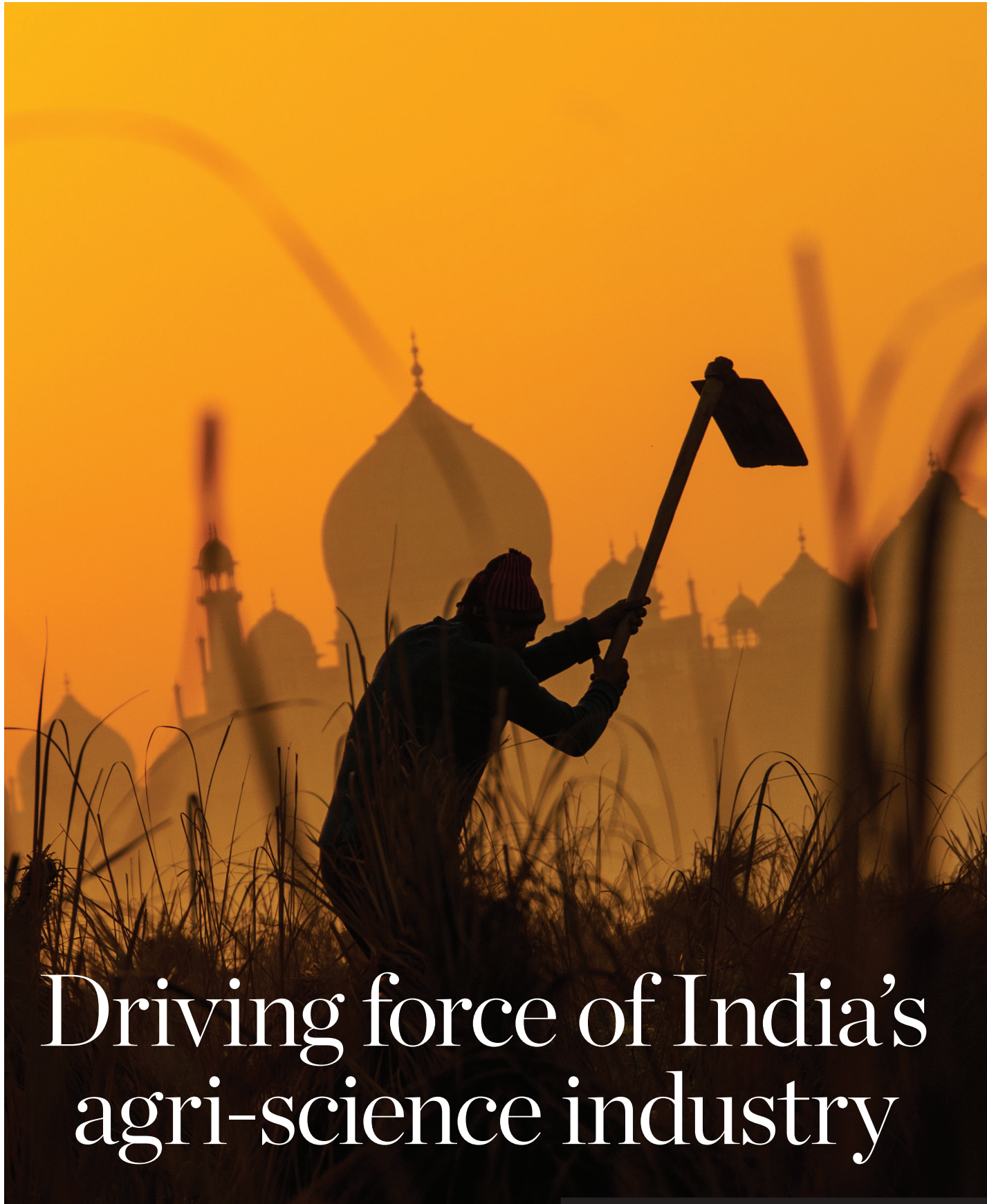


# EASE OF DOING FARMING THROUGH PARTNERSHIP



## SUSTAINABLE PROGRESS

Redefining Indian  
agriculture with farmer and  
planet-friendly initiatives



# Driving force of India's agri-science industry





**A**griculture is an important sector of the Indian economy as it contributes about 17% to the total GDP and provides employment to over 60% of the population. India is the second largest producer of wheat and rice, the world's major food staples. India is currently the world's second largest producer of several dry fruits, agriculture-based textile raw materials, roots and tuber crops, pulses, farmed fish, eggs, coconut, sugarcane and numerous vegetables.

Committed to advancing sustainable agriculture, CropLife India is an association of 15 R&D driven member companies in crop protection, and jointly represents 70% of the market, being responsible for 95% of the molecules introduced in the country. These member companies have an annual global R & D spend of 6 billion USD and are firmly committed to engaging with the farming community to enable Safe, Secure Food Supply. It is the active voice, and leading advocate for the plant science industry.

CropLife and its Member Companies are firmly committed to engage with the farming community, thereby minimizing pre-harvest and post-harvest crop losses due to pest attacks and plant diseases. Their endeavours enable farmers to adopt new technologies in agriculture, while providing in depth farmer training on good farming practices, including responsible use of crop protection products and spraying technologies.

The organisation is committed to support the efforts of the Central and State governments who act swiftly and do a commendable job to help agriculture navigate the unprecedented crisis through several policy measures as has been witnessed in the recent pandemic.

CropLife India believes that its role is to be a partner in progress with the government, farmers and other stakeholders to focus on three critical issues.

1. Progressive policies, best practices and reforms.
2. Promote judicious and safe use of agrochemical products through integrated pest-management approach and product stewardship.
3. Promote precision agriculture which can make farming more modern and efficient.

The organization has a long history of creating awareness and building capacity on sustainable practices among various stakeholders including farmers, agriculture input retailers, agricultural extension staff, custom officials, key stakeholders and several NGOs. Acting on its role of Stewardship for Agrochemical Industry, CropLife India's outreach helps safeguard the food security of the nation. The various initiatives towards product stewardship; comprise:

**Our Outreach programs** are designed in a manner that the farmer receives the message of responsible use and usage of Personal Protective Equipment, from his entire fraternity; in his language. Activities like road shows and cultural programs embedded with project messages, door to door outreach, school awareness program, loudspeaker campaign, participation in Krishi Melas and reaching out to women self-help groups have proved to be very impactful.

**Anti-counterfeit Mass Awareness Campaign** was conducted across Gujarat, to educate farmers and create awareness against spurious/illegal products. The Anti-Counterfeit Module has been included in the curriculum of Diploma for Agriculture Extension Services for Input Dealers (DAESI) Course managed by SAMETI, Government of West Bengal and more than 1600 Dealers get sensitized with this diploma course every year.





**Safe & Responsible Use of Crop Protection Products** – Our initiatives aim to cover around 6,000 farm families in three states with pilot projects in the districts of East Godavari in Andhra Pradesh; Bharuch in Gujarat and East Champaran in Bihar.

**Outreach Initiative for use of Personal Protection Equipment (PPE)** – We worked towards creating availability of the PPE Kits at farmers' retail outlets through the distribution channels in three key States - Maharashtra, Punjab and Andhra Pradesh; much before the pandemic.

**Madhu Sandesh** - A shared benefits approach to a shared responsibility - CropLife India in association with Indian Council of Agricultural Research (ICAR) and Agriculture Development Trust, KVK Baramati; conducted a project which entailed providing subsidized rental bee hives to farmers in Maharashtra, which proved beneficial in enhancing the production of pomegranate and onion seeds via pollination.

**Doctors' Training Programs** combined with a digital module, was specially designed for the Health Practitioners; to aid in the process



**When you sow the seeds of safety You harvest peace & health plenty**

**SAFETY POINTS IN FARMING DURING COVID PANDEMIC**

**Wear PPE Be a Superhero!**  
By wearing Personal Protective Equipment (PPE) while handling pesticides, you ensure optimum safety from chemical residues & biological infections for you.  
Wash it daily after work & don't share it with anyone.

**Social Distancing for Long Term Delight!**  
By keeping your coworkers, family members & animals at a safe distance, you can stop the spread of chemicals drifts, viral infections and ensure sound health for your family.

**Your Safety is In Your Hand!**  
Washing your hands frequently with soap and water during or when not in contact with pesticides, keeps you safe from contamination of pesticides as well as Coronavirus.

**Always remember to:**  
Threat free empty containers and dispose them properly while still wearing PPE.  
Regularly inspect & disinfect machinery tools, tractor cabins and surfaces etc.  
After handling pesticides, wash yourself and the protective gear thoroughly.  
Always cover your face with a clean cloth or use a face mask when going out.

**Fight Coronavirus with Awareness**  
Make sure that all workers in the work field have access to adequate soap and water for frequent hand wash and also following the guidelines safety protocols issued by the Govt.  
If any worker shows symptoms like fever, cough, shortness of breath, arrange isolation and treatment immediately.  
Use only registered pesticides & always read the instructions on the label to protect your crops and livelihood.

