INDEX

EVENT LOCATIONS

A worldwide survey was conducted. The only question asked was : *"Would you please give your honest opinion about solutions to the food shortage in the rest of the world?"*

The survey was a huge failure ...

In Africa they didn't know what *"food"* meant. In India they didn't know what *"honest"* meant. In Western Europe they didn't know what *"shortage"* meant. In China they didn't know what *"opinion"* meant. In the Middle East they didn't know what *"solution"* meant. In South America they didn't know what *"please"* meant. And in the USA they didn't know what *"the rest of the world"* meant.

In good humour 😊

INTRODUCTION

It is famously said that all great changes are preceded by chaos. The world, as we knew it a year ago, has evolved and adapted to disruption caused due to the pandemic. The crisis led to chaos, but it also brought with it a plethora of opportunities, transformations, and up gradations. Though it all happened suddenly, people have adjusted gradually to the changes brought on by the pandemic including, in the field of manufacturing and field operations particularly in agriculture.

This dossier pertains to the period April 2021 till end of August 2022 listing all the activities which CCFI members carried out in spite of the COVID-19 pandemic.....and more !!

INDIAN AGRICULTURE : 75 YEARS OF GLORY

India is an agricultural country. Agriculture and its allied activities act as main source of livelihood for more than 80% population of rural India. It provides employment to approximately 54% of labour. Its contribution to Gross Domestic product (GDP) is between 14 to 15%. At the time of Independence, India faced food grain shortage. India achieved spectacular growth in agriculture sector since 1966. India today is self sufficient in most of the food grain despite population increase. The food grain production of India increased from 51 million tons in 1950 to about record 273.38 million tons in 2016-17. This growth in itself represents a remarkable achievement in the history of world agriculture. India has achieved significant growth in agriculture, milk, fish, oilseeds, fruits and vegetables owing to green, white, blue and yellow revolutions. All these revolutions have brought prosperity for the farmers.

The Indian food industry is poised for huge, growth, increasing its contribution to world food trade every year due to its immense potential for value addition, particularly with the food processing industry. The Indian food processing industry accounts for 32% of the country's total food market, one of the largest industries in India and is ranked fifth in terms of production, consumption, export and expected growth.

Indian agriculture is as diverse as our culture, due mainly to family run small farms. No other country cultivates as many different types of crops as we do. Our crop diversity and diet diversity support each other.

India's small farms function 12 months a year. They are multifunctional. They invariably practice a unique kind of mixed agri-horti-livestock farming. It is common in India to see agricultural farmers doubling up as milk producers, goat rearers, poultry keepers, aqua culturists etc.

This multifunctionalityof small farms helps in producing multiple agricultural outputs per unit area of the farm land. The Indian economy at ($3894 Billion) is the 5th largest in the world. India ranks second largest in the world in agricultural production, surpassing the USA and the EU. In 1950s, India had to import rice to feed her people. Now, India is the largest exporter of rice in the world. India is the world's largest producer of milk in the world.

Indian farmers, policy makers, scientists and agri. input companies have played a stellar role in shaping our agriculture to be a multiproduct powerhouse. Indian agriculture produces more food crops and less feed crops unlike most other countries. Food crops “directly” meet our dietary needs and leave less carbon foot print compared to feed crops that go into making animal based foods (meat).

Indian agricultural sector is a trade surplus sector. The exports exceed the imports – earning valuable foreign exchange for the country. Between the FYs 2016-17 and 2020-21, our agricultural exports fetched a trade surplus of Rs 5.21 lakh Cr. ($75.6 billion).

Our agricultural sector is highly evolved, sustainable and resilient one as evident of its robust growth even during the recent Covid pandemic.

The contribution of the agriculture sector to India’s GDP has increased over the years. The percentage share of GVA (Gross Value Add) of agriculture and allied sector to total economy was 17.6% in FY 2018-19, 18.4% in FY 2019-20 and 20.2% in FY 2021-22. This increase is due to the increased government initiative with respect to the agriculture sector.

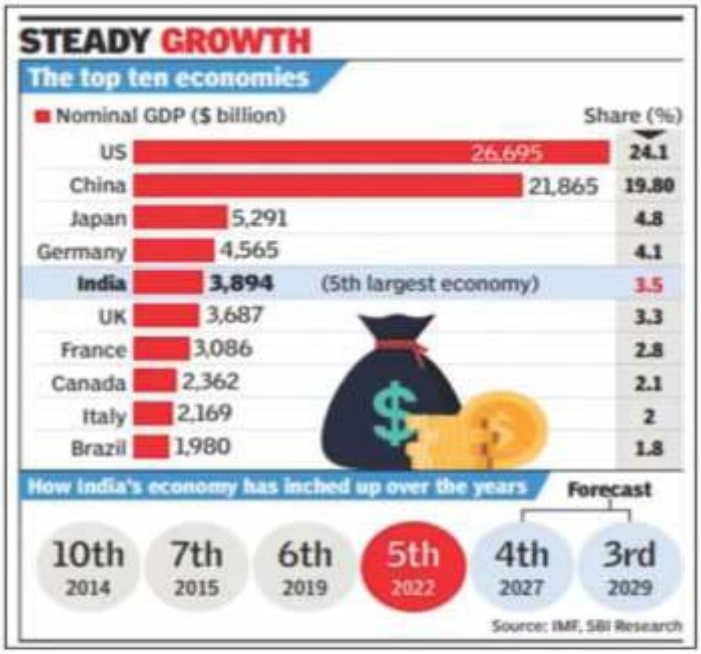
The impact of climate change is now more evident than over due to global warming. Increase in temperature, change in precipitation patterns, changes in weather, and reduction in water availability can have a big impact on agriculture in terms of disrupting food availability, affecting food quality, and reducing agriculture productivity.

Every aspect of the Indian economy is now under direct or indirect influence of agriculture so one has to take care of climatic variation affecting monsoon patterns, heat and cold waves, and most importantly, pests so that Indian GDP can show double digital growth.

In the past few years Indian Agriculture has advanced by leap and bounds, whereby the food grain output along with pulses, natural fibers, sugarcane, vegetable, and fruits has increased sharply. Even today, we are counted amongst the top exporters of agricultural produce owing to an equivalent progress in the crop protection industry.

Agriculture has been pivotal to India since the dawn of its civilization. With one of the largest arable complemented by favorable climatic conditions, it enables the subcontinents to produce a variety of crops. Even today despite rapid urbanization, the growth of the agricultural sector is intrinsically tied to the growth of the economy as a whole.

In terms of economic productivity, it contributes to at least 1/6th of the national income and helps maintain food security with the country. India's total agricultural and allied products exports stood at US$ 41.25 billion in FY21. The sector employs over 54% of the Indian population and 70% of the Indian rural population is dependent on agriculture sector is indicate to have the most sweeping impact on poverty reduction (approx.twice that of manufacturing). Recognizing this, the government declared its goal to double farmer income by 2022.



It is equally important to mention that India, the world's **fifth largest economy** ranks the **second largest in agricultural output** ($532 Billion) 👏👏

Most Indians do not know this spectacular achievement in the field of agriculture.

CELEBRATING 75 YEARS OF INDIA'S INDEPENDENCE

Seventy – five years ago, India started an incredible journey to ultimately ensure its deserved place among the leading world powers. A vibrant democracy and diverse society, a fascinating combination of traditions and inexorable economic progress in agriculture and industry, philosophy of peace and inclusiveness- all of these and more make India a unique and admirable nation.

75th Anniversary of Indian Independence or Azadi Ka Amrit Mahotsav was an event, in which the 75th Anniversary of the Independence of India was celebrated in India and abroad. It was 76th Independence Day of India.

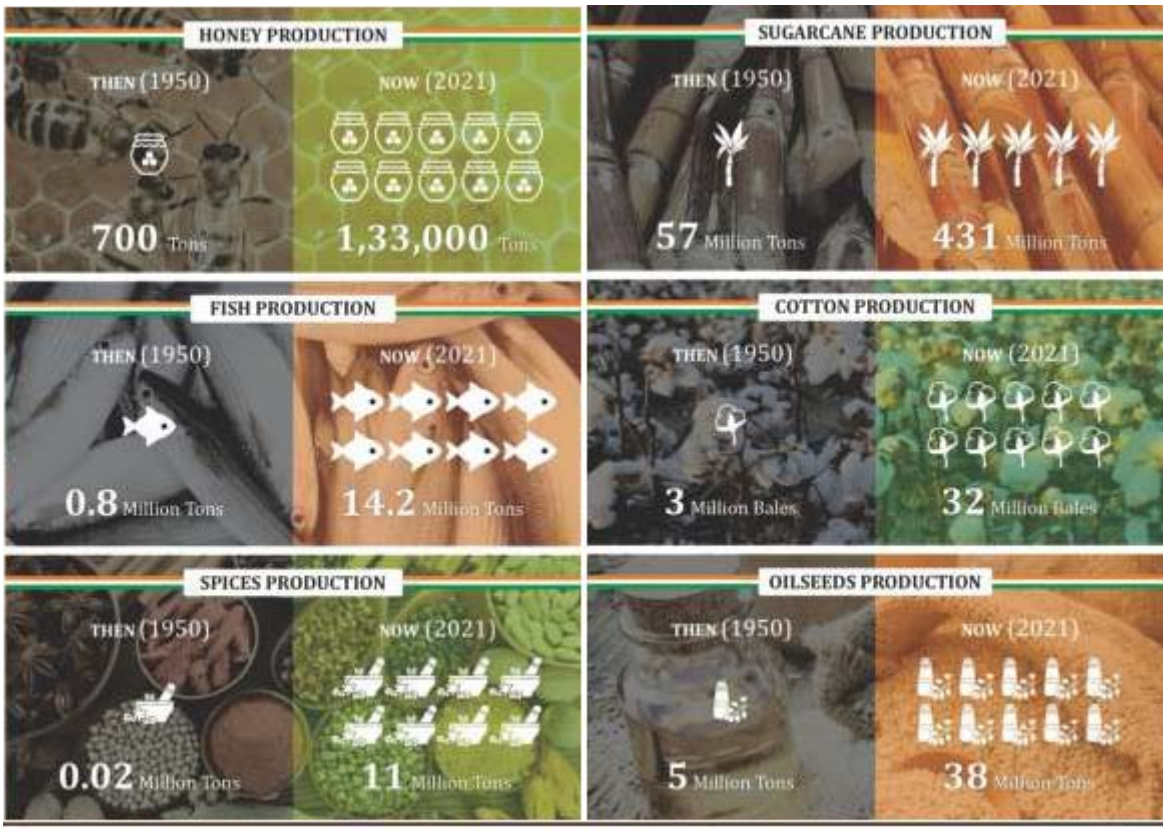
The Government of India decided to celebrate the 75 years of Independence of India, with tribute to people instrumental in bringing India thus far in its journey, in the spirit of Atmanirbhar Bharat". 'Azadi Ka Amrit Mahotsav' means Elixir of energy of independence. It is the initiative to celebrate and commemorate 75 years of independence from British Raj and the history of India's people, culture and achievements. The commemoration is to be celebrated through a series of events organized by the Government of India. Prime Minister of India Shri Narendra Modi inaugurated the celebration on 12 March 2021 with a 'padyatra' (Freedom March) at Savarmati ashram with a 75-week countdown to its 75th anniversary of independence and it will continue till 2023 ending on 15th August 2023.

