There are 200+ start-ups that are involved in manufacturing and providing drone services in agriculture would be crucial.

Sandeep Kr Tiwari Updated 30 June, 2022 5:57 PM IST

ThinkAg along with CropLife India, the leading voice of the plant science industry in India organized an Industry Round table "AgLab" - Connecting Innovators with Corporates - Drone Applications in Agriculture & Crop Protection - bringing together all stakeholders of the Agriculture Drone ecosystem with a 'focused platform for partnerships' for the start-ups and concerned on the need of fast-tracking and large-scale adoption of drone technology for agrochemical spraying in the country.

SAT, SEP 17, 2022 | UPDATED 17:47 IST

ANI
South Asia's Leading Multimedia News Agency

National World Business Sports Lifestyle Entertainment Health

CropLife India Pioneers Farmers' Education Drive on chili Thrips Management in Andhra Pradesh

Guntur (Andhra Pradesh) [India], August 26 (ANI/NewsVoir): CropLife India, an association of 16 R&D driven crop science companies, and the leading voice of the plant science industry in India, pioneered a farmers' education drive on Chili Thrips Management in Andhra Pradesh.

The inauguration ceremony was held in Guntur today; Dr Sujatha, Deputy Director of Horticulture, Government of Andhra Pradesh, being the Chief Guest. Present on the occasion were officials and entomologists of Dr YSR Horticulture University of Andhra Pradesh, Scientists of Krishi Vigyan Kendra and Extension Officers, Farmer Producer Organizations (FPOs), distributors, retailers, member companies and other officials.

THE AGE OF DRONES

A LIBERALISED GOVERNMENT POLICY HAS HELPED THE DRONE ECOSYSTEM TAKE OFF IN INDIA. NOW WILL IT CHANGE OUR LIVELY?

By Ajay Sakamaria

B ELAVS FROM THE MILITARY TO MASS DRONE use in agriculture, the technology has revolutionized the way farmers work. From crop health monitoring to precision farming, drones are changing the face of Indian agriculture. But what does the future hold for this technology? Will it change our lives? This is the question that many farmers are asking. The answer lies in the hands of the government and the industry. A liberalized government policy has helped the drone ecosystem take off in India. Now will it change our lives? This is the question that many farmers are asking. The answer lies in the hands of the government and the industry.

THE ECONOMIC TIMES News
English Edition | Today's Paper

Government working on fast-tracking drone adoption in farm sector: Official

Synopsis
The Directorate General of Civil Aviation (DGCA), the agriculture ministry and CIB&RC are working jointly to fast track applications and adoption of drones in the agriculture sector, including crop health monitoring and spraying of soil nutrients. Prakash Prasad said at the roundtable discussion, according to a statement.

Three concerned departments of the government are working jointly to fast track drone adoption in the farm sector, according to a senior official of the Directorate of Plant Protection, Quarantine and Storage (DPPQS) Ravi Prakash. The Central Insecticide Board and Registration Committee (CIB&RC) under the DPPQS has received applications from eight crop protection companies seeking permission for conducting trials of drones, he said.

Discussing the issue virtually at an industry roundtable organised by CropLife India and non-profit body ThinkAg, Prakash said drones are affordable for farmers and help in superior produce.

"The Directorate General of Civil Aviation (DGCA), the agriculture ministry and CIB&RC are working jointly to fast track applications and adoption of drones in the agriculture sector, including crop health monitoring and spraying of soil nutrients," Prakash having said at the roundtable discussion, according to a statement.

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AGROSPECTRUM | APRIL 2022 | www.agrospectrumindia.com

Choosing a Balanced Approach Towards Agrochem Sustainability

The global agrochemicals industry is currently valued at \$216 billion and is expected to grow at a CAGR of 3.4 per cent by 2025, according to Markets and Markets report. Agricultural intensification is a key driver of agrochemical industry's growth because of rising food demand and decreasing agricultural land. In addition, the agriculturally-dependent developing economies of the world will fuel this expansion. With sustainability in the agrochem industry as the key driver, let's understand its impact on the Indian agriculture sector.

Agrochemical consumption in Europe and Asia Pacific accounts for about half of global consumption. Around 85 per cent of the world's agrochemical exports come from these regions, making them the global manufacturing and exporting hub for agrochemicals. Many agricultural crops have seen significant increases in yields thanks to the widespread use of agrochemicals.

Sustainable agriculture relies on efficient application of crop protection systems. The chemical industry has been working hard to inform the public that new crop solution chemicals are less hazardous to human health and the environment because they degrade quickly when used in conjunction with prudent chemical usage and sound farming practices (GAP).

The agrochemical sector has recently been identified by the government as one of the 12 Champion Sectors, where India can be a global hub for manufacturing and export. India is already a critical player in the global supply chain. The Indian agrochemical industry is worth Rs 500 billion and has the potential to grow to Rs 800 billion by 2025, out of which exports are estimated to be around 60 per cent. The prospect of the sector is promising given the low penetration of agrochemicals in India at 0.4 kg/ha as compared to up to 13 kg/ha in USA, Japan, China or other countries. The key demand drivers are growing population, changing food habits and nutritional needs, crop diversification, climate change, new invasive pests, etc.

India ranks fifth in terms of agrochemical production and fourth in terms of exports. According to PwC Research report, the Indian agrochemicals industry was valued at approximately Rs 42,000 crore in FY20, with domestic consumption totaling approximately Rs 20,000 crore and exports totaling approximately Rs 22,000 crore during the same period. The Indian agrochemical industry is gradually changing its practices to be more environmentally friendly. Businesses have begun to implement zero-emission solutions, which has

CropLife India Engagement



Progressive
Regulation



Stewardship



Anti Counterfeiting





Policy Advocacy



Communications
& Outreach



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