**Ask these 3 questions when buying pesticides**

**Q1** What proof do you have that the pesticide you are buying is authentic?  
**Q2** Who manufactured the pesticide and how can a farmer contact the manufacturer?  
**Q3** Is this pesticide legally registered/authorized with the Government and what proof do you have?

A Health Awareness Initiative by CropLife India [www.croplifeindia.org](http://www.croplifeindia.org)

**Our Members**







of treating patients affected due to accidental pesticide poisoning.

CropLife India digitalized all the efforts towards Farmers' education on Safe and Judicious Use of Crop Protection Products; which had been our motto; during the Covid-19 pandemic restrictions.

**Grow Safe Food Campaign** - Launched by the Department of Agriculture, Co-cooperation & Farmers' Welfare, Government of India, and a key pillar of CropLife India's efforts to improve sustainable production of adequate amounts of safe food, and augment food and nutritional security for the billion-plus population. Under this campaign, CropLife India sent Advisory Letters to Dealers across the country. The Advisory Letter, both in English and Hindi, was sent through its member companies, to around 500,000 dealers across India, over three years. CropLife India had collaborated with Federation of Indian Chambers of Commerce & Industry - FICCI,



and organized a Roundtable Meeting to sensitize stakeholders and raise awareness.

**Other activities:**

- Advisory for farmers and spray management agencies and recommendation of concerted efforts of the Centre and State Governments in controlling the locust menace, including use of novel modern technology and spraying devices.
- CropLife India Farmer's Training Film, an educational video featuring both Stewardship and Anti-counterfeiting messages for farmers' welfare; is available in eight languages. 'Hamaara Pradhaan Sabse Mahaan', a film set to give the message that the right information makes the difference.
- Maintaining an emotional yet informative relationship with our Farm Heroes, thereby creating mechanisms to reach out to them effectively via various possible platforms.
- Demonstrating its sustained commitment to promote stewardship as the key driver for a resilient, sustainable and a profitable food and agribusiness sector in India through multiple initiatives.
- Reaching out to children, as influencers of opinions in our families, with the help of rhymes.

Recently, CropLife India has been awarded for Commendable Work for Changing Public Perception in India about Indian agriculture, farming practices and farmers at the India Chem 2021 by FICCI

CropLife India and its member companies together touch the lives of over 20 million farmers and support safe, secure and nutritious food systems through innovation, capacity building and good agricultural practices.

**Our Associate Members**





# Thinking beyond crop protection

**A**DAMA India, a leader in the Indian Agrochemical industry, is a part of ADAMA Agricultural Solutions. Powered by Israeli technology, ADAMA arrived in India in 2009 and has achieved phenomenal growth in the last 12 years.

Our vast array of Herbicides, Insecticides, Fungicides and Bio-stimulants help farmers protect their crops empowering them with healthy produce and optimum yield.

At ADAMA, we strive to ascertain that our rural communities are nurtured and taken care of. Over the years, we have helped build school infrastructures, road benches, auditoriums in colleges, distributed books among children, donated medical instruments in hospitals and much more. Most recently, we have constructed R.O. water treatment plants in several villages across the country.

We connect with farmers regularly to understand their needs and contribute to farmer welfare and community building.

## Helping build rural communities

Support and care for our farmers, rural communities and workers has always been vital to us. That support and care was needed like never before in 2020 as Covid-19 hit the country. From lodging around 150 workers in our plant and taking care of their necessities to distributing over 600 food packages in the surrounding villages, our team ensured their availability to help the people in need.

There has also been a focus on directly tackling the virus. Helping the frontline COVID -19 warriors, ADAMA donated medical devices to the Sevashram Hospital in Bharuch, in the western coastal state of Gujarat. These included four high-flow nasal oxygen machines along with theatre equipment for those with gynaecological problems.

ADAMA staff has also sanitized local municipal buildings such as the police station and town hall to help reduce the spread of the virus. Masks and sanitizers were distributed locally helping



to emphasize the need to help prevent the spread of the virus.

Looking beyond Covid-19, ADAMA continues to support children to realise their potential. It has committed to financially support 10 children and two teachers in the Asmita Vikas Kendra residential school in the Gujarat town of Tralsa, 50 kilometres from ADAMA's plant. Home to 75 children with disabilities, ADAMA also donated two solar heaters to provide hot water for the school. Supporting the stationary requirements of many children ADAMA also distributed notebooks in many schools.

## Delivering safe water across India

Water is a precious resource in India. The country may be home to a sixth of the world's population, but it only has 4% of the world's fresh-water resources. Supplying safe water for drinking





**At ADAMA we strive for a world where everybody has food security, and everybody in farming has a fulfilling and rewarding life. Many share this vision with us, but we do it differently.**



and farming has been another key element to ADAMA's social and community actions recently.

In December 2020 and January 2021, three water plants were installed by the ADAMA team in Andhra Pradesh. The plant in Bethamcherala village supplies 10,000 people in the surrounding area with water, including a school of 600 children. After 25 years of water scarcity, the 3,000 villagers in Pothidoddi now have access to a safe and reliable source of water after the



installation of a plant purifying 1,000 litres of water an hour. A third plant was installed in the village of Mutyalampadu in Andhra Pradesh's Guntur district. An indication of the importance of the plants, is that they were inaugurated by local Members of Parliaments and State Ministers.

Water plants in other states have been installed, as well. As many as 2,500 farmers attended the opening of the plant in Gorakhpur, Uttar Pradesh, while farmers and villagers in Reveral in the partly central and partly western state of Maharashtra have already seen the benefits of their new plant which was inaugurated in October 2020.

Steering our efforts towards sustainable projects that provide long-term impact to the farming community, at ADAMA we listen to our farmers, Learn about their issues and Deliver the best solutions. ■





# Ensuring success of farmers, agriculture and tomorrow

**F**arming is the biggest job on earth. BASF supports productive, sustainable agriculture, slowing farmers to protect the land they hold for future generations while meeting the demands of modern society.

The company invests in the right solutions to enable farmers to grow more quality food, more efficiently. As also, share its expertise to help farmers to make a better life for themselves and their communities.

BASF constantly strives for the right balance aimed at the success of farmers, agriculture and future generations. Product stewardship, responsible and ethical management of products throughout their lifecycle – is fundamental to everything the BASF team in India does. BASF believes every farmer, irrespective of the size of the holding, should be protected from exposure risks experienced on the farm.

## Promoting farmer safety

Safety underlies everything that BASF does. This is why Product Stewardship - the responsible and ethical management of our products throughout their entire lifecycle - is so close to our heart. The responsible use of crop protection products is a core focus. The company believes that every farmer, irrespective of the size of the holding, should be protected from exposure hazards experienced on the farm, such as chemical vapors and contact of chemicals with eyes and skin.



## Positive environmental inheritance

In everything BASF does, it plays its part in leaving a positive environmental inheritance. The company knows that farmers particularly face the challenge to access correct information, advice and equipment to enable them to work in a safe environment.

## Meeting safety requirements

In 2013, BASF launched a customized Sanrakshan





### 'Suraksha Hamesha' Meeting Outreach

- BASF has reached out to more than 1, 53,499 farmers
- More than 153499 Farmers trained
- Over 7665 women farmers trained
- Over 29846 spray men trained
- 22577 students covered
- 3162 Agriculture department officials participated
- And much more



Kit to meet the safety requirements of Indian farmers and spray men. Sanrakshan kit is an affordable, high-quality set of personal protection equipment designed to encourage good agricultural practices and promote farmer safety.

### Sharing knowledge and experience with farmers

BASF has long been training farmers on aspects of safety while dealing with Crop Protection Products. Since 2016, BASF has been conducting dedicated 'Suraksha Harnesha' training programs for farmers in India. Meaning 'Safety all the Time', the program serves as a platform to educate farmers and spray men about the 9 steps of responsible use of crop protection products and personal protection mediums.

### Bringing a social change

Using tools such as safety films, posters & presentations, the team shares messages on important stewardship topics - including the handling, usage, storage, and disposal of crop protection products.

Use of personal protection equipment is also emphasized. 'Suraksha Hamesha' meetings are conducted across all territories where BASF operates. These meetings are focused exclusively on promoting responsible use of crop protection products and personal protection measures - no product promotion is done during these meetings. During these meetings, the state and central government's farm extension teams are involved at the respective locations.

### Empowering women farmers

Women are an important part of the society and key decision maker who can bring about positive social change. Under the umbrella of 'Suraksha Hamesha', BASF has made a consistent effort to spread the message on safety to around 7665 women farmers. "By attending the Suraksha Hamesha meetings my understanding of safety measures to be taken during the spraying operation and the importance on the usage of personal protection equipment's has increased. BASF cares about farmer safety".