There are five themes of the 'Azadi Ka Amrit Mahotsav' mainly:

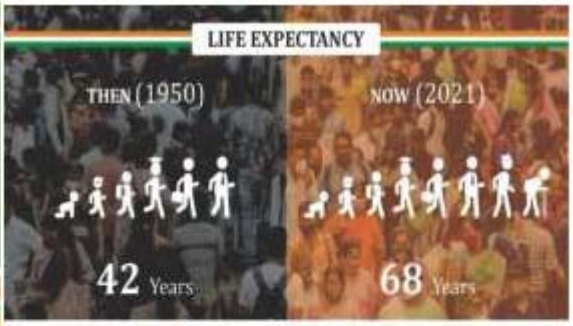
- **Freedom struggle:** It focuses on and celebrates the countless freedom fighters who had helped India achieve freedom from the British.
- **Ideas@75:** This theme brings into spotlight the programs and events inspired by ideas and ideals that have shaped India so far and are to influence for next 25 years (till India's 100th Independence day, named Amrit Kaal').
- **Resolve@75:** This theme focuses on the collective resolve and determination to shape the destiny of India. Events and programs under this theme include initiatives such as Constitution Day, Good Governance Week etc.
- **Actions@75:** This theme focuses on all the efforts that are currently being undertaken by the Government to take India to carving out its position at the world level. It has a motto: SABKA SAATH. SABKA VIKAS. SABKA VISHWAS, SABKA PRAYAS.
- **Achievements@75:** This theme highlights all the milestones and collective achievements achieved since India's ancient history along the way till today's 75-year-old independent country.

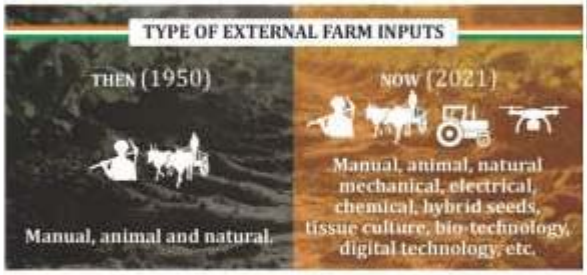
In the usual ceremonial practice the Prime Minister of India hoisted the flag from Red Fort at Delhi followed by speech on achievements and proud moments as a people of this country.

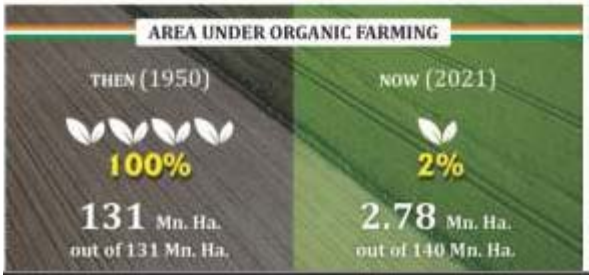
The government of India also started a campaign Har Ghar Tiranga (transl. Tiranga at each house) under the auspices of 'Azadi Ka Amrit Mahotsav' to endorse people to bring the flag home and hoist it to mark the 75th year of India's independence.


HONEY PRODUCTION
THEN (1950)
700 Tons
NOW (2021)
1,33,000 Tons
SUGARCANE PRODUCTION
THEN (1950)
57 Million Tons
NOW (2021)
431 Million Tons
FISH PRODUCTION
THEN (1950)
0.8 Million Tons
NOW (2021)
14.2 Million Tons
COTTON PRODUCTION
THEN (1950)
3 Million Bales
NOW (2021)
32 Million Bales
SPICES PRODUCTION
THEN (1950)
0.02 Million Tons
NOW (2021)
11 Million Tons
OILSEEDS PRODUCTION
THEN (1950)
5 Million Tons
NOW (2021)
38 Million Tons


INDIA'S AGRICULTURAL GVA/OUTPUT
THEN (1950)
< 10 Billion USD
NOW (2021)
532 Billion USD


LIFE EXPECTANCY
THEN (1950)
42 Years
NOW (2021)
68 Years


TYPE OF EXTERNAL FARM INPUTS
THEN (1950)
Manual, animal and natural.
NOW (2021)
Manual, animal, natural mechanical, electrical, chemical, hybrid seeds, tissue culture, bio-technology, digital technology, etc.


AREA UNDER ORGANIC FARMING
THEN (1950)
100%
131 Mn. Ha.
out of 131 Mn. Ha.
NOW (2021)
2%
2.78 Mn. Ha.
out of 140 Mn. Ha.


Indian Agriculture: Contemporary Facts
India in 2022 ranks the 2nd largest in agricultural production and the 9th largest in agricultural exports.
Indian farmers feed the world now!
In terms of value of agricultural output, India's is double than that of the USA or the EU.
Indian agriculture is not a gamble on the monsoon anymore.
Indian agriculture is resilient, inclusive and progressive.
When was the last time you heard of famines and food shortages in India?

AGRICULTURE @ 100 YEARS : FUTURE AHEAD

India @ 100 in 2047 will still have largest section seeking livelihood in agriculture. Welfare of the farmers and landless rural society will hence remain a core engagement. This warrants trans- formation of the hitherto production – centric agriculture into an agri- enterprise, which is a mature food system and is creating productive jobs and profitable incomes-and all of this while nurturing the ecology.

Departing from the past, a confident agriculture will need to deliver on its new mandate. This entails ability to predict risks and uncertainties both production and post – production- as well as negotiate them to minimize loss of output and income.

Agriculture depends on connecting all stakeholders with in the agri value chain and empowering the farmer. In fact recent reports indicate that India's agriculture technology sector has the potential to grow to $24.1 billion in the next five years which is indicative of the potential that the eco system is on the cusp of unleashing. As a highly entrepreneurial country, India's farmers and entrepreneurs have the ability to co- create systems that are sustainable, efficient and self-reliant. For that understanding, the on ground data at the supply and demand sides is imperative to make informed and focused decisions. If we create an ecosystem where all stakeholders across the agri – value chain have access to a higher equilibrium through financial intermediation, market linkage, information, etc. there is no reason why agriculture cannot be the biggest contributor to our economy.

FOCUS ON AGRICULTURE BY GOVERNMENT OF INDIA

It was suggested that the government needs to be more sensitive to the need of farming community, especially of the small land holders and of poor, living in the backward fragile and marginal areas.

Government needs to take action against vendors, dealers & distributors supplying, misbranded crop protection chemicals. Even though the regulations are in place, stronger enforcement can go a long way in improving usage of such chemicals. With our effort, Govt. has agreed to allow a three year diploma courses in Agriculture.

The Government of India recognizes the potential agriculture holds and the overall thrust of the Union Budget 2022 seems to be towards building a more robust and resilient agricultural infrastructure for farmers through modern technological intervention

and extensive financial investments with in the agritech start-up and larger agri- value chain ecosystem.

The introduction of Kisan drones for land records, digitization, and crop assessment will lead to improve efficiency in key farm interventions especially for small holder's farmers; it could also boost employment opportunities within the rural landscape if the opportunity is catalyzed by the government. The breakthrough decision to focus on crop- diversification and promotion of domestic oilseeds production is important, as it will promote both the expansion and productivity enhancement within the often neglected horticulture sector.

RESPONSIBILITY OF CCFI AS AN OLDEST & APEX FEDERATION

Crop Care Federation of India (CCFI) is not only the oldest but an apex federation of over 50 Indian Manufactures dealing in Agriculture inputs like pesticides, fertilizers, seeds and farm equipment with Pan India presence. The basic purpose is of advancement of crop protection and safety of farmers during field operations and storage. CCFI of India is a leading trade body for Indian crop protection industry. Members of CCFI account for >90% of agrochemicals export from India ($3.4-bn in 2019-20).

India is a leading exporter of generic pesticides (similar to generic medicines) producing valuable trade surplus.

CCFI serves as a responsible interface between Government and Industry at all levels including farmers, researchers and scientists. We are instrumental in framing of Governmental policies, proposed market regulatory reforms, technologies adoption, and research and extension, information technique in agriculture and in generating rural employment for the benefit of our stake holders namely corporate trade, channel partners, farmers and their contract labour.

It is our endeavor to ensure farmers prosperity by taking up extension work and demonstration to help small and marginal farmers to minimizing their crop losses and increase their income.

We emphasis to train women farmers' who play a key role in both agriculture and non agriculture sector particularly in grain storage, dairy and bee keeping activity.

ROLE OF MEMBERS TOWARDS “MAKE IN INDIA”

Our members represent major agrochemical corporates who not only have their manufacturing facilities but constitute almost over 90% of the exports to 130 countries globally giving credence to the fact that Indian Agrochemicals are well accepted across the world.

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

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

- Add Value Agencies
- Agrico Organics Ltd.
- Agrocel Industries Pvt. Ltd.
- Anu Products Ltd.
- Aristo Bio-tech and Life Science Ltd.
- ArystaLifescience India Ltd.
- Astec Life Sciences Ltd.
- Atul Ltd.
- Best Agrolife Ltd.
- Bharat Rasayan Ltd.
- Biostadt India Ltd.
- Bhagiradha Chemicals & Industries Ltd.
- Coromandel International Ltd.
- Crop Growth (India) Pvt. Ltd.
- Excel Industries Ltd.
- Gharda Chemicals Ltd.
- Godrej Agrovet Ltd.
- Hemani Industries Ltd.
- Heranba Industries Ltd.
- Hikal Ltd.
- HIL (India) Ltd.
- IFFCO-MC Crop Science Pvt. Ltd.

- India Pesticides Ltd.
- Indofil Industries Ltd.
- Insecticides (India) Ltd.
- Krishi Rasayan Exports (P) Ltd.
- Meghmani Organics Ltd.
- NACL Industries Ltd.
- Neo Seeds India Pvt. Ltd.
- Nichino India Pvt. Ltd.
- Parijat Industries (I) Pvt. Ltd.
- Punjab Chemicals & Crop Protection Ltd.
- R3 Crop Care Pvt. Ltd
- Safex Chemicals India Ltd.
- Shriram Fertilizers & Chemicals
- Spectrum Ethers Pvt. Ltd.
- Sudarshan Farm Chemicals India Pvt. Ltd.
- Sulphur Mills Limited
- Sumitomo Chemical India Ltd.
- Swal Corporation Ltd.
- UPL Ltd.

CRITICAL IMPORTANCE AND BENEFITS OF AGROCHEMICALS

Agrochemicals are chemicals agents used on farmland to improve the nutrients in the field or crops. They improve crop growth by killing damaging insects. They are implemented in all forms of farming sectors such as horticulture, dairy farming, poultry, crop shifting, commercial planting, etc.