The Suraksha Hamesha program has been awarded as the industry's Best Stewardship Program by a panel of senior agricultural industry experts at the 2018 Global Agrow Awards ceremony in London. This award recognizes BASF's consistent effort and motivates us to carry on our stewardship activities with the same passion.

Indeed, BASF stands shoulder to shoulder with Indian farmers to support them in their journey of growth, leading and delivering the message of farmer safety enabling them to produce safe and healthy food.



# Making better life farming still better

**B**ayer CropScience Limited is part of the Bayer Group's operations in India and represents the company's agriculture business comprising Seeds, Crop Protection, Digital Farming solutions and non-agricultural pest control (Environmental Science). Our Seeds/Crop Protection segment offers a broad portfolio of high-yielding hybrid seeds and integrated crop management solutions for sustainable agriculture. In addition, we provide farmers with agronomic advisory and help farmers use data to improve farming practices and conserve natural resources. An important initiative that has made a commendable impact towards sustainable agriculture is Better Life Farming.

## Better Life Farming

In 2020, more than 20 million smallholder farmers across India have been supported by Bayer's agri-inputs, technologies, crop & farm advisory and digital solutions. A key initiative that has helped us reach out to smallholder farmers and create a conducive ecosystem is the Better Life Farming (BLF) alliance, which works with partners across the agri-value chain to support smallholder farmers in developing economies to increase crop yields and farm incomes.

The Better Life Farming initiative has led to a doubling of crop yields and tripling of farm incomes among participant farmers while keeping an eye on water usage and integrated farm manage-



ment. It has created price transparency in the marketplace, increased the bargaining power of smallholders, and promoted clusters of rural agri-entrepreneurs. It has also created opportunities for women farmers to be integrated into mainstream farming operations and emerge as rural agri-entrepreneurs.

The BLF alliance's agri-entrepreneurship model functions through Better Life Farming Centers run by local agri-entrepreneurs. These centers open up economic opportunities for smallholders by enabling knowledge and technology transfer on good agricultural practices (GAP) and delivering services such as market linkages, access to agri-inputs, financial solutions and mechanization services as well as crop advisory. Presently, 475 Better Life Farming Centers are operational in the Indian subcontinent.

By 2025, the Better Life Farming initiative aims to empower 2.5 million smallholders in





**Advancing life - that's what we at Bayer are all about. We put ourselves to the test day in, day out. All together. All over the world. With enthusiasm for new ideas.**

the Indian Subcontinent through access to modern agri-inputs and better public health. These smallholders will be served by five thousand agri-entrepreneurs across horticulture, corn, and rice crops.

Driving 'safe & responsible use' of Crop Protection products

Bayer markets seeds and crop protection products which have been granted regulatory approval by the concerned national and state authorities, observe international codes of conduct and are safe to the operator and the environment when used in accordance with label instructions.

### Responsibility for Customers and Partners

Supporting our customers and partners in safe handling of seed and crop protection products is a focus of our product stewardship. As part of this, we offer regular training and awareness programs to help farmers identify and purchase authentic crop protection products. Our training programs focus on safe & responsible use of crop protection products and proper use of Personal Protection Equipment (PPE). In 2020, 1,37,000 farmers across India were covered under Bayer's safe use training and awareness programs through face to face and digital connect.

Our product stewardship measures also include internal employee training measures. Furthermore, our Product Stewardship Policy provides informa-



tion on all principles for the responsible handling of our products, combined with specific instructions for use for our employees and those who work with our products. In addition to training activities, we produce collaterals even in regional Indian languages, explaining the safe use and scope of protective clothing and correct storage and disposal of our products.

Bayer India has ventured into equipping each of its retail counters with PPE kits for sale and use by the spray operators. Every field / farm training session begins with a safety training and awareness about safe & responsible use of crop protection products. Bayer also works with state-level licensing authorities in India to conduct training programs for their staff and retailers selling the product who are the immediate connect with end users. In 2020, 8,000 PPE kits, 7, 50,000 face masks and sanitizers were distributed to rural farming communities to shield them from the ongoing Covid-19 pandemic. A special communication on Covid mitigation was achieved by distributing hand fans to 1.5 lakh growers in seven languages. ■





# Making agriculture, more productive, resilient and sustainable

**A**t Corteva Agriscience™, we grow progress by putting farmers and consumers at the heart of agriculture. By doing this, we are reshaping the industry to meet the needs of the twenty-first century. We believe that the future of farming depends on aligning the food value chain from end to end. Together, we can achieve a more financially secure, sustainable, innovative, and responsive agricultural industry. Our purpose is to enrich the lives of those who produce and those who consume, ensuring progress for generations to come.

Our commitment to effective stewardship and alignment with our core values demonstrates that our customers can view us as a trusted partner committed to their success and productivity.

In 2019-2020, we covered more than 1.3 million farmers, retailers, dept officials, agri students and extension workers through various on-field and online outreach programmes and activities.

To tackle issues of pest and disease infestation and vagaries of the weather, Corteva Agriscience™ is providing support to farmers through digital technologies that provide effective decision support systems. Using AI-based diagnostic solutions (powered by Plantix®) through the Farmer Connect Application, farmers can get not only diagnostic reports along with suggested remedial approaches with the help of a photo click of the infested area, but also get suggestions for the purchase of crop protection products via e-commerce vendors or nearby retailers.

Besides this, AI solutions are being employed for our AcreNext™ project in direct seeded rice (DSR) cultivation while Machine Learning models are built using satellite imagery data for monitoring major crops like rice and corn for their health mapping and acreage estimation and for providing appropriate solutions and advisory services. More than 300,000 farmers have taken advantage of the advisory services offered under the AI-based package of practice.



## AcreNext™ - Next Generation Rice Farming

**A sustainable rice farming solution for India**  
Corteva Agriscience™ introduced the AcreNext™ program in 2020 in India which is an integrated direct seeded rice programme providing DSR solution. This comprises hybrid seeds, mechanized sowing services and weed and crop management





advisory for rice farmers. Direct seeded rice (DSR) provides an alternate resource-efficient technology that minimizes the environmental impact while improving the farmers' livelihood.

This technique allows faster crop establishment, requires less intensive labor, and helps in groundwater retention while protecting the water table. Improvement in yield and faster crop maturity allows farmers to access the market sooner increasing their income.

The programme is available in Punjab, Haryana, Uttar Pradesh, and Madhya Pradesh.

Corteva Agriscience™ has also partnered with an NGO called PRADAN to introduce DSR techniques in Bihar, Jharkhand, and Madhya Pradesh where water scarcity is a major challenge for farmers.

The project empowered women through financial inclusion and DSR cultivation to become Agriculture Entrepreneurs (AE). The program provides know-how on the DSR process, business skills, farmer mobilization and awareness to farmers in their agricultural planning. They also get support in doorstep input supply, production and sale of fertilizers and access to output markets.

Corteva Agriscience™ through the AcreNext™ program continues to drive uptake and awareness of DSR and enables the farmers to adopt the best and most innovative practices that support their farms and livelihoods, while contributing positively to the environment.

### Safe Food Safe Farmer Project

With the focus on educating and capacity building of the farming community and allied stakeholders across the value chain, the Safe Food Safe Farmer Project was launched in three districts of Maharashtra namely Nasik, Ahmednagar and Buldana in 2018.

Corteva Agriscience™ invested in a multi-pronged strategy focused on empowering the farming community on four key areas namely worker exposure and safety, application technology, responsible use, secure storage and integrated pest management and health and hygiene.

More than 116,000 farmers and spray operators have benefitted from these training sessions along with increased retention and utilization of these best practices.

Recognising the need for disseminating product stewardship practices to agriculture graduates and extension workers, various classroom and field trainings were conducted for students of the Rural Agriculture Work Experience (RAWEX) program.

The project became a knowledge partner for Govt institutions, retailer associations, and aca-



demia. These stakeholders further acted as stewardship ambassadors cascading the information and practices to the farming community. Over 3600 agriculture students, staff and extension officers benefitted from these trainings. Additionally, about 200 medical practitioners from rural healthcare and primary healthcare centers have also been trained on recognition, first aid and treatment of exposures cases related to crop protection products.

The FarmHer initiative of Safe Food Safe Farmer project which covered more than 34,000 women and other stakeholders in 2019-2020, focused on imparting knowledge on nutrition, health and hygiene, sustainable food production and food security, secure storage and first aid and specialized self-defense training to the women farmers and other farmer families.

When Covid-19 struck the country, the project team sprang into action and changed outreach strategies by engaging with farmers via digital platforms focusing on Covid-19 safety guidelines and hygiene practices. PPE kits, survival food kits and sanitation kits comprising sanitizers and soaps were expeditiously procured and distributed. In Maharashtra, 120,000 PPE kits were distributed to municipal workers, doctors and farmers and further 15,000 kg worth of food packed in survival kits was distributed. These programmes were organized in collaboration with the Agri departments in consonance with the Covid-19 guidelines.