Despite above all the effects, if agrochemicals are handles carefully may give fruitful results. The benefits of agrochemicals are not limited to growing crop yield. Some of the crops consumed by farmers contain diseases. Persons who eat plants in contact with disease- provoking organisms have been at risk of these diseases before pesticides were widely used. This is much less of a threat due to the increased use of pesticides in farms around the world. Crop protection solutions enable farmers in food production processes to increase crop yield and output. As weeds, pests, and diseases have an impact on up to 40% of the future crop production worldwide, if current pesticide uses were eliminated, this would increase.

Food production would deteriorate without crop protection chemicals, many fruits and vegetables would be missing, and prices would increase. Another significant advantage of pesticides is to help keep food prices in check for the consumers. Chemicals for crop protection to minimize and, in some cases, eliminate insect damage allow the customer to buy high- quality insect- free products while at the same time doing little harm to human life.

Notwithstanding the effect these have on the financial prospects of the farmers, their implication on biodiversity are huge invasive pests and diseases have in the recent past wreaked havoc in Indian fields.

The threats of the future are immense and unknown. The crop protection industry must be dynamic enough to combat these threats in the most effective and productive way. The key to India's food security lies in crop protection.

Agrochemicals play a key role in increasing agricultural productivity by protecting crops from insects, pests, fungi, weed, rodents etc. Owing to their benefits, they have been used indiscriminately rising concerns over their usage. Nevertheless, they are indispensable in agriculture to maintain productivity as the population is exponentially increasing and so is the demand for food. Hence there is a need to employ a policy for the management of the agrochemicals to encourage their judicious use.

Plant insects and pest incur a major loss to farmers worldwide every year. It has been estimated that insect destroy 15% of crops, diseases pathogens and weeds around 13% each and pests during post harvest period damage 10% of crops. Agrochemicals help minimizing this loss by protecting crops, increasing productivity and maintaining the quality of the produce. This also saves other costs such as labour and fuel which in turn lowers the prices of agricultural commodities.

Apart from their use in agriculture, agrochemicals are also used to prevent negative impacts caused to society in many ways. For example, trees and weeds growing under power lines, when left unchecked, would result in power outages. Herbicides are used to eliminate this growth. Also, herbicides are widely used to control unwanted vegetation along national highways, roadsides in parks, wetlands and public areas to ensure public safety and convenience.

The quantity and quality of annual food production affected by insects, diseases, weeds, fungi and other pests due to changing weather conditions is significant. One of the most vital offering from the chemical industry are crop protection products which work towards controlling pests and diseases, which otherwise can consume , infect, and damage produce. India is one of the largest producers of agrochemicals, and with help of research and innovation, the industry has gained tremendous potential for development, as the market gears up for robust growth.

While the government has recognized the potential of agrochemicals identifying it as one of the champion pillars of its economy, India also plays a significant role in the global supply chain. As it strides ahead, India's crop protection sector is now utilizing its R&D facilities, to develop newer products that are safer, more effective, and on par with international standards. With its infrastructure and regulatory system creating an environment conducive to promoting the category, India is on the path to be the global agrochemical manufacturing hub.

The demand for food grains and increasing awareness about the need for crop protection chemicals to arrest crop loss are two of the major factors driving growth in the protection sector. However this is not without its challenges cost and investments required for R&D, a sub optimum distribution system and misbranded products available at cheaper prices. The opportunity rests in increase in utilization, creating an impetus for exports and expansion of product portfolios- all achievable in the short and long term, with the right push in the form of timely and adequate government policies.

CROP PROTECTION SOLUTION FOR FARMING COMMUNITY

Crop protection industry is expected to play a prominent role in achieving higher yields in India where farmers continue to grapple with challenges like high monsoon dependency (62%), unpredictable weather patterns, reduction in arable land, low per hectare yield and increased pest attacks.

India is the 4thlargest producer of agrochemicals after USA, China and Japan. Insecticides dominate the Indian crop protection market with almost 55% share, with major application on rice and cotton.

We provide crop protection solution to the farming community, both men & women and reach out in deep pockets by laying actual demonstrations to build credibility among the farmers (small and marginal farmers) by imparting specialized training and field extension activity. Though extension activity has been carried out by us and our member companies for over five decades, CCFI has intensified our farmer training and awareness programs since last five years.

Though India rank 2nd in the World agricultural production of agrochemicals after USA, China and Japan, with global population expected to cross 9bn by 2050 it would be necessary to produce 50% more food, however only 4% of additional land will come

under cultivation to meet this demand. It would mean thereby that food and nutrition need of the growing population require a sustainable approach that put thrust on increase in production against the background of lower yields and decreasing farm sizes.

With the emergence of the newer pest India remains one of the lowest in terms of per capita consumption of pesticides at 310gm /ha as against 5 to 7 kg /ha in UK and around 13 kg/ha in China .

Country	Value of Agri output($bn,2017)	Pesticides Use (tones,2016)	Number of Pesticides Active Ingredients(technical)Registered
China	968	1,763,000	681
India	401	50,410	279
EU	239	368,588	489
USA	193	407,779	323
Brazil	94	377,176	477
Japan	57	51,006	583
Australia	36	50,922	561
World	3342	4116,832	NA
Source: World Bank Database(accessed on 3rd September2018) FAOSt at (accessed on 19th September 2018)			
India's share in global agricultural output is 12% but India's share in global pesticides use is just around 1%. Countries with smaller agricultural area and production use more pesticides than India- both in variety and volume.			

CHANGE IN PERCEPTION TOWARDS AGROCHEMICAL INDUSTRY

Over the years the agrochemical Industry has worked meticulously to bring about a perceptional change towards agrochemicals.

We strive to promote and safeguardsthe positive image of the industry against the onslaught of negative publicity spread by pseudo activists, scientists with ulterior motive and foreign NGO's who are unsuccessfully trying to malign the agrochemical industry, Indian agriculture and our farming community. We strongly feel, this is undermining the effort of the Indian agrochemicals industry and the Indian farmers who have ensured increased quantum production, resulting in self sufficiency of food in the country.

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

This should not be confused with bio products laced with pesticides which have no authentic addresses of manufacturer or the marketer. The agrochemical industry has been much maligned primarily because of this category.

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

2022 LOOKS PROMISING

First Advance Estimates of production of major Kharif crops for 2022-23 have been released by the Ministry of Agriculture and Farmers Welfare. The Union Minister of Agriculture and Farmers Welfare Mr. Narendra Singh Tomar said that foodgrain production of 149.92 million tonnes is estimated in kharif season.

As per First Advance Estimates, the estimated production of major kharif crops for 2022-23 is as under:

- **Foodgrains – 149.92** million tonnes.
  - Rice – 104.99 million tonnes.
  - Nutri / Coarse Cereals – 36.56 million tonnes.
  - Maize – 23.10 million tonnes. (record)
  - Pulses – 8.37 million tonnes.
  - Tur – 3.89 million tonnes.
- **Oilseeds – 23.57** million tonnes.
  - Groundnut – 8.37 million tonnes.
  - Soybean – 12.89 million tonnes.
- **Cotton – 34.19** million bales (of 170 kg each)
- **Jute & Mesta –10.09** million bales (of 180 kg each)
- **Sugarcane – 465.05** million tonnes (record)

In July 2021, the first commercial consignment of Kashmir's Mishri cherry was shipped to Dubai, paving the way to boost horticulture crop exports.

In June 2021, India exported 24 metric tonnes of groundnuts to Nepal from West Bengal, boosting groundnut exports from Eastern India.

In FY21, India exported 1.91 lakh tonnes of banana worth Rs. 619 Cr. (US$ 82.90 million).

Out of the total 39 mega food parks that were sanctioned, 22 mega food parks are operational, as of November 2021.

National Conference on agriculture for Rabi campaign 2022-23 was organized on 8th September 2022 at New Delhi to discuss the upcoming Rabi season planning and crop coverage. Union Agriculture Minister, Mr. Narendra Singh Tomar speaking at the inaugural address of the National Conference said" As per 4th advance estimates(2021-22) production of food grains in the country is estimated at 3157 lakh tones which is higher by 50 lakhs tonnes than the production of food grains during 2020-21. Total pulses and oilseeds production during 2021-22 is estimated at records 277 and 377 lakh tones respectively."

As per First Advance Estimates for 2022-23 (Kharif Only), total foodgrain production in the country is estimated at 149.92 million tonnes which is higher by 6.98 million tonnes than the average foodgrain production of previous five years (2016-17 to 2020-21).

Total production of kharif rice during 2022-23 is estimated at 104.99 million tonnes. It is higher by 4.40 million tonnes than the previous five years (2016-17 to 2020-21) average Kharif rice production of 100.59 million tonnes.

Production of Maize in the country during 2022-23 is estimated at record 23.10 million tonnes which is higher by 3.21 million tonnes than the average Maize production of 19.89 million tonnes.

Production of Kharif nutri / coarse cereals is estimated at 36.56 million tonnes which is higher by 2.92 million tonnes than the average production of 33.64 million tonnes. Total kharif pulses production during 2022-23 is estimated at 8.37 million tonnes.

Total kharif oilseeds production in the country during 2022-23 is estimated at 23.57 million tonnes which is higher by 1.74 million tonnes than the average oilseeds production.

Total production of sugarcane in the country during 2022-23 is estimated at record 465.05 million tonnes. The production of sugarcane during 2022-23 is higher by 91.59 million tonnes than the average sugarcane production of 373.46 million tonnes.

Production of cotton is estimated at 34.19 million bales (of 170 kg each) and production of Jute & Mesta is estimated at 10.09 million bales (of 180 kg each).

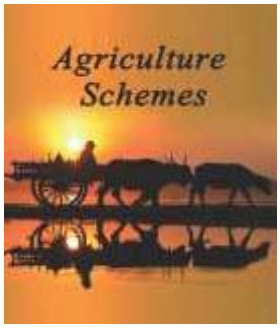
He further mentioned that Pradhan Mantri FasalBima Yojana under which Rs 1.22 lakh Cr. has been given to farmers as compensation for the loss of their crops Mr. Tomar said that all the farmers should be brought under the ambit of of this scheme. This will especially make a small farmers feel secure.

The minister expressed satisfaction on the success of mustard mission during first two years of its implementation. Mustard production has jumped by 29% from 91.24 to 117.46 lakh tones in the last two years. The productivity saw 10% jump from 1331 to 1458 kg/ha. The area under rapeseed and mustard has increased by 17% from 68.56 in 2019-20 to 80.58lakh ha in 2021- 22. He appreciated the farming community and the Sate government for this commendable achievement. The increased mustard production will help in bridging the gap of imports of palm and sunflower oil. Government is now implementing special soybean and sunflower mission on the pattern of mustard mission.

Shri. Tomar said that the central government has started work on digital agriculture to bridge the gap between the farmers and the government so that the farmers get the benefits of the government scheme transparently. There is also a need to work together on the digital agriculture mission. He also said that with the efforts of the Prime Minister the year 2023 will be celebrated as the International year of Millets. India is going to lead this program all over the world.

The national target for total food grain production has been set at 3280 lakh tones for the year 2022-23 in which Rabi seasons will contribute 1648 lakh tones. The strategies would be to enhancement by introducing High Yields Varieties (HYVs), adoption of suitable agronomic practices in low yielding regions, utilizing residual moisture early sowing and life saving irrigation for Rabi crops.