The Safe Food Safe Farmer project covered a myriad of activities and initiatives while keeping the farming community at the centre of everything, covering more than 0.8 million stakeholders through training programmes, online platforms, field activities and awareness campaigns. In 2020, Corteva Corteva Agriscience™ and the Safe Food Safe Farmer project was conferred the Best Stewardship Programme Award during the Global and prestigious Crop Science Forum & Awards 2020 ceremony. ■



# Advancing chemistry and technology to advance agriculture



## Focus on Market-Driven Technologies

As a leading agricultural sciences company, FMC is committed to responding to customers' evolving needs. We are investing significant resources in discovering new active ingredients, developing innovative formulations and biologicals in addition to advancing precision agriculture technologies that support sustainable agriculture around the world. To learn more about FMC's latest innovations, please visit our Technology Portfolio page.

## Living its Values

Our six Core Values define who we are and how we do business: Customer-Centricity, Sustainability, Respect for People, Safety, Integrity, and Agility. Collectively, these values guide us as individuals and as a team of 6,400 people around the world. It's what sets FMC apart and it's the key to our long-term growth and sustainability as a company. Download our poster below.

## A Clear Vision

FMC has a strong executive management team that charted an aggressive, five-year growth plan in late 2018. The strength of FMC's technology portfolio and geographical diversity help the company manage through challenges better than most. Our record of financial performance demonstrates our agility, the strength of our strategy and ability to execute in the most challenging conditions.

## Commitment to Integrity

At FMC, we are committed to conducting our business with honesty and integrity and complying with all applicable laws. Laws and standards vary in different countries and cultures, but, as a global company, our common goal and continuing commitment is to maintain equally high standards wherever we operate.



## Diversity and Inclusion

Our people and our culture are special at FMC. We create an inclusive environment where diverse views, backgrounds, and experiences are keys to our success. To learn more about our focus on diversity and inclusion, please see here.

## Globally Minded

FMC embraces cultural differences is important in an operating environment where teams are spread all over. Collaboration across functions and geographic regions occurs daily.





building farmers with guidance, knowledge and insight to manage crops.

The company's Community Outreach is also humane in nature.

And so has been our support to rural communities against major public health challenges such as Covid.

FMC India has sustainability at its core. Numerous projects include Project Samarth and Project Saffal.

A multi-year program, Project Samarth dwells with safe water and aims to make potable water accessible to rural communities in India.

Project Saffal deals with good agricultural practices and soil health.

As part of good agricultural practices, in May 2019, FMC India in collaboration with South Asia Biotechnology Centre (SABC) launched Project Saffal across India to provide IPM knowledge transfer to help Indian farmers combat Fall Army Worm. Various marketing communication collaterals were distributed as part of Saffal.

Numerous training sessions have been carried out in collaboration with leading state universities

FMC has also been established as a thought

leader for FAW menace.

Various other Initiatives of FMC India comprise empowering women in agriculture through various means, renewable energy, kicking off Science Leaders Program across India with scholarships for deserving PhD and MSc Ag students, training and awareness programs, community outreach in Kharod village (near Panoli) improving people's lives and major awareness campaign against covid-19 across the country by distributing protection equipment, safety kits and more.

With sustainability at its core, FMC also uses external collaborations, partnerships and investments to enhance the diversity of its efforts.

Numerous training sessions have been carried out in collaboration with leading state universities.

FMC is a thought leader for managing invasive pests like Fall Army Worm menace, eCapacity



# Assuring that all can enjoy nature's precious gifts

## Promoting stewardship & sustainability

Responsibility is not just a word for Indofil as we strive to go above and beyond to ensure our successive generations will have the opportunities to enjoy nature's precious gifts.

Indofil lives by its principle of being a responsible corporate player carrying the legacy of its legendary former Chairman Late Mr. K K Modi, a respected, foresighted, and visionary icons of India's agrochemical industry.

The farming community always had greater challenges with respect to their access to technology and benefitting from it as well. Indofil is already reaching a sizeable number of farmers across India through various digital and mobile platforms offering valuable information, alerts and advisory to the farmers.

Safe, judicious and responsible use of agrochemicals and stewardship

Indofil has always been at the forefront of promoting safe, judicious and responsible use of agrochemicals and stewardship remains an integral part of the strategy. More than 1600 safety kits comprising apron, gloves etc were distributed in Yavatmal, Amravati, Jalgaon, Nagpur, Parbhani, Buldhana, Aurangabad, Wardha, and Akola territories. Also, farmers were trained on topics including PPE, safety practices during mixing agrochemicals, washing the empty

containers, disposal of wastes, precautions to be followed while spraying etc.

## Digital outreach initiative

Indofil's digital outreach initiative offers specific, timely and actionable advice including safe and responsible handling of agrochemicals to more than 100,000 farmers across India, remotely. The company is leveraging internet-based innovative technologies for reaching out to the farmers during the Covid-19 pandemic. The farming community is benefitting from it as well.

Indofil's digital-driven campaigns are customized to meet the specific requirements of the farmers offering crop-specific, region-specific advisory benefitting a few lakh farmers across the country. In the era of AV-aided training, video conferencing became an instant hit among the farmers be it the tea growers in West Bengal or cotton farmers across 5 States (Telangana, Andhra Pradesh, Haryana, Punjab, and Maharashtra).

These video conferences were found to be much







## The company believes strongly in innovation, transformation, and excellence to take on the challenge of creating new markets and businesses.

effective to get farmers actively engage and have their queries addressed in real time. To make things more exciting, drone cameras are used to show actual fields to the participating farmers who cannot afford to travel due to distance or any other constraints for example, due to the travel restrictions in the midst of the “New Normal” during the Covid19 pandemic. Further, the most popular online video sharing platform, YouTube is being used to do live broadcast of the “Indofil Field Day” demonstrations and trainings combined with group meetings, and field days on the ground.

Be it promoting sustainable agricultural practices amongst farmers in the traditional way through regular awareness campaigns, meetings, informal interactions, games, etc. or through hi-tech digital platforms including audio or video conferences, “Team Indofil” reached out to lakhs of farmers as a part of its digital outreach program promoting safe and judicious use of agrochemicals for the benefit of the stakeholders in the entire food value chain.

Further, alerts via SMS to several thousand soybean farmers in Madhya Pradesh and Maharashtra, with weather forecasts and consequent pest or disease infestation, helped them get prepared and act proactively. Similarly, thousands of farmers in Gujarat and Rajasthan benefitted through the audio and video conferencing programs offering specific advisory on their ensuing groundnut crop.

The company’s commitment to ensure a sus-



tainable business is underpinned by a goal to achieve zero injuries and zero occupational illness while ensuring eco-friendly operations across verticals. Safe and reliable operations form the bedrock of sustainable operations with regular monitoring of Environment, Health and Safety (EHS) policy to ensure a safe and healthy work environment for employees.

As a philosophy to empower people to drive new ideas, the company believes strongly in innovation, transformation, and excellence to take on the challenge of creating new markets and businesses.

To promote education in marginalized areas, Modi Innovative Education Society (MIES), Chhattisgarh, a registered society engaged in educational activities, is building K. K. Modi University in Village Mahmara, District Durg, Chhattisgarh.

In line with the social objectives of our Group, Indofil has been significantly contributing towards the establishment of the university.





# Delivering impact through farmer connect

**F**ounded in 1946, PI Industries focuses on complex chemistry solutions in agri and pharma sciences. PI Industries has a strong rural reach and brand equity with millions of Indian farmers, having served them with market-leading brands and the trust for over seven decades. "With a significant footprint in the Indian crop protection market, were committed to raising farm yield and productivity through the provision of innovative and cutting edge products and solutions;\* affirms Prashant Hegde, CEO AgChem Brands, PI Industries.

## Water Conservation

With the agriculture sector accounting for approximately 90% of the 761,030 billion litres of annual freshwater withdrawals in the country, there is a need for water-saving agronomic practices for sustainable agriculture.







### DSR Technology

DSR (direct seeded rice) technology is one of PI's initiatives in sustainable agriculture and one with all-round benefits to the farmer. Aside from helping save water, DSR technology helps farmers save labour cost and is therefore an eco-friendly and economical alternative to conventionally transplanted rice.

PI's well-trained field teams offer hands-on training for different aspects of DSR production (leg working of seed drill, sowing methods etc.), conduct awareness camps, farmer meetings, setting up of demonstration farms with farmers, and training across multiple rice growing states in the country.

### Demonstrable benefits of DSR

PI's DSR program spans the states of Karnataka, Punjab, Andhra Pradesh, Telangana, Bihar, Jammu, Haryana, Tamil Nadu, Chhattisgarh, Maharashtra, Odisha and Madhya Pradesh. This has resulted in measurable/tangible savings of water and other resources.

- 18 lac acres of farmland benefitted
- 1.6 trillion litres of water saved annually
- 6, 184 / farmer /acre average saving in cost of paddy cultivation
- 7 lac farmers benefitted till date

This and other interventions in implementing water and watershed management projects won



CII's National Awards for Excellence in Water Management 2020.

### Safety & Stewardship

PI's sustainability initiatives are keenly focused on keeping our farmer communities safe. Safety stewardship is viewed as a collective responsibility and significant effort is made in educating the farmers. During the Kharif season 2020, PI Industries was allotted Sangli region as a nodal district for safety awareness by the Department of Agriculture, Government of Maharashtra.

PI conducted Safety & Stewardship Awareness Program for the farming community, covering 10 talukas of Sangli district. The focus was on Safe use of Pesticides and First Aid (pesticide poisoning) and on mandatory deployment of Safety Kits (while spraying insecticides). PI also distributed 1000 Safety Kits to farmers in Sangli and conducted a PPE kit awareness rally in Palus.

Our initiatives have served the farmers well and also received excellent response from retailers and distributors.

### Community Outreach

Extending support during the pandemic, our social responsibility to the farming community was manifested in our rapid and multi-pronged response. We deployed over 60 hi-tech sanitisation machines in conducting spray sanitisation drives around the country while also distributing masks, sanitisers and food kits. Being sustainability-minded, PI has constantly leveraged its expertise in agri-sciences to positively impact India's agricultural landscape and improve livelihood for farmers!





# Serving farmers through science for sustainable farm prosperity

**R**allis, a 168 year old company is the face of TATA Group in the agriculture sector and is committed to serve farmers through science for sustainable farm prosperity.

The core values (Safety, Passion, Integrity, Customer Centricity, and Excellence) of Rallis have always coincided with its philosophy to bring in a change and revolutionize the agricultural industry. The company is known for its commitment to serve farmers through science for sustainable farm prosperity and for its deep understanding of Indian agriculture, sustained contact with farmers, quality agrochemicals, branding and marketing expertise and its strong product portfolio of comprehensive crop care solutions.

Rallis believes that it is its responsibility to support farmers with Product knowledge, which enables them to take the right decision and for enhancing yield and quality of their agri produce.

Rallis makes a commendable impact towards sustainable agriculture, always with the interests of farmers, farming community and the environment in mind.

Through Rallis Samrudh Krishi (RSK), the company brings farmer

prosperity by providing holistic solutions to the farmers – right from seeds to harvest, digital technology-enabled agronomy and predictive advisory services through Drishti Platform.

Rallis also provides regular technical support for all crops to farmers through Samadhaan app and Dr. Vishwas helpline.

## **CORPORATE SOCIAL RESPONSIBILITY at Rallis**

Being a Tata group company, Rallis strongly believes in the Tata ethos of “what comes from the community should go back many times”. The company is committed to improve the quality of lives of people in the community it serves through long term stakeholder value creation, with special focus on empowerment of rural communities. Rallis’ Corporate Social Responsibility (CSR) initiatives are weaved around Natural Resource Man-





**RUBY:** Rallis Ujjwal Bhavishya Yojana – An Educational initiative: The status of government schools particularly those in remote and rural areas suffer from the lack of infrastructure, poor quality of teaching and poor governance. Amidst this backdrop, Rallis supports this ignored area with RUBY (Rallis Ujjwal Bhavishya Yojana) for next generation and strongly feels that it can be done by encouraging children to opt for formal education and initiates various educational programs focusing on the Fun concept. The RUBY program, along with Quality education, focuses on strengthening the infrastructure facilities and capacity building of teachers so both students and teachers can focus on Quality education for achieving the desired outcome across 4 states - Gujarat, Maharashtra, Karnataka and Telangana.



**MODEL TRIBAL VILLAGE:** Historically, Schedule caste and Scheduled Tribes have faced social disadvantage. Rallis strongly believes that a lot of work is needed to be done for empowerment of these communities. Among these two categories Tribal are the worst affected. Keeping this in mind, Rallis in collaboration with TCSR initiated Model Tribal village intervention which focuses on Holistic development of Tribal to overcome Social disadvantages faced

agement (NRM), Education and Skilling, Women empowerment and Model Tribal village under Affirmative Action (AA). These are driven by the CSR team in support with key strategic partners having domain expertise, in partnership with stakeholders. Employees are one of the key stakeholders and support the CSR & AA initiative by active participation through volunteering. In the future, Rallis plans to scale-up all the CSR initiatives and positively impact more lives.

**The CSR initiatives comprise:**

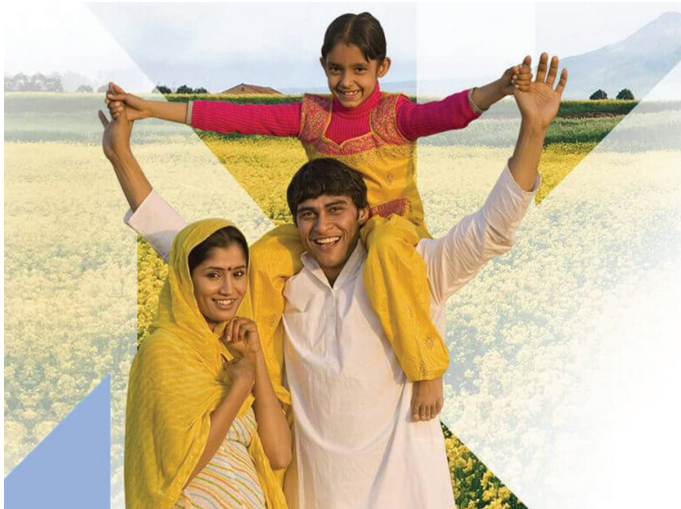
**JAL DHAN:** Scarcity of Water is a serious issue in rural life. In tune with its strong connect with two major consumer of water i.e. Agriculture and Industry, Rallis endeavours to play a vital role in combating perceived water menace in India with Jal Dhan”, started in 2013 as a rain water conservation program, implemented in Maharashtra with special focus on water stress region which aims at increasing water availability for domestic and Agri use through watershed interventions.

by them historically. Rallis began with potential villages in and around Mumbai, eventually spreading to more across Maharashtra and Gujarat.

**TARA - Women empowerment and skilling initiative:** TaRa is an Acronym for Tata Rallis, secondly Tara is a Star in Indian local language which emits bright light and can brighten the environment surrounding them. In similar ways a skilled person especially women has the potential to brighten and empower her family and society she comes from. At Rallis, women have always been focused while designing and implementing various CSR initiatives at Rallis. The company has initiated skill enhancement initiatives by adopting a two pronged approach by partnering with NGO and Partnering with Government.

**YOU ARE SAFE:** Rallis is largely into Agri Solutions business and crop care, bonding with farmers, working closely with rural India and believing in a cohesive, inclusive & integrated society for years. Through the ‘You Are Safe’ initiative, Rallis has been conducting awareness sessions related to use of safety kits, disposal of used pesticide containers, and safe spray of pesticide. The initiative helps educate farmers and their family members in safety precautions to be taken while using pesticides in a holistic manner, mainly across Maharashtra.





# Sustainable success through innovation & excellence

**S**umitomo Chemical Company Limited (SCC), the parent company of Sumitomo Chemical India Limited was established in 1913 to manufacture fertilizers from sulphur dioxide emitted from smelting operations at the Besshi copper mine in Niihama. During a journey of a century, the company has expanded in several chemical-related sectors and is among one of the leading global chemical companies recognized for its R&D innovation capabilities and specialty product focus.

Sumitomo Chemical India Ltd. (SCIL) was incorporated in 2000 as wholly owned subsidiary of Sumitomo Chemical Company Ltd. (SCC). SCIL manufactures, imports and markets products for Crop Protection, Grain Fumigation, Rodent Control, Bio Pesticides, Environmental Health, Professional Pest control and Feed Additives for use in India.

The company's product range comprises conventional chemistry sourced from its parent company, Sumitomo Chemical Company and biological products sourced from USA based subsidiary, Valent Biosciences LLC, a leader in producing a range of naturally occur-



ring, environmentally compatible pesticides and plant growth regulators, for over 40 years. Also produced are many technical grade pesticides in a state-of-the-art manufacturing units with indigenous R&D facility.

Sumitomo Chemical India Limited (SCIL) always puts service before profit and uses its wealth for community development. The belief is that it is possible to be ethical, socially responsible and profitable at the same time. This core guiding philosophy of SCIL existed much before Corporate Social Responsibility came to be recognized as a model for ethical, sustainable and responsible business.

SCIL is widely acknowledged as a responsible corporate owing to its long history in philanthropic initiatives. The company's ultimate objective is to create social equity and facilitate prosperity for those at the bottom of pyramid.

## **Few CSR projects of SCIL comprise:**

### **Sanitation & Drinking Water**

SCIL provides safe drinking water to households in villages surrounding the manufacturing sites through collaboration with Government departments such as Water and Sanitation Management





as National Association of Blind (Valsad), Sarkari Matsya Vyavsay School (Boiser) and Government Secondary School (Vapi).