GOVERNMENT POLICIES & SCHEMES : STRATEGY FOR DOUBLING FARMERS INCOME BY 2022



The government is also implementing various schemes for supply of farm inputs, like pesticides seeds, fertilizers, agricultural machinery & equipment, irrigation facilities, institutional credit etc. at subsidized rates to the farmers in the country. The government has recently taken several steps for increasing investment and growth in the agriculture

sector which include creation of Long Term Irrigation Fund (LTIF) Micro irrigation Fund for water use efficiency promotion of commercial organic farming. etc.

A network of 729 Krishi Vigyan Kenderas (KVK) has been established at the district level across the country to ensure that newer technologies such as improved variety seeds of crops, new breeds/ strains of livestock and fish, and improved production and protection technologies reach farmers.

Ministry of Civil Aviation launched the Krishi UDAN 2.0 scheme in October 2021. The scheme proposes assistance and incentive for movement of agri produce by air transport. The Krishi UDAN 2.0 will be implemented at 53 airports across the country largely focusing on Northeast and tribal regions and is expected to benefit famer, freight forwarders and airlines.

In October 2021, the Union Ministry of Agriculture and Farmers welfare announced that 820,600 seed mini kits will be distributed free of cost in 343 indentified districts across 15 major producing States under a special programme. This programme is likely to boost production and productivity by speeding up the seed replacement rate and subsequently, help in increasing farmer's income.

Prime Minister of India launched the Pradhan Mantri Kisan Samman Nidhi Yojana and transferred Rs. 2021 Cr. (US$ 284.48 million) to bank accounts of more than 10 million beneficiaries on February 24, 2019. As per the Union Budget 2021-22, Rs.65,000 Cr. (US$8.9 billion)was allocated to Pradhan Mantri Kisan Samman Nidhi (PM- Kisan).

The Indian Government has initiated Digital Agriculture Mission or 2021-25 for agriculture projects based on new technologies such as artificial intelligence, block chain, remote sensing and GIS technology, drones, robots and others.

In September 2021, the Union Ministry of Agriculture and Farmers welfare signed five MoUs with CISCO Ninjacart, jio Platforms limited, ITC limited and NCDEX e- Markets limited. This MoU will have five pilot projects, which will help farmers make decisions on the kind of crops to grow variety of seeds to use and best practices to adopt to maximize Yield.

The government of India is going to provide Rs. 200 Cr.(US$306.29million) for computerization of Primary Agricultural Credit Society (PACS) to ensure cooperatives are benefitted through digital technology.

The government of India launched the Prdhan Mantri Krishi Sinchai Yojana (PMKSY) with an investment of Rs. 50,000 Cr. (US$7.7 billion) aimed at development of irrigation sources for providing a permanent solution from drought.

The Government of India has allowed 100% FDI in marketing of food products and in food products E- commerce under the automatic route.

The government of India has introduced various scheme and policy change to support the growth of agriculture in India, many of which have initiated the adoption of tech and provided better access to input to enhance the current process and structures of agriculture and the existing food system within the country. But these policy initiatives have historically only been focused on increasing agricultural productivity and have not been successful in efficiently transforming the value chain.

While there is indication of increased improvement in yields through improved inputs. Intervention within agriculture must go beyond capital investment. For this reason, it was encouraging to see State Agricultural Universities (SAUs) being given their due diligence in the budget through increased financial support to promote higher education research, and training with in the sector.

The Electronic National Agriculture Market (e-NAM) was launched in April 2016 to create a unified national market for agricultural commodities by networking existing APMCs. It had 16.9 million farmers and 157,778 traders registered on its platform until February 2021. Over 1,000 mandis in India are already linked to e-NAM and 22,000 additional mandis are expected to be linked by 2021-22.

India is expected to achieve the ambitious goal of Doubling Farm Income. The agriculture sector in India is expected to generate better momentum in the next few years due to increased investment in agriculture infrastructure such as irrigation facilities, warehousing and cold storage. Furthermore, the growing use of genetically modified crops will likely improve the yield of Indian famers. India is expected to be self – sufficient in pulses in the coming few years due to concerted efforts of scientists to get early maturing varieties of pulses and the increase in minimum support price.

In the next five years, the central government will aim US$9 billion in investments in the fisheries sector underPM MatsyaSampada Yojana. The government is targeting to raise fish production to 220 lakh tones by 2024-25.

The year 2015-22 has brought attention on farmer’s income and welfare, recognizing the paradox of high production and low farmer’s income strategy has introduce an ecosystem approach , guided by nutrition security, income security and production

sustainability. Emphasis is also on deficit commodities (pulses & oilseeds), livestock and fisheries. Adopting a value chain approach, monetization of agri-produce is the focus- hence, the initiatives to strengthen agri logistics, food processing, and market competitiveness. Contract farming, FPOs, higher profit- margins under MSP & broad-based procurement are addressing some structural concerns.

There needs to be clear know- how of the problems of farmers at the grass roots which stretch beyond capital requirements. The solution to increase farmers income lies in increasing farmers share in the final consumer paid price by decreasing the cost of marketing, transaction cost, and other intermediaries. As a sector that heavily relies on the efforts of farmers (most of whom are small and marginal farmers), it is in its best interest to empower them.

IMPORTANCE OF PACKAGE OF PRACTICES

Importance of Package of Practices was emphasized with clear directive to use correct dosage and only on cropsrecommended. The idea is primarily to educate the farmers of the recommendation on soil type, land preparation, seed varieties & seed rate, seed treatment, time of sowing, preparation of nursery (wherever applicable), spacing between the rows and plant to plant, inter cropping, irrigation, use of fertilizers, use of agrochemicals (Insecticides, Fungicides, Herbicides), duration of the crops etc. The packages of practices are prepared by the Agricultural Universities of different States based on their field trials separately for Kharif and Rabi seasons.

During training programs, medical experts were of the firm view that the person spraying pesticide should totally avoid liquor, tobacco and smoking as these cause retinal pressure, hypotension, vomiting, diarrhea and salvation.Normally it is being practiced by agricultural contract labour engaged by farm owners. This is being done to stimulate them and cover larger areas during the day long operation which needs to be totally discouraged.

The farmers were convinced that while actual spraying, over 99.5% is water and with protective gear there is no chance of any inhalation or of any accident. The farmers at all location were very receptive, intelligent and interested to understand the correct procedure for spraying.

CHALLENGES FOR INDIAN AGRICULTURE

Presently, agriculture faces many challenges such as (i) Low productivity (averaging to 60% of world average), (ii) decreasing profitability in farming, (iii) rising quality competitiveness under the pressure of globalization, (iv) poor linkage of farms with the market (v) low knowledge of input agriculture, (vi) wide gap between lap and land experiments, (vii) low level of mechanization and value addition (viii) supply chain management and product lifecycle managements, (xi) lack of qualified manpower to address the new and emerging challenges and deliver at grassroots level, (x) mounting threat to sustainability arising from depleting quality of natural resources, biotic stresses and inefficient use of agro-inputs and(xi) poorly coordinated and natural disaster management system.

To properly address these challenges, competent human resources in sufficiently large numbers would be required in the near future. To achieve this renewed thrust for higher agriculture education is necessary with enhanced financial support to the ICAR-AU system. Estimates suggest that by the year 2021, more than16,000 scientific manpower would be required to cater to the need of R&D in the country. At present there is substantial gap of 50% or more between demand and supply of manpower in agriculture and allied science sector. The projections indicate that the annual out turn required for undergraduate and above would be about 54,000 as against the present annual out turn of around 40,000. This means that sincere efforts are required to attract more number of students towards higher Agriculture Education. There is a vast scope young graduate to undertake agriculture as their profession which is directly or indirectly contributing to the economic and social development of the country.

However the sector has been fraught with challenges in terms of the availability of formal capital, mechanization, logistics, and market accessibility. The severity of which was heightened by the pandemic- led chain of events but on flipside, revealed the unexplored scope of agriculture.

DEPENDENCE ON RAINFALL

It is clearly evident that agriculture production in India has been increasing over the years despite rainfall variation. Delayed or deficient monsoon has not led to disaster on

the food front over last few years. Indian agriculture used to be dependent on monsoon in the past when crop cultivation was confined to the monsoons, mainly for food grains with very little horticulture and animal husbandry.

Annual perception levels in India are much higher than some of the other countries such as France, USA, China and Australia. Clearly, low rainfall cannot be cited as a reason for low agricultural productivity in India because countries with lower precipitation such as the US and China are among the top agriculture producer in the world. Instead, channeling rain water into irrigation system should be the focus and hence some of the developed countries, despite lower rainfall are able to conserve the right amount of water requirement for agriculture produce.

RUMOR MONGERING BY NGOs

Some of the NGO activists in India have been spreading canards about pesticides and their ill effect because of its excessive use. The use of pesticides in India is barely 600g/ha where as in China it is 13kg/ha when the arable agricultural land in India much higher than China.

It is worthwhile to mention that several vested interests in the world, who want to keep India backward, are financing these NGO's for publishing blatant lies to create fear psychosis not only among the rural masses, but also educated urban customers.

NGO's also blame that farmer's suicides are rampant in Indian agriculture. Suicides whether by farmers or non farmers deserve attention and understanding. In terms of share of profession, share of farmer's suicide has decreased over the last few years from 16% in 2004 to 9.4% in 2015 as compared to urban community and now 7% in recent years.

The claim that nutritional content falls with use of agrochemicals is unfounded, however studies have found no evidence for difference in nutritional content. CCFI believes that this propaganda and is a mode of communication used to manipulate or to influence the opinion of select group to support a certain opinion or belief. Today India is not on only self sufficient in food grains but an exporting nation as well. There seems to be an unholy nexus between foreign donors and many Indian NGOs are spinning sinister web to thwart India's progress.

PROMOTIONAL AND AWARENES CAMPAIGNS

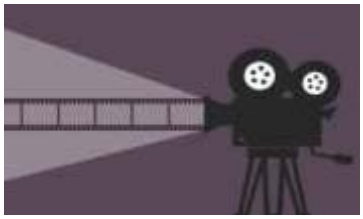
Normally awareness campaigns are a measure of how well known a brand, firm, or product is perceived by the end user. CCFI adopted promotional tools like educational films to showcase the activities undertaken by us and our members. We have exclusively developed animation films in different regional languages highlighting various precautions while using agrochemicals right from the time they are procured from authorized dealers, their transportation and storage. Importance of label and leaflet was of immense importance for knowing crop pest matrix, the dosages recommended, steps to make spraying solution etc.

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

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

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

EDUCATIONAL FILM CAMPAIGN



To create awareness among the farming community, promotional tools like educational films, technical literature, posters and plays (Nukked Natak) were enacted for better understanding of the theme.