### Natural Resources Conservation

Sustainability is a practice at SCIL. The projects on Natural Resources Conservation resonate with the core area of sustainability. The areas covered comprise Tree plantation and Tree Guards, Waste Water Management, Replenishing Water Table, Solar Hot Water System and Solar Street Light.

### Education & Skill Development

SCIL supports education & skill development through Enrolment and Education, Computer Aided Learning and more.

### Project: Locust Attack and SCIL attempt to help farmers reduce losses

In a first attack of this century, the swarms of locusts from Pakistan that have invaded farms in parts of Gujarat and Rajasthan since Oct 2019 has resulted in an estimated loss of 2.5 thousand crore rupees.

With over 360000 hectares of crop loss in Gujarat and Rajasthan under locust attack, SCIL came up with “NEW INNOVATORY IDEA” of using drone for aerial spray in Rajasthan. This resulted in excellent control of locust attack. Locust is being controlled in 1003 hectares, which had potential of damaging 50000 hectares of crop area.

SCIL received appreciation from Ministry and Govt. officials. Also the initiative was covered by many News channels and local media.

### Project: Clean Cultivation to reduce pest pressure and increase crop yield

India is a developing country where cost effective weed management practices are very important.. Weed management helps suppress and control weeds so that they don't impact negatively on the soil nutrition, pests attack, yield, harvesting operations etc.

The conceptual working on clean cultivation by eradicating the weeds on bunds and channels is under practice by farmers

which certainly reduces the attack of insects and diseases in the main field crops. Reduction in economic yield of vegetables due to weed infestation has also been reported to be 70-80% in Carrot, 60-70% in Onion, 40-70% in Tomato and 50-60% in Cauliflower.

SCIL has educated the growers across the geographies on role of clean cultivation in minimizing the pest pressure hence getting good quality produce with better yields.

Endeavouring for success and sustainability through innovation & excellence, SCIL moves on. ■



Organization (WASMO), Gujarat Water Supply Board (GWSSB) and community involvement.

Nearly 700 people from 5 villages of Kutch and Bhavnagar have benefitted from SCIL's efforts for safe drinking water system since, 2014. Also provided has been Drinking Water Coolers and RO systems at schools and associations such



# Confirming Indian farmers' progress for a century



**A**s one of the pioneers in the Indian Agrochemical Industry, SWAL Corporation Limited is committed to the progress of Indian farmers for a century.

## People to Farmer (P2F) team

The company's People to Farmer (P2F) team encompasses an All-India sales and distribution network comprising 150 plus expert technocrats in the field. Apart from marketing products, the field force demonstrates their right usage by interacting with the farmers on all aspects of farming technology. SWAL Corporation has a well-orchestrated distribution network spanning 24 stock points and about 4000 dealer outlets ensuring availability of products at the right time and the right place

## Atmanirbhar farming sector

The priority of Atmanirbhar Bharat is Atmanirbhar farming sector and Atmanirbhar farmers.

Aligning with the central goal of Atmanirbhar Bharat and doubling farmers' income, SWAL aims at improving farmer's livelihood by increasing the productivity and quality of the produce, while sustaining the environment.

Indian agriculture requires grass root level reach of technology and knowledge. SWAL Corporation seeks to promote parity by bridging the existing gaps in the farming sector that ultimately lead to enhanced farm productivity and income.

The path of attaining higher productivity is met by several challenges which include the lack of knowledge pertaining to:

- **Soil Potency:** Nutrient imbalance and poor soil structure are responsible for gradual decline in soil health.
- **Pesticide resistance:** Repetitive use of similar chemistry has led to resistance development among pests for most used pesticides.
- **Spray Management:** Availability of quality products with apt application timing is a huge challenge. Application of the right products at precise timing is an absolute need.
- The farming community needs an addressal of these crucial pain points.

**CROP WELLNESS CLINIC** is an initiative of SWAL Corporation that addresses and solves the challenge mentioned above. Crop Wellness Clinic or CWC is a one-stop solution that bridges the gap of farmers' knowledge and effective technology deployment. It creates awareness to address the major vulnerabilities:

**Soil Potency:** Use of advanced technologies to boost soil porosity, structure & nutrient balance.

**Pesticide resistance:** Use of different chemicals







in alternate sprays to prevent resistance development among pests.

**Spray Management:** With the technical know-how and access to inputs, SWAL Corporation reaches the farming community through its distribution network with the right product at the right time and right application method.

The extensive distribution channel at field level assists SWAL Corporation to serve farmers in all these aspects efficiently.

SWAL Corporation chose to implement a CWC drive in one of the toughest agro-climatic regions of India. Beed- a water scarce district of Maharashtra, faces innumerable uncertainties related to cultivation. SWAL Corporation demonstrated an effective way of farming by taking up a project on doubling cotton yield of farmers by highlighting these pain points and through a bouquet of offerings, including UPDT, Soilstar, Panama, Ferio, Wuxal, Acenthrin and Starthene Power.

The sole objective of this drive was to double cotton yields of farmers despite the seasonal challenges. SWAL onboarded diverse group of farmers from taluka Gevarai, district Beed to Crop Wellness Clinic. The farmers also practised their traditional way of farming in other parts of their plots to measure it against the final outcomes of CWC. The efficacy of this drive can be understood from the viewpoint of different stakeholders involved. Farmers, being the end consumers, had a pleasant experience through their CWC journey.

It is through the extensive distribution reach



**Aligning with the central goal of Atmanirbhar Bharat and doubling farmers' income, SWAL aims at improving farmer's livelihood by increasing the productivity and quality of the produce, while sustaining the environment.**

that SWAL Corporation reaches and serves the end consumers i.e. farmers. Their view towards CWC is equally crucial in this drive.

With average 100% growth in yield, CWC impacted the livelihood of farmers by enabling them to cultivate in an advanced and effective manner. With increased yield and higher profit margins, these farmers plan to adopt CWC's method of cultivation in the following seasons.

The foremost goal to reach enhanced productivity is to use the quality product with the correct dose at the correct time. It is through the Crop Wellness Clinic that this goal is being met.

SWAL steers ahead pioneering new horizons in Indian agriculture and creating a better tomorrow for Indian farmers. ■



# Committed to the health and safety of farmers

**S** yngenta is one of the world's leading agriculture companies, comprising Syngenta Crop Protection and Syngenta Seeds. The ambition is to help safely feed the world while taking care of the planet. Syngenta aims to improve the sustainability, quality and safety of agriculture with world class science and innovative crop solutions. The company's technologies enable millions of farmers around the world to make better use of limited agricultural resources.

## A key initiative – ISAFE

Syngenta, as a responsible corporate citizen is committed to health and







safety of the farmers. As part of stewardship activity, growers and farm laborers around the world are trained to effectively minimize environmental impacts and adverse health incidents. Going a step further, Syngenta India launched Farmer Health and Safety program in the year 2017 programme under CSR to collaborate with Government and NGOs to provide health and safety education and service to farmers and farm laborers.

The key components of the project are –

1. Spray men Entrepreneurship (SE) program
2. Farmer training on health, hygiene, and farm safety
3. Farm labour/Spray men counselling
4. Doctors awareness program



5. Mobile Health Units run by Wockhardt Foundation
6. Public awareness campaigns on Health and Safety

All the programs have now been combined in the program called I-SAFE - Inculcating Safety Awareness for Farmer Empowerment. This program in collaboration with Syngenta Foundation India (SFI) and Krishi Vikas Kendras (KVKs) and our CSR implementing partners is currently operating in 15 districts of six states - Maharashtra, Andhra Pradesh, Telangana, Madhya Pradesh, Punjab and Haryana.

In fact, the program of certified Spray men Entrepreneurs (SEs) is first of its kind to avoid operator exposure. This unique program trains SEs on proper use through PPEs, reading of labels and leaflets, equipment maintenance etc. The SEs further have a set of 5-6 spray men who undertake all the precautions during spraying. In this program we have trained 177 SEs who intern have identified and trained 990 spray men.

Under the farmer training and spray man counselling, more than 92000 farmers have been trained and 5200 spray men have been counselled on Health and Safety.

Doctor Awareness: Supported by the District Administration and the Health Department, we have conducted 18 Doctor Awareness programs covering about 1175 doctors from primary and rural health centers. In this programme, Dr. V V Pillay, an eminent toxicologist trains the doctors on 'Recognition and Treatment for Pesticide Exposure and the Government found it very useful and it was huge challenge for them to provide proper treatment to the patients who are exposed to chemicals.

Mobile Health Unit: This is a unique initiative that aims to treat patients from the villages in Yavatmal in Maharashtra and Guntur in Andhra Pradesh. This program was launched in November 2017. The Mobile Health Van remains at the disposal of the District Administration and medical officers. This health service has been used this remote and far-reaching in areas. About 125000 patients in the above two districts have been covered in the last three and half years.

Public Awareness Campaigns: Awareness campaigns through street plays, rallies, poster displays, wall paintings, announcement through public address systems are also organized during the spraying season to make public aware about the safety precautions they need to follow. More than 1500 villages have been covered through the Public Awareness Campaigns so far.

Syngenta. Helping farmers. Combating climate change. ■





# Working with farmers to improve farm profitability & sustainability

**C**rystal Crop Protection Ltd. is an R&D based Crop Solution Company which aims to work closely with the farming community and improve farm profitability & sustainability by advancing R&D in crop protection, seeds and farm mechanisation services. The Group was set up by the visionary industrialist, Mr. Nand Kishore Aggarwal, now Chairperson, in 1994. While he is the guiding force behind Crystal's rapid progress, Mr. Ankur Aggarwal, Managing Director, has injected fresh dynamism and a new vibe to the company.

Crystal has grown consistently over the years and is today one of the fastest-growing agrochemical companies in India, with its portfolio comprising insecticides, fungicides, herbicides and biostimulants and seeds.

Today, Crystal stands tall as a R&D-based company focusing on delivering the best crop solutions to Indian farmers. To achieve this, Crystal strives for excellence in areas of R&D, Manufacturing capabilities, Deep penetration for building brands, Institutional business and Inorganic growth.

## Research & Development

The Company runs a robust R & D programme that delivers superior, safe, and world class formulations of plant protection chemicals which are effective and also affordable for farmers. Recognising the vagaries of Indian agro-climatic conditions and socio-economic

conditions of Indian farmers, Crystal has established KRDC, its in-house R&D centre at Sonipat, Haryana, recognized by the Department of Scientific and Industrial Research, Ministry of Science and Technology, GoI and has been given GLP (Good Laboratory Practices) accreditation.

The facility carries intensive work in the field of Product development, Formulation development, Synthesis of novel chemistry, Analytical chemistry, Bio-sciences etc. KRDC has filed a vast number of patents since 2010 and many have been commercialised since then.

The new innovations developed by KRDC are evaluated pan India by field-biologists. The promising products are subjected to patent check and taken up for registration by a competent team of experts.

## Manufacturing Excellence

The company has four operational formulations manufacturing plants, two in Jammu, one in Sonipat, Haryana and yet another in Anand, Gujarat. With its recently commissioned technical





manufacturing facility at Nagpur, and a greenfield technical plant in Dahej, Gujarat, Crystal now has three technical plants, the first being at Sonipat, Haryana.

### Deep Distribution Penetration

The company has a pan-India sales and distribution presence with a dedicated sales force that provides customer service and undertakes product promotion. Crystal's pan India presence has deep penetration with stocks supplied through 47 distribution centres to its 5000+ distributors. The products reach more than 30,000 retail outlets across India.

### Farmer Education & Brand Building

Crystal, through its 1200+ Crystal crop advisors team, work closely with farmers in their farmlands to deliver the right farming technology at the farmers' doorstep. It conducts various farmer education and engagement programs across markets which include Farmer Training Programs, On-field Product Demonstrations, Crop-based yield demonstration programs and more.

Crystal rich product portfolio spans more than 80 brands across crops and segments. Some major brands are Missile, Bavistin, Proclaim, Tilt, Talwar Zinc Super 14, Apex 50, Azotrix, Nutrozen, Abacin and Amora.

### Institutional Business & Export

Trust, integrity and ethics make brand Crystal one of the sought-after companies in institutional partnership. Crystal has a large customer base with more than 200 reputed companies in India and abroad. Apart from the domestic market, the company focuses on South-East Asia, Gulf region, Latin America and Africa for exports.

### Seed Business

Apart from Crop Protection, Crystal is now among the leading companies in Seed with a focus in field crops such as Cotton, Pearl Millet, Maize, Grain and fodder Sorghum, Mustard and Paddy. With a high focus on seed research, the company has modern research farms and laboratories spread over more than 100 acres across India



### Vision

To be amongst the most admired crop solution companies by providing innovative, cost-effective products & services.

### Mission

To work closely with farming community and improve farm profitability & sustainability by advancing R&D in crop protection, seeds and farm mechanization services.

developing better varieties for Indian farmers.

Some of the leading seed brands are Proagro, Surpass, Dairy Green, SX-17, Mahalaxmi, Atheeva, and CCH-999.

### Inorganic Growth

The company believes that pursuing selective acquisitions, partnerships, and alliances would improve its competitiveness, further diversifying its product portfolio and strengthening its market position.

Since 2011, Crystal has made 9 strategic acquisitions to expand its manufacturing capabilities and Crop Protection and Seed Business which includes some well established and leading brand viz. Bavistin, Proclaim, Tilt, Dairy Green, SX-17, Proagro and Surpass.

### Future Growth Plan

Crystal plans to grow its businesses rapidly and with its strong pipeline, it plans to introduce 3 to 4 world class products every year in crop protection and seed with continued investments in Manufacturing and R&D.







# Transforming India through Agriculture

**D**hanuka Agritech Limited, with almost four decades of active presence in crop protection chemicals has travelled a long way and yet believes that the journey has just begun. With state-of-the-art modern manufacturing facilities and strong R&D setup, we have partnered with world-class leaders in the crop protection industry. Over the years, we have earned the reputation of being a credible agri-business entity which offers products and services of highest quality.

## Reaching out, making a difference

- Product portfolio of more than 85 Brands
- More than 350 SKUs
- 3 Production units
- 75000 Retail outlets
- 1000+ Manpower

## Cultivating success with expertise

Decades of on-ground efforts have helped us to achieve deep-rooted knowledge about Indian agriculture. This vast reservoir of knowledge and experience has made us a leading player in the Indian Agrochemical Industry, few advantages of which are:

- Deep and practical understanding of Product Registration process in India
- Strong presence in each aspect of Lab to Land Approach
- Decades of experience in market development of Specialty molecules
- Huge and deep distribution network across India
- Capability on developing a new and unique formulation for the Indian market
- First to introduce formulations like SE and SG in India
- Toll Formulation Capability & Capacity



## Research & Development

Dhanuka Agritech Research Centre is recognised by the Ministry of Science and Technology, Govt. of India. This centre has been driving initiatives on Integrated Crop & Pest Management, organising various Workshops and Seminars on IPM, ICM and IRM while generating scientific data and evaluating new molecules for the near future.

Dhanuka Agritech's R&D works in close collaboration with the Government of India's leading research establishments like, Indian Council



**Awards & recognitions**

- Part of India Inc. 500 India's fastest growing Companies under INR 1,500 Cr.: FY 2010 & 2011-12 • Listed as among '200 Best Under a Billion Companies in Asia Pacific' three times by FORBES Magazine in the year 2010, 2011 & 2013 • Inc. India's Award for Innovation in Product: Mortar and Innovative Logistics Management 2013 • Inc. India Innovative 100 Award in recognition of smart innovation for the product - Lustre 2014 • Listed under India's exemplary Companies: Inc. India - Hall of fame 2014 • FICCI Chemicals and Petrochemicals Award for Best contribution to Academia 2014 • Amar Ujala CSR Award 2017 • 70 Most Trusted Power Brands 2017 - Planman Media • National Best Employee Brand 2019 • The Fortune India Next 500 Universe 2017 • Commendable work for changing Public Perception FICCI 2018 • Uptime Achievement Award, Amity 2020 • ASSOCHAM's - Water Management Excellence Award 2018 • Business Leader of the Year 2021 by Global Leader Conclave • India Chem 2018 • Business Sphere 2018 • Great Place to Work for 2018-19 • Hurun Industry Achievement Award 2019



of Agricultural Research (ICAR), New Delhi; Indian Agricultural Research Institute (IARI), New Delhi; Central Rice Research Institute (CRRRI), Cuttack Odisha; Central Potato Research Institute (CPRI), Shimla; Himachal Pradesh; Tea Research Association (TRA), Toklai, Assam; and State Agricultural Universities (SAUs) to ensure compliance with government rules and regulations before introducing a new product.

**Nurturing growth beyond borders**

Dhanuka Agritech has been making continuous efforts to seek new opportunities and new solutions beyond borders. We believe that our success is in the success of farmers. With success comes responsibility, so we reinvest in developing new technology for the farming community with the support of international collaborations. A few of these collaborations are for new crop protection solutions for Indian farmers, collaborations for the marketing of agrochemicals and Tie-ups for product registration and development.

Dhanuka's visionary culture & value system allows us to emphasise not only to adapt to the challenges of present day but also take the responsibilities of future.