Our films highlighted various precautions to be taken for agrochemicals - like always taking original invoice from the dealer, proper transportation, storage under lock & key,

keeping out of the reach of children, reading label and leaflet before use, measuring recommended quantity correctly, mixing thoroughly the spray solution, not using combination of insecticides, spraying along the direction of the wind, totally avoiding tobacco, smoking, and drinking during spraying operations, wearing complete protective safety gear, taking bath and washing clothes, antidotes & first aid procedure, destroying of empty containers etc.

In our plan this year is to prepare a video film on our members focus on “Make in India” and endorsing the government policy of “Atamnibhar Bharat”.

We now propose to develop short 2 minutes videos for Whats App groups which have greater spread and credibility. Also plans are afoot to tie-up with agri channels for reaching deep pockets and mass base of farmers.

OUR MASCOT: JAGRAT KISAN – KHUSHAL KISAN

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

We are an agrarian country with almost 14 Cr. farmers, directly involved with agriculture which forms a bridge between rural and urban divide.

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

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

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

GROWING AGROCHEMICAL EXPORTS AND ITS POTENTIAL

The Agriculture Export Policy, 2018 was approved by the Government of India in December 2018. The new Policy aimed to Increase India's agricultural export to US$ 60 billion by 2022 and US$ 100 billion in the next few years with a stable trade policy regime.

Year	**Agrochemicals Export from India** (Rs. Cr.)
2017-18	16,497
2018-19	22,126
2019-20	23,757
2020-21	26,513
2021-22	36,521
Est: 2022-23	40,000

IMPORT LOBBY MISLEADING FACTS

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

Year	Agrochemicals Import from India (Rs. Cr.)
2017-18	8,467
2018-19	9,267
2019-20	9,096
2020-21	12,418
2021-22	13,363
Est: 2022-23	15,000

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

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

Inferior and substandard quality products find their way into the country, to the detriment of Indian farmers. The quality of Indian products is found to be even better than that of original producer, in terms of active content and purity profile.

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

As you would appreciate imported pesticides formulation are majorly imported by Multi National Companies and traders. Presently all reputed companies are marketing their

products through licensed authorized distributors and dealers it is their responsibility to safe guards their Brand Image.

Products “misbranded are primarily on account of margin which are as high as 50% on proprietary or monopolistic molecules or brands imported.

TOP 20 AGROCHEMICAL COMPANIES IN THE WORLD

According to the ranking list of Top 20 Global Agrochemical Companies for FY2020, 15 enterprises realized growth in sales in FY2020. These included 10 enterprises that achieved double-digit growth. Total pesticide sales of the top 20 enterprises in FY2020 stood at US$61.8 billion, an increase of 2.9% YoY. Sales of the top four agrochemical players made up nearly 60% of the top 20; and the top 11, which surpassed $1 billion for each enterprise, constituted almost 90%. Eleven out of the top 20 are Chinese companies, with their total sales being $22.7 billion, 37% of the top 20. Sino-Agri Leading Biosciences Co., Ltd., the only newcomer to the list, ranked first in sales growth rate among the 20 with a growth of 53.1%.

Most enterprises have witnessed increases in both sales volume and price of their pesticides. Still, they were hit by the exchange rate volatility, primarily the depreciation of Brazilian Real, and their sales performance was affected to varying degrees by multiple factors such as adverse weather, agricultural product prices and COVID-19.

Sales of top 20 global agrochemical firms in FY2020 ($ million)					
FY 2020 (FY 2019) Ranking	Company	FY2020[1] (Reported Currency)	FY2019[1] (Reported Currency)	FY2018[1]	% Change[2] (FY2020/ FY2019)
1 (2)	Syngenta[3,4]	11,208 ($11,208)	10,588 ($10,588)	9,909	+6
2 (1)	Bayer Crop Science[5]	9,986 (€8,749)	10,374 (€9,263)	9,641	-3.7
3 (3)	BASF[6]	7,036 (€6,165)	7,123 (€6,360)	6,916	-1.2
4 (4)	Corteva[6]	6,451 ($6,451)	6,256 ($6,256)	6,445	+3.1
5 (6)	UPL[7]	4,662 (INR 346,280)	4,461 (INR316,260)	2,688	+4.5
6 (5)	FMC	4,642 ($4,642)	4,609.8 ($4,609.8)	4,285.3	+0.7
7 (7)	ADAMA[3]	3,738 ($3,738)	3,611 ($3,611)	3,617	+3.5
8 (8)	Sumitomo Chemical[8]	3,235 (-)	2,575 (-)	2,538	+25.6
9 (9)	Nufarm[9]	1,720 (AUD2,563.157)	2,517 (AUD 3,536)	2,332	-31.7
10(10)	Jiangsu Yangnong[3]	1,413 (Yuan 9,754)	1,251 (Yuan 8,639)	788	+13
11(11)	Rainbow Chemical	1,056 (Yuan 7,289.8)	880 (Yuan 6,074)	809	+20
12 (-)	Sino-Agri Leading Biosciences	963 (Yuan 6,641)	629 (Yuan 4,343)	-	+ 53.1
13 (12)	Huaport Life Sciences	893 (Yuan 6,186)	757 (Yuan 5,230)	935	+18
14 (14)	Wynca Chemical	881 (Yuan 6,081)	690 (Yuan 4,763)	665	+27.7
15 (15)	Kumiai Chemical[10]	738 (¥79,395)	663 (¥ 72,623)	881	+11.3
16 (17)	Lianyungang Liben Crop Science	680 (Yuan 4,698)	617 (Yuan 4,261)	561	+10.2
17(18)	Lier Chemical	673 (Yuan 4,644)	586 (Yuan 4,044)	606	+14.8
18 (20)	Hubei Xingfa Chemicals	635 (Yuan 4,387)	523 (Yuan 3,614)	509	+21.4
19 (16)	Nissan Chemical[8]	602 (¥63,848)	655 (¥ 64,038)	571	-8.1
20 (13)	Nanjing Red Sun	577 (Yuan 3,986)	691 (Yuan 4,768)	891	-16.5

Notes:

1. Based on the average dollar exchange rate in the initial report of the fiscal year
2. YOY rate of change sales in dollar
3. Now belonging to Syngenta Group
4. Excluding turf, landscape and seed & trait business sales
5. Excluding seed & trait and Environmental Science sales
6. Excluding seed and trait business sales
7. This list uses UPL's data for FY2021 and data FY2020, which are dated respectively as of March 31, 2021 and March 31, 2020.
8. Sales of 2020 and 2019 fiscal years closed on the 31st March of 2021 and 2020 respectively.
9. Sales of 2020 and 2019 fiscal years closed on the 31st July of 2020 and 2019 respectively.
10. Sales of 2020 and 2019 fiscal years closed on the 31st October of 2020 and 2019 respectively.

M&A Synergy Effects Face Multiple Tests, with Innovation Products Remaining Important Drive for Sales Growth

First and second-tier firms have finished the business restructuring after the M&A up to now. However, related business growth was slightly anemic because of unfavorable exchange rates, bad weather and COVID-19 on the synergy effects.

In 2020, Syngenta vaulted over Bayer to the top with $11.208 billion in pesticide sales, an increase of 6% YoY. Its sales volume and price increased by 12% and 3%, respectively. That Syngenta Group realized sales of $23.1 billion and an increase of 5% YoY was due to its robust business growth, price increase, alongside successful function cost control. Syngenta Group successfully managed the impact of the COVID-19 pandemic and related macro-economic headwinds, particularly the need for incremental inventory and logistics to facilitate higher sales and overcome the effect of weaker currencies.

The pesticide sales of Bayer Crop Science slipped below $10 billion to $9.986 billion, a decrease of 3.7% YoY. The year 2020 witnessed an outright decline in the sales of all its pesticide products. Among them, sales of herbicides stood at €4.74 billion, a

decrease of 7.0% YoY. The decline in sales at herbicides was due in particular to a loss of registrations in Europe / Middle East / Africa and North America. Business in North America was also impacted by shifts in demand for selective herbicides into the prior year. However, the firm expanded our business in Asia / Pacific and Latin America. Besides, the sales of fungicides and insecticides fell by 2.9% and 5.4% YoY to €2.639 billion and €1.37 billion, respectively.

In 2020, the pesticide sales of BASF Agricultural Solutions decreased by 1.2% to $7.036 billion. Its sales in South America, Africa and the Middle East plummeted, but its sales volume and price rose by 5% and 2%, respectively. Currency led to 9% of the adverse effects.

The pesticide sales of Corteva was $6.451 billion, an increase of 3.1% YoY. The sales volume and price of the company's pesticide products increased by 7% and 4%, respectively. However, the adverse effects of exchange rates constituted 7% and product mix 1%. Corteva's sales of new pesticide products reached $1 billion, up 35% from the previous year. Its driving forces came from the following products: herbicides Enlist (dicamba), Arylex (halauxifen-methyl) and Rinskor (florpyrauxifen-benzyl), as well as the insecticide Isoclast (sulfoxaflor), etc.

The five companies ranking fifth to ninth contributed to 28.4% of the total sales on the list with $18 billion. After selling its South American business to the Japanese company Sumitomo Chemical, Nufarm suffered a significant decrease of 31.7% in pesticide sales. On the contrary, this helped Sumitomo Chemical realized a 25.6% increase in pesticide sales. The other companies witnessed growth in the sales performance to a different extent.

UPL rose by 4.5% to $4.662 billion in pesticide sales, edging out FMC to gain a fifth place on the list. Overall, the company performed well during the reporting period, with rupee sales increasing in all regional markets to varying degrees and India showing the most robust growth, up 22% YoY.

FMC pesticide sales were $4.642 billion, up 0.7% from last year. Insecticides, as the top product category in the company (proportion: 61%), realized $2.83 billion of sales, followed by herbicide (26%), fungicide (6%), and others (7%). It was noteworthy that the sales of the two bisamide insecticides Rynaxypyr® (chlorantraniliprole) and Cyazypyr® (cyantraniliprole) totaled $1.8 billion, driving FMC's performance growth substantially.

Pesticide sales of ADAMA, the subsidiary of Syngenta Group, rose by 3.5% YoY to $3.738 billion, ranking seventh on the list. The robust growth in the fourth quarter drove ADAMA to achieve record-high sales in 2020. The Company saw its strongest growth over the year in the emerging markets of Latin America and the India, Middle East and Africa region, as well as in APAC. Its performance was further bolstered by various acquisitions completed in 2020, including in Greece and Paraguay. Herbicide products fell into its top product category among the business of all plant protection products of

ADAMA, with sales of $1.707 billion in 2020, 45.7% of the total sales of all plant protection products.

The sales of Japanese Sumitomo Chemical, ranking eighth on the list, increased exponentially by 25.6% YoY in FY2020 to $3.235 billion. The company officially completed the acquisition of the South American business of Nufarm in April 2020, contributing to its significant growth. The company's sales in India were performing well, and plant protection products grew globally. Nufarm officially divested its South American business in April 2020, causing its pesticide sales to drop significantly by 31.7% to $1.72 billion in FY2020. North America turned into its largest sales area after that.

ROLE OF MEDIA IN OUR BUSINESS

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

देश की कृषि उपज को बढ़ाने के लिए हो रही है अंतरराष्ट्रीय कृषि प्रदर्शनी

किसानों में जागरूकता लाने और उन्हें प्रशिक्षण देना है मकसद

KRISHAK JAGAT

कृषक जगत

CCFI distributes free PPE safety kits to farmers at FarmTech Asia Indore

April 8, 2022 Delhi Bureau 0 Comments CCFI 1 min read

08 April 2022, Indore: Crop Care Federation of India (CCFI) today organised a free PPE (personal protective equipment) safety kit distribution drive for the farmers participating in FarmTech Asia at Indore.

The industry body aims to educate the farming community in terms of safe use of agro chemicals which are being used on crops of economic importance like Cotton, Soyabean, Wheat, Sugarcane in Madhya Pradesh.

Madhya Pradesh Agriculture Minister Mr. Kamal Patel with Ms. Nirmala Pathrawal and Mr. Harish Mehta.

Madhya Pradesh Agriculture Minister Mr. Kamal Patel with Ms. Nirmala Pathrawal and Mr. Harish Mehta.

Crop Care Federation of India (CCFI) is an apex organisation of over 50 Indian companies involved in manufacturing of agro chemicals which is a major input for reducing crop losses in agriculture.

Ms. Nirmala Pathrawal, Executive Director, CCFI said, "We have trained over one lakh farmers across India on safe use of pesticides so far. The industry body has been distributing safety PPE kits comprising of head gear cap, goggles, face mask, hand gloves, full apron and gum boots to the farming community. This effort from CCFI has been highly appreciated by state governments, ministries and farming community."

CCFI is the only Indian federation which has been training farmers and distributing safety kits over the years even before the pandemic so that our agricultural production can increase safety.

देश की कृषि उपज को बढ़ाने के लिए हो रही है अंतरराष्ट्रीय कृषि प्रदर्शनी

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किसानों को दी जाएगी निःशुल्क किट

स्वॉल एवं सीसीएफआई ने आयोजित किया सेमिनार

पायनियर समाचार सेवा। हिसार

नरमे की फसल की बंपर पैदावार व गुलाबी सुंडी के प्रभावी नियंत्रण हेतु सैमीनार

प्रदेश भर से आए किसानों ने सैमीनार में भाग लिया

KRISHAK JAGAT

कृषक जगत

Reduction in GST rates on agrochemicals to benefit importers: CCFI

July 16, 2022 Delhi Bureau 0 Comments CCFI

16 July 2022, New Delhi: Crop Care Federation of India (CCFI) is the largest industry body of manufactures and exporter of pesticides. The member organizations are of firm view that present GST of 18% on pesticides is logically good. If it is reduced to 5% or nil the Indian manufacturers will suffer as all the raw material containers, plant and machinery has 18 % GST.

Mr Deepak Shah, Chairman of CCFI in a written communication to Ms. Nirmala Sitharaman, Chairperson, GST Council mentioned, "Reduction in GST on agrochemicals would result in inverted duty structure which would be detrimental to Indian manufacturers who have the capability and capacity to manufacture quality pesticides locally rather than depend on imports."

This rate covers more than 90% of the goods and services which are subject to GST. Similarly about 90% of the final products and services sold by the industry across the value chain are at this rate of 18% with the aim to provide a balancing and seamless flow of credit and its utilisation. It also avoids the distortion caused due to inverted duty structure.

For the pesticides which are imported, if they have 5% GST or lower, they will have a distinct advantage against indigenous Manufacturers. The step would go against the policy towards Atmanirbhar Bharat and 'Make in India'.

Reduction in GST will result in an increase in imports of agrochemicals which touched ₹13,369 Cr in 2021-22 mainly from China, Japan, Israel, Thailand, Europe, Hongkong, etc. Several shipments were delayed due to non-availability of containers, increase in tariffs rates and congestion at ports during covid which now have started arriving in full flow.

Indian manufacturers are responsible for 80% of agrochemicals exports from India to over 130 countries with acceptable quality specifications. In terms of value, exports is at ₹ 35,000 cr which is higher than domestic consumption of ₹29,000 cr.

CCFI

CROP CARE FEDERATION OF INDIA (CCFI) LAUNCHES LATEST VIDEO ON FARMER WELFARE & TRAINING PROGRAMS

Report by
Mr. Harish Mehta, Senior Advisor, CCFI, New Delhi

It is famously said that all great changes are preceded by chaos. The world as we knew it a year ago has evolved and adopted to disruption caused due to the pandemic. The crisis led to chaos but it also brought with it a plethora of opportunities, transformations and upgradation in agriculture.

Agrochemicals was declared as a champion sector and CCFI members continued indigenous manufacturing, distribution and field operations for the benefit of the farmers.

As the world recovers from the COVID-19 pandemic, CCFI and its team were already back on the road spearheading their mission of promoting judicious use of agrochemicals by farmers, their contract labour & women.

These activities have been lucidly captured in their latest video ENRICHING LIVES. This mission takes CCFI members across the country to Nagpur, Mumbai, Bangalore, Chattisgarh, Rajahmundry, Guntur & Indore as a major interface between Universities, state Government, researchers, bureaucrats & scientists. The farmers were not only trained on the spraying operations but also explained in detail the use of correct dosages for making a spray solution, proper nozzles type, sprayers to be used, besides storage, disposal of containers etc.

This was possible because of CCFI's participation in various agritech expos and conferences which has been a crucial avenue for outreach.

Farmers were given complete PPE safety kits comprising of head gear, goggles, face mask, gloves, apron and gum boots free of cost, a unique initiative much appreciated by the states and the farmers. after recording the details for creating data base, used for sending messages during the season.

पत्रकारों से बातचीत करते हुए स्वाल कार्पोरेशन के अधिकारी राहुल पांडे, पंकज जोशी, हरीश महता। ● जागरण

किसानों को बताए गुलाबी सुंडी के प्रभावी नियंत्रण के उपाय

- प्रदेश भर के 600 किसानों विक्रेताओं एवं कृषि वैज्ञानिकों ने भाग लिया
- किसानों को उन्नति के लिए किए जा रहे कार्यों के बारे में दी जानकारी

जागरण संवाददाता, हिसार : स्वाल एवं सीसीएफ आई ने एचएयू के सभागार में एक सेमिनार आयोजित किया। जिसमें स्वाल कारपोरेशन ने नरमा किसानों को कपास में अच्छी पैदावार और गुलाबी सुंडी को लेकर जागरूक किया।

इस सेमिनार में प्रदेश भर से आए लगभग 600 किसानों विक्रेताओं एवं कृषि वैज्ञानिकों ने भाग लिया। इसी दौरान प्रेस वार्ता का भी आयोजन किया गया। सेमिनार में विषय रक्षा सूत्र नरमा फसल की गुलाबी सुंडी का प्रभावी नियंत्रण पर चर्चा की गई इस सेमिनार में स्वाल कार्पोरेशन की सराहनीय पहल रही जिसमें किसानों को गुलाबी सुंडी के प्रभावी नियंत्रण के बारे में डा. ऋषि शर्मा प्रिंसिपल विज्ञानिक सीआइसीआर द्वारा विस्तारपूर्वक बताया गया। उन्होंने बताया कि गत वर्ष गुलाबी सुंडी के प्रकोप के कारण कुछ किसान कपास का उचित उत्पादन प्राप्त नहीं ले पाए, जिसका मुख्य कारण इस कीट के बारे में जानकारी का अभाव होना है। सेमिनार में आए सभी नरमा किसानों को सीसीएफ आई के चेयरमैन आरती श्राफ ने वीडियो कांफ्रेंसिंग से संबोधित किया। वहीं एग्जिक्यूटिव डायरेक्टर सीसीएफआइ निर्मला पंचरवाल एवं हरीश मेहता ने सीसीएफ आई के किसानों की उन्नति के लिए किए जा रहे कार्यों के बारे में विस्तारपूर्वक बताया। डा. एसके वर्मा हेड सीआईसीआर सिरसा ने बताया कि गुलाबी सुंडी के प्रभावी नियंत्रण के लिए जागरूक होना बहुत जरूरी है। इस दौरान स्वाल कार्पोरेशन के अधिकारी राहुल पांडे, पंकज जोशी, हरीश महता आदि उपस्थित रहे।

ROLE OF FPOs

To obviate the immediate concerns of scarcity of farm labor, policies must facilitate easy availability of machinery through state entities, Farmer Producer Organizations (FPOs) or custom hiring centers (CHCs) with suitable incentives. It is also suggested to explore leveraging MGNREGA funds to pay part of the farm labour (with farmers paying the balance wage amount) to lessen the monetary burden on the farmer, while ensuring wage employment to the landless laborers and workers.

LOAN WAIVERS & CREDIT FLOW

Agriculture in India is a Statesubject; however agricultural activities, being interconnected in neighboring regions, agri-sops or benefits must not distort the market scenario. Waiver of farm loans, evidences suggest, have not fully benefitted the majority of small and marginal farmers. Rather, it affects the future credit behavior of the borrowers and thus negatively impacts the agricultural credit culture altogether. As the *kharif* (rainy/wet) season of 2021 is fast approaching, institutional lending of crop loans should be expanded and facilitated for smooth (and sufficient) flow of credit to borrowing farmers. Agri-inputs – seeds, fertilizers, agro-chemicals, etc. – have to be pre-positioned for easy availability. Private sector must play a significant role with necessary policy support.

Relaxation of the norms by Agricultural Produce Market Committees (APMCs) allowing farmers to sell their produce beyond the designated mandis will certainly ease the burdens of farmers. State Governments must gear up their machineries for smooth procurement operations of farmers' marketable surpluses at MSP (minimum support price) or through other price support schemes.

It will be thus very appropriate to focus attention on the agriculture sector as a growth engine and also to bring resilience in food (and nutrition) security. At this critical stage, where climate change is already adversely impacting the agriculture sector, productive investments, including on research and innovation, would be very purposeful.

Structural reforms such as land leasing, contract farming and private agricultural markets, etc. have long been advocated to bring enhanced investments into the agriculture sector and to push its growth. However, there has not been uniform implementation of these legislations by State Governments and so the full potential of the sector is unrealized. These reforms need significant political will.

OPPOSITION TO FARM LAWS CLEARLY MISPLACED

The reform package introduced by the Government, combines three laws, all introduced through the ordinance route.

- First the government has amended the Essential Commodities Act to remove the existing restriction on stocking food produce.

- Second, it has introduced a new law, The Farmer Producer Trade and Commerce Ordinance to end the monopoly of the Agricultural Produce Market Committees and allow anyone to purchase and sell agricultural produce.
- Third, The Farmer (Empowerment and Protection) Agreement on Price Assurance and Farm Services Ordinance, has been enacted to legalize contract farming, so that big business and companies can cultivate vast swaths of land on contract basis.

In the Rs. 20 Lakh Cr relief packages announced by the Government, importance has been given to the agriculture sector due to which farmers would be benefited.

Also, had the farm reforms gone through, food inflation in India would have been much less. It's hard to establish the argument with data as it is a 'what if scenario. But it is true. Look food inflation was mainly promoted by supply side factors. Had farm reforms gone through, there would have been more investment on storage capacities which in turn would have helped facilities better supplies. The opposition to the farm laws was clearly misplaced. Farm reforms were meant to empower small and marginal farmers who got exploited by mighty middlemen.

But these farm Laws were taken back by Government in November 2021.

DEMOLISHING MYTHS ON USE OF PESTICIDES IN INDIA

Myth- Indian farmers use excessive Pesticides

Reality- India ranks 2nd in the world in agriculture production after China, but it ranks 12th in pesticide use.Most other countries including USA and those in the EU such as France, Spain, Italy, Germany etc. use more pesticides then India on per unit area and per unit of output basis (source FAOSTAT).
"Indian farmers use excessive pesticides" is a false propaganda by some vested aimed at reducing market success to our agriculture products globally.

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

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

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

Reality- Globally India ranks 172nd in cancer rates. Australia, New Zealand, Ireland, USA and Denmark are the top 5 that leads in cancer rates. (Source WHO)
The largest incidence of cancer in India are in the states like Mizoram, Meghalaya, Sikkimetc that hardly use pesticides in agriculture. Punjab ranks 24th among various states in each standardized cancer rates in India. (Source ICMR)
Group I list of WHO's International Agency for Research on Cancer (IARC) contains 120 substances considered to be carcinogenic to humans. Not a single agrochemical Figures in this list
Singapore with nil area under agriculture has more cancer rates than India.

Myth- Accidental exposure to pesticides spray drift affects farmers.

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

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

The effects of drift through drones is being studied.

Myth- Indian market is full of spurious pesticides.

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

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

Reality- Fish species are highly sensitive to water quality and toxic pollutants.
India ranks the third largest in Inland fish production. This shows that our water system remains conducive to production of fish.
Andhra Pradesh & Punjab have the highest pesticides consumption yet inland fish productivity at 6560 kg per acre of inland water area ,is higher than other states in India.

Myth- Pesticides are the primary means to commit suicide.

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

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

Reality- Use of pesticides in every country depends on local crops, climate, environment and occurrence of pests and diseases.
Pesticides registration/ use therefore varies from one country to another and are granted after stringent field and laboratory trials, with strong element of sovereignty.
The number of registered pesticide in India is 290 as against over 400 in EU.

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

Reality-All substance used as pesticides whether organic, bio or synthetic undergo the same toxicity, safety and efficacy assessments before allowed for commercial introduction.
Crop protection industry in fact offers a variety of pesticides products- organic, bio and synthetic- to farmers enabling a diverse and inclusive approach to pest control.

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

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

Reality- Indian manufacturers produce quality which is in fact superior than imported products in terms of purity profile and efficacy. Our members account for 80% of exports to 130 countries with acceptable quality. The price is also not only competitive but lower

by 50-75 % once produced indigenously. However, unethical practices are used in India to see that even after an expiry of the patent, MNCs keep their monopoly and Indian manufacturers are denied registration on some dubious grounds. There are now heavy investment in R&D by Indian companies with world class Researchers centers for innovations.

Myths- Introduction of neonicotinoid insecticides adversely affected honey production.

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

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

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

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

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

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

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

IMPORTANCE OF RESEARCH AND DEVELOPMENT (R&D)

Pest and diseases dynamics are constantly changing and it becomes in cumbent upon the industry to cater to the differing demands. The sector, therefore is on the cusp of constantly changing technologies to suit the varied demands, R&D becomes a priority, but the high cost of R&D deters many manufacturers from investing in new solutions. Farmers at large remain unaware of the new products or they lack the knowledge regarding the product at hand. This is a precarious situation as the efficacy or the usefulness of the product is closely linked to the knowledge of the user.

Crop protection chemicals are still the most extensively adopted management measure once the pest problem is reported. The new molecules that are being developed negate many of the purported ill effects of the conventional molecules. It is indeed a ray of hope. However almost 70% of global market is dominated by the generics.

Plant diseases forecasting is an underexploited area in India. Pests and diseases are dependent on weather variables to a great extent and many models have been developed to predict the onset of diseases and pests. However, those models are seldom used in conventional agriculture. But in years to come, model based predictions would find favor in agriculture.

The use of silicas has led to considerable improvement in the efficiency of plant production products, and the active ingredient in these new formulations has had absolutely no adverse effect on performance. Liquid formulations developed to improve safe handling of active ingredients occupy an important share in the pesticides market.

At the same time, solid agrochemical formulations in crop protection (herbicide, insecticide, and fungicide) and seed treatment- formulations (insecticides, fungicide, and biocide) have been known for many years in the industry.

On the one hand we’re looking at the government’s food security objectives given India’s vast agro climatic diversity, limited farmland, and growing population. Innovation powered by R&D, exports, and becoming a global supply hub- the case for the crop protection chemicals sector is getting stronger with time. It also stands to support the objectives of Aatmanirbhar Bharat’, given our talent pool of qualified scientists and technicians, increasing investments and technological capabilities.

Another area of misconception is an Indian Research and Development (R&D). Our members spend lot of time and money on research and development to develop new technologies indigenously.

Rs. 8,514 Cr. (US$ 1.1 billion) has been allocated to the Department of Agricultural Research and Education.

Indian corporates have invested over Rs. 3000 Cr. on research and development, in terms of land, building, equipments, trials and registration. This is approx 5% of the turnover of the industry.

INVESTMENTS

The government has taken several steps for increasing investment in the agriculture sector such as enhanced institutional credit to farmer's promotion of scientific warehousing infrastructure for increasing shelf life of agricultural produce setting up of Agri-tech infrastructure funds for making farming competitive and profitable developing commercial organic farming etc.

NABAARD will assist the creation of blended capital fund with a focus on the agricultural start-up ecosystem which will be used to fund agriculture and rural enterprises startups that are related to the farm product value chain.

According to the Department for Promotion of Industry and Internal Trade (DPIIT), the Indian food processing industry has cumulatively attracted Foreign Direct Investment (FDI) equity inflow of about US$ 2.55 billion between April 2000-March 2022.

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Investment worth Rs. 8,500 Cr. (US$ 1.19 billion) have been announced in India for ethanol production. Production of horticulture crops in India reached a record 331.05 million metric tonnes (MMT) in 2020–21(as per 3rd advance estimate), an increase of 10.5 million metric tonnes over FY20. India has the largest livestock population of around 535.78 million, which translates to around 31% of the world population. Milk production in the country is expected to increase to 208 MT in FY21 from 198 MT in FY20, registering a growth of 10% YoY. Area under horticulture is projected to rise by 2.7% in FY21.

PRODUCTION LINKED INCENTIVES (PLI) SCHEME

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

Automobile and auto component, advance chemistry cell batteries, specialty steel and high –efficiency solar panels have attracted the maximum interest.

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

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

PLI scheme as the Production linked Incentive scheme is commonly abbreviated as is an initiative started by the government of India to encourage domestic and local production to create micro jobs. PLI scheme is an incentive to domestic industries to boost local production. Domestic business also helps in cutting down import bills. As per the PLI scheme the government encouraged domestic companies and establishment to set up or expand on manufacturing units to increase production to which the government provide incentive on incremental sales. According to the PLI scheme, the scheme aimed to include more labour incentive sector of production – example include food processing textile etc. in addition to the already existing sector like allied equipment for mobile phones and assembly, pharma and medical device.

The PLI scheme is essential in the country for many reasons. The prime necessity to neutralize the amount of imports and exports in the country in a non- discriminatory manner. This is possible when domestic industries are given more and due importance.

Another reason is that India is primarily a labour intensive work force owing to the population and that the government could focus on capital influx for growth. So instead the government shifting its focus to boost short term, under a year result driven industries can potentially balance the trade into and out of the country.

Highlights of PLI

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

Agrochemicals are yet to be included under this scheme but the government is keen to boost the sector and we expect an approval in this fiscal. Idea being to research, develop, and launch newer, safer and better products. Not only does it stand to build and enhance capacity, but also boost employment and fortify 'Make in India" prowess.

Annexure- I List of intermediates recommended for inclusion in PLI scheme, which are currently being Imported in India.

Insecticide- 17
Herbicide- 9
Fungicide- 9
Total- 35

Annexure- II List of Technical Grade Products, which are currently being imported in India

Insecticide- 27
Herbicide- 25
Fungicide- 29
Total- 81

Annexure- III List of Formulation which are currently being imported in India.
Insecticide- 23
Herbicide- 38
Fungicide- 26
PGR- 2
Total- 89

Annexure- IV List of Technicals being imported in India despite having indigenous manufacturing capacity

Insecticide- 11
Herbicide- 13
Fungicide- 7
Total- 31

NO DATA EXCLUSIVITY FOR AGROCHEMICALS: VIEW POINT OF CCFI

Data exclusivity refers to protection of data submitted by originator (MNC from developed countries) to the regulatory authority for market approval of agrochemicals.
Data exclusivity is different from patent protection, which is an exclusive right that prevents others from commercially exploiting the patented innovation for 20 years under TRIPS agreement India allows this protection.

Crop Care Federation of India (CCFI) opposes the renewal attempts by multinational companies (MNCs) and importers to achieve data exclusivity regime in India.
The agrochemicals industry in India is export intensive, earning valuable foreign exchange byway a of trade surplus. In last five years Indian agrochemical industry earned a trade surplus of over Rs. 50000 Cr. (7-bn) to the country.

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

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

REASONS FOR MAINTAINING 18% GST ON AGROCHEMICALS

Crop Care Federation of India who are the largest manufactures and exporter of pesticides are of the firm view that present GST of 18% on pesticides is logically good If it is reduced to 5% or nil the Indian manufactures will suffer as all the raw material contains plants machinery has 18% GST. This would result in inverted duty structure' stated Mr. Deepak Shah, Chairman CCFI in a communication to Ms. Nirmala

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

For the pesticides which are imported, if they have 5% GST or lower, they will have a distinct advantage against indigenous manufacturers. The step would against the policy towards Atmanirbhar Bharat through 'Make in India' This is will result in increase in imports of agrochemicals which during 2021-22 touched Rs. 13369 Cr. mainly from China, Japan, Israel, Thailand, Europe, Hongkong etc. Several shipment were delayed due to non availability of containers, increase in tariffs rates and congestion at ports which have started arriving in full flow now in the current fiscal.

Indian manufacturers are responsible for 80% of our agrochemicals exports to over 130 countries with acceptable quality specification. In fact we have exports pegged at Rs. 36363 Cr. higher than domestic consumption of Rs. 29000 Cr.

Any reduction or exemption would result in loss of revenue estimated at 4500 Cr. annually to the government, besides blocking of working capital which would increase cost of business. Also as has been observed, the government has been lately working to prune GST exemptions during their GST council meeting. At CCFI we work towards policies favoring the farming community where our members can produce better quality than their imported counterparts at 30-75% lower cost of production and save valuable foreign exchange.

We strongly recommend that there should not be any change in GST rates for pesticides manufactured in India.

MRL DATA ON AGROCHEMICALS

Agri commodities in India carry high pesticide residues.

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

Its annual studies over the last 8 years found that on an average barely 2.2% of the agri commodities had pesticide residues above the prescribed Maximum Residual Limits (MRL). In other words, 98% of our agri commodities have MRL values within the prescribed limits.

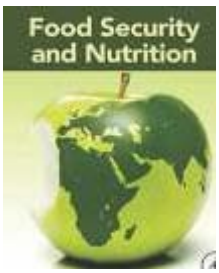
Indian findings are in line or in fact better than most developed nations like UK where in the 2019 report, 7.2% samples were found with residues above the MRL values.

It may also be pertinent to note that MRLs are legally imposed commercial standards for trading and not safety standards. Merely having MRLs above the prescribed limits, does not necessarily mean the produce is unsafe for consumption.

In fact MRLs have become a tool to restrict our agricultural commodities that are highly price competitive.

While the countries that import our agricultural products put them to strict MRL tests, there are hardly any checks in India for commodities like apples, almonds, cheese, chocolates that we import.

FOCUS ON NUTRITIONAL SECURITY



Food and nutrition security are intimately interconnected, since only a food based approach can help in overcoming malnutrition in an economically and socially sustainable manner. Food production provides the based for food security as it is a key determinant of food availability and production without associated ecological harm for ensuring adequate availability. By mainstreaming ecological considerations in technology development proactive policy support, we can enter an era of evergreen revolution and sustainable food and nutritional security.

Healthy Food Initiative Program is a holistic approach for ensuring health and nutrition to population and is mush needed to help systematize the complete value chain from sowing till consumption by factoring quality standards at all the stages and by integrating GAP, bio fortification, GMP, Codex and other essential components. It is high time that Indian agriculture adopts stewardship approach and develops safer food value chain in partnership with the key stakeholders. The initiative by India Council of food and agriculture will sensitize and take all the stakeholders on- board like researchers, policy makers, health industry, nutrition agencies, NGOs, etc. thus promoting government, industry and NGO alliance to expedite the supply as well as demand for safe and nutritious food by advocating and promoting better health and nutrition policies and practices and creating pro- health environment.

In September 2021, Hon'ble Prime Minister Shri. Narendra Modi launched 35 crop varieties with special traits such as climate resilience and higher nutrient content.

NANO UREA AND NANO PESTICIDES

The indication from the government that India would not need to import urea by 2025 could not have come at a more opportune movement given that the global prizes of this most consumed fertilizer have soared to new highs and its availability has dwindled due to the Russian -Ukraine conflicts and export by China and other countries. The international urea prices are currently ruling at their highest level since the 2008 food and financial crisis. So are in fact the price of phosphatic and potassic fertilizer for which the countrie's reliance on imports is even higher than that of urea. As a result, the fertilizers subsidy in the current fiscal year is projected to exceed Rs.2.5 trillion surpassing last fiscal year's record of Rs.1.62 trillion by a high margin. Higher indigenous production more efficient use of fertilizers and promoting organic sources of plant nutrients are the only means to rein in burgeoning subsidy burden.

Urea policy focused primary on maximizing domestic output promoting energy efficiency in urea manufacturing and reviving the defunct fertilizer plants. The evolution of "Nano urea" which is substantially more potent than the conventional material came as an additional bonanza in this respect. This new generation urea which condenses one bag equivalent of urea into a tiny bottle of 500 ml liquid further speeded up the match towards shedding reliance on imports of this key farm input. The cooperative sector fertilizers giant IFFCO must be given due credit for pioneering and promoting nano-urea technology which has already proved its worth as a game changer. IFFCO- MC is active member of CCFI.

The production capacity of Nano urea is likely to swell from the present 50 million bottles (each containing 500 ml liquid) to over 440 million bottles with the commissioning of the under-construction nano- urea plants. Moreover, the resurrected fertilizer plants at Ramagundam, Talcher, Gorakhpur, Sindri and Barauni and a few new ones at other sites are also expected to begin producing to their full capacity. Indeed, many analysts believe that India should now be looking forward to exporting urea rather than importing it by capitalizingon its huge Nano urea production potential. The great through is nanotechnology has also opened up opportunities for the production of Nano di- ammonium phosphate (DAP), which is the second largest in consumption and highly import dependent from input. This product currently is advanced stages of development is expected to bring down the cost of dap by half.

The offer multiple advantages ranging from cost reduction and supply augmentation to the much-needed improvement in fertilizers used efficiency and rise in farmer's income. Studies have shown that while nutrient consumption by plants is only 25 - 30% in the

case of conventional fertilizers, it rises to 90% nano product therebypushing up crop yields perceptibly. Additionally, the use of nano urea and DAP helps reduce the soil, air and water pollution attributable to chemical fertilizer. With such developmentsbeing on the horizon India may well is on the cusp of transmuting from a bulk importer to a net exporter of plant nutrients.

Several of our members are manufacturing urea DAPetc and we expect a radical change in fertilizers scenario.

NOTE ON NANO PESTICIDES

Nanopesticides stand for pesticides formulated in nanomaterials to find applications in the agricultural field, whether specially fixed on a hybrid substrate, encapsulated in a matrix or functionalized nanocarriers for external stimuli or enzyme-mediated triggers. Nanosized particles, coupled with their shape and special properties are thought to explore pesticide activities in nanocarrier innovative formulations based on several materials like silica, lipids, polymers, copolymers, ceramic, metal, carbon and others.

The nanopesticide formulations can increase water solubility, bioavailability and protect agrochemicals against environmental degradation, revolutionizing the control of pathogens, weeds, and insects in the crops. However, the nanomaterial features are also borderline their cytotoxicity and genotoxicity.

The effect of formulations on the behavior of nanopesticides in the environments, ecosystems, farmer workers, consumers, and all productive sector involved in the agriculture chain is not entirely known . However, the critical role of nanoformulations in reducing the active ingredient's degradation, improving water solubility equilibrium, and increasing the biological availability of actives ingredients are known. Specifically, to avoid endemic infestation of pests, plant injury and economic loss by decreasing the quality and quantity of agricultural products and foods.

ZERO BUDGET NATURAL FARMING

Zero budget natural farming (ZBNF) is a method of chemical free agriculture drawing from traditional Indian practices.

Without the need to spend money on these inputs- or take loans to buy the- the cost of production could be reduced and farming made to a Zero budget' exercise, breaking the debt cycle for many small farmers.

Instead of commercially produced chemical inputs, the ZBNF promote the application of jeevamrutha- a mixture of fresh desi cow dung and aged desi cow urine, jiggery, pulse flour, water and soil- on farmland. This is a fermented microbial culture that adds nutrients to the soil,and act as a catalytic agent to promote the activity of microorganisms and earth worms in the soil. About 200 liters of jeevamrutha should be sprayed twice a month per acre of land after three years, the system is supposed to become self – sustaining. Only one cow is needed for 30 acres of land, according to Mr. Subhash Palekar, with the caveat that it must be a local Indian breed- not an imported jersey or Holstein. A similar mixture, called bijamrita, is used to treat seeds, while concoctions using neem leaves and pulp, tobacco and green chillis are prepared for insect and pest management.

The ZBNF method also promotes soil aeration; minimal watering, intercropping, bunds and top soil mulching and discourage intensive irrigation and deep ploughing.

In order to achieve the central government's promise to double farmers income by 2022, one aspect being considered is natural farming methods such as the ZBNF which reduce farmers dependence on loans to purchase inputs they cannot afford. Meanwhile, intercropping allows for increased returns.

ZBNF Critics, including some experts within the central policy and planning think tank NITI Aayog, note that India needed the green revolution in order to become self-sufficient and ensure food security. They warn against a wholesale move away from that model without sufficient proof that yields will not be affected. Sikkim which has seen some decline in yield of following a conversation to organic farming is issued as a cautionary tale regarding the pitfalls of abandoning chemical fertilizers.

However expert at Niti Aayog have also warned that multi location studies are needed to scientifically validate the long term impact and availability of the model before it can be scaled up and promoted country –wide.

The IARI is studying the ZBNF method practice by basmati and wheat farmers in Modipuram(Uttar Pradesh), Ludhiana(PUNJAB), Pantnagar (Uttarakhand) and Kurukshetra (Haryana), evaluating the impact on productivity, economics and soil health including soil organic carbon and soil fertility.

ORGANIC FARMING CANNOT DRIVE SUSTAINABILITY

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

However, globally only 1.1% of the agricultural land is under organic agriculture. Two third of the organic agricultural land gross to support livestock while the balance one third grows primary food for our direct consumption. In India the figures is 0.6% of cultivated land.

Organic farms have been found to have a crop yield 20% less than conventional farms, with other studies suggesting that the number would be as low as 50% in India.

Organic farming also requires considerably more land and with the current (and increasing) population if all farms were to switch to organic method overnight, food production would drop, rendering a large section of the population in want of food.

Sikkim has been touted to be a completely organic farming state in India. However it is worthy of note that in the last two decades, Sikkim's population increased by 50% but its food grain production decreased by 30%, Further , Sikkim has the lowest productivity (5 tonnes/ha) in vegetable in India. If model were adopted by other state as well could it lead to a food crises?

The organic food segment in India is expected to grow at a CAGR of 10% during 2015-¬25 and is estimated to reach Rs. 75,000 Cr. (US$ 10.73 billion) by 2025 from Rs. 2,700 Cr. (US$ 386.32 million) in 2015.

APPLICATION ON USE OF DRONES

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

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

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

REUSE OF CONTAINERS AND EFFORTS BY CCFI MEMBERS

Agrochemicals are usually toxic and can pose significant environmental risks when stored in bulk storage systems, mainly when accidental spills occur. The use of the agrochemicals in many countries has become highly regulated and permits provided by the government may be necessary for purchasing and applying approved agricultural products. Misuse, including unsafe storage leading to chemical leakage, chemicals washing, and chemical spills, may impose significant penalties. Where such chemicals are used, they also fall under the mandatory rules and regulations, proper storage facilities and marking, emergency clean- up equipment, emergency clean-up protocols, protective equipment, as well as protective methods for treating, applying and disposing of.

Indian agro licensedcompanies have initiated work on those lines by engaging private contractors and agencies to collect and segment used pesticides containers.

IMPORTANCE OF FARMER TRAINING

Pesticides can enter the body through four routs of exposure including dermal (skin), ocular (eyes), ingestion (mouth) and inhalation (lungs). Skin contact is the most common cause of pesticides poisoning for applicators and some pesticides enter the body through the quit readily. At the time of mixing, pesticides are more concentrated and the likelihood of injury is increased during this time. Some parts of the body absorb pesticides extremely fast (within a few minutes) and need extra protection. Two such areas are the head and body are between the naval and about mid- thigh. If any pesticide is spilled in this area, wash it off immediately and change clothing. It is best to avoid direct contact with pesticides by wearing the proper Personal Protective Equipment (PPE) as specified on the label of the pesticides intends to use.

One of our words are required on a pesticides label to indicate the toxicity of the pesticide:

- Danger- Poison or Danger- Toxicity Category (I)- Highly Toxic (fatal if ingested)Bright red
- Highly toxic- colour Orange
- Danger- Toxicity Category-I Highly corrosive to eyes