**Our international collaborations comprise:**

- Agrinos India Pvt. Ltd. - MYCORE
- Corteva Agriscience - QURIN', D-ONE, LARGO', Dabooch
- FMC Corporation., U. S. A. - AAATANK',

**NABOOD, COVER' GRANULE, COVER LIQUID**

- Hokko Chemical Industry Ltd., Japan - KASU-B, CONIKA'
- Nippon Soda Co., Ltd., Japan - NISSODIUM
- Nissan Chemical Corporation, Japan - KIRARI, TARGA SUPER', SEMPREA', SAKURA', MAXX-SOY"', CHEMPA', ONEKIL
- OAT Agrio Co. Ltd., Japan - FOSTER'
- Oro Agri International Ltd., USA - WETCIT', SUELO
- Sumitomo Chemical Company Limited, Japan - CALDAN 4G, CALDAN'50SP, SHEATHMAR'
- Syngenta India Ltd., Switzerland - FENOX'-1000

**Harvesting the fruits of hard work**

Dhanuka Agritech's consistent performance has been acknowledged with various honours, over the years. (Reference – awards and recognitions over the years, above)

**Giving back to the society**

Strengthening community development initiatives have been the prime focus of Dhanuka Agritech Limited, since its inception. The responsibility of giving back to society has driven us to emphasise on initiatives that create value in the community. We are well aligned with the nation's vision, we stand and contribute to empower Education, Water Conservation, Healthcare, Environment, Food & Nutrition. We are structured around multiple thematic areas for holistic development of communities and we regularly engage in social development works, to improve the lives of Indian citizens. ■

**In retrospect**

- Listed Company in BSE and NSE • No. 2 in market reach & penetration for brand sales in Indian market • Pan-India presence • 08 Branch Offices • 6, 500 distributors • 75, 000 retailers approx. • 1236 Dhanuka Doctors supported by 1000 plus employees • Listed thrice in the Forbes Magazine '200 Best under a Billion Companies in Asia Pacific



# Securing food and achieving sustainable agriculture

Since its founding in 1920, Nippon Soda (Nisso) has accumulated unique technologies and know-how, and provided highly functional and high-value-added products. Furthermore, as a company that handles chemical substances, Nisso has always been mindful of the doctrine of responsible care and have driven business activities with attention to the environment, safety and health. Since expanding operations into agrochemicals in the 1950s, Nisso has provided a variety of agrochemical products that strive for effectiveness and safety.

## Research and Development

Nisso has assigned agrochemicals, as one of its four priority directive fields, and while performing regular strategic and systematic reviews in response to rapid changes in the business environment and technological progress, it works to bolster its core businesses by strengthening development in the peripheries of its priority businesses and to rise to the challenge of creating new businesses in the fields of agrochemicals. As the locations for these efforts, Nippon Soda has designated the Odawara Research Center (Odawara, Kanagawa) for agrochemicals.

Regarding core technologies, individual locations are working to enhance and develop the core technologies required to develop new peripheral products and to establish proprietary technologies for Nisso. Special efforts are made to maintain and improve important core technologies that contribute to enhancing our competitiveness to secure technological superiority against competitors. The required core technologies are used to create new differentiations.

## Odawara Research Center Important core technologies

Agrochemical development synthesis technology, bioactivity evaluation technology, safety evaluation technology, formulation technology, analysis technology

## Required core technology

Pharmacokinetic evaluation technology, calculator chemical technology, fluorination technology, catalyst design technology







### Odawara Research Center

Odawara Research Center conducts research on agrochemicals, one of the main pillars of Nisso's business. Focused on the three fields of drug synthesis research, live evaluation research, and safety research, the Center is a multidiscipline research center with the Haibara Field Research Center and the Bandai Field Research Station as test farms. Based on advanced organic synthesis technologies, the company is working not only on investigation and synthesis of new chemical compounds, but also pursuing the bioactivity and safety of chemical compounds. Due to a distinct, integrated research framework that can be driven from basic research to field tests, quick and highly efficient agrochemical development is possible. Efficient searching for new chemical compounds is also possible.

Furthermore, as an approach to a new field, Nisso is expanding research areas into technologies using asymmetric synthetic catalysts and reactive, and microorganisms, and cultivating the buds of new products and technologies that rapidly meet society's needs.

### Achieving sustainable agriculture through smart agriculture

In the future, Nisso will continue supplying safe and effective agrochemicals that are highly rated,

at the same time create new agrochemicals that are safer and more effective by using advanced synthetic technology to contribute to the world's food supply. Additionally, the company will utilize information and communications technology (ICT) and other technologies to support labor-saving pest control work and the production of high-quality crops.

### New areas

Also, because of the global increase in awareness of environmental protection, there is a focus on biopesticides to eliminate crop diseases and harmful insects. Reducing the impact on ecosystems is a major issue, and Nisso is engaged in a range of activities including developing and supplying internally developed biopesticides.

Nisso Chemical India LLP (Nisso India), incorporated in 2017, is a wholly owned subsidiary of Nippon Soda Co., Ltd. (Nisso) based in Tokyo, Japan. The company's core businesses comprise high-performance and versatile fine chemicals and pharmaceuticals, as well as the authorization and distribution of safe, sustainable and effective agrochemical products, including proprietary active ingredients, as well as plant protection products formulated with world-class technology.

New Chemistry under development in India are: Picarbutrazox; Ipflufenquin; Cyflufenamid; Acynonapyr; Tebufenozide, Sethoxydim and their Mixture formulations.

The company offers services in market Research, evaluation and development, technical services, marketing strategies, regulatory support and reaching out to the customer, with a deeper understanding of the market and customer needs.

Nisso India does not directly sell products but monitors the sales of customers and supports promotions for generic products. All intended to take Indian agriculture ahead, sustainably. ■







# Connecting India's Agri Needs Sustainably

**T**he House of Stanes has a impressive lineage going back to 1861, with Sir Robert Stanes. The organisation was founded as a tea planting company and coffee curing works. This marked the beginning of greater things to come; expansion of plantation holdings, diversification into fertilizer mixing (1890) automobiles (1940) and more growth areas.

T Stanes celebrated its centenary year in 1961 and was acquired by the Amalgamations Group.

The company has developed grass-roots level contacts, supported by a network of over 12,000 dealers with over 200 field sales and service personnel to effectively cater to the needs of the farming community.

Today, T Stanes is a large business house from peninsular India, engaged in manufacturing and marketing, encompassing a diverse range of activities that include Organic Fertilizers, Micronutrients. Bio-fertilizers, Botanical Pesticides, Microbial Insecticides, Microbial Fungicides, Microbial Nematicides Anti-transpirants, Immunomodulators, Pheromones Traps and Seeds, to name a few.

## Accreditation and accolades

- Winner of Indian National Production Awards 1994, 1996, 1997.
- Winner of Indian National Award 1994 Best R&D Research on Neem.

## Sustainable agriculture

Man has been living in harmony with the plant kingdom for ages. In fact, agriculture has been mankind's primordial occupation. It is the vital source that offers the basic necessities food, water and fresh air which is essential for our survival. But then, in the race for existence, the agile man has moved far quicker than the mute plants.

The technological advancement has brought about an alienation from laws of nature. Productivity and yield have quite often relegated concern for Mother Nature. This has been mainly due to







use of chemical inputs which often poison not only the soil and ground water, but also plants and animals that live on them. This detrimental effect of synthetic inorganic inputs on the fragile eco-system calls for a return to nature.

T. Stanes and Company Limited feels a strong sense of responsibility to safeguard the earth and environment. This has spurred intensification of research and development of agro-inputs that are bio-degradable, eco-friendly, safe to use, protect the crop and increase the yield.

### Research & development

The company's aim through Research & Development is to develop new products as well as improve the properties and functionality of the older products. T. Stanes constantly looks for new active ingredients that can control crop pests; improve yield and productivity in unique ways. The research involves creating new and innovative products on Nutrient management, Pest management, Disease management and Water management.

Farmers are given access to a steady flow of new and current resources to help them maximize yields on limited farmland. In order to achieve that, we conduct testing on the plant, soil and in-house field efficacy trials as well as at farmers' fields and validate the products through agricultural university bio-efficacy studies.

As a part of ongoing open innovation initiatives, T. Stanes collaborates with the Indian Council of Agricultural Research Institute and State Agricultural Universities for new product and technology development. The products are registered at Central Insecticide Board, Fertilizer Control Order and



Organic certification agencies. Data on toxicology is also generated for product registration both in National and International institutions.

### Friends of earth

The company's pioneering effort in going green has been repeatedly recognized by the Government of India with awards and partnerships for further projects in research and development as well as great appreciation from customers around the globe. Encouraged by its foray into bio-products, Stanes also produced, after significant research, a full array of herbal teas and ayurvedic remedies. Its love for maintaining the environment is of course reflected in its line of products and aptly echoed through its vision, to be 'Friends of the Earth'.



# WE CONGRATULATE YOU FOR YOUR EFFORT IN PRODUCING BUMPER CROP EVEN DURING PANDEMIC.




**DEFEAT COVID 19**  
Get vaccinated along  
with your family.  
Be safe and keep safe.



## Our Members



## Our Associate Members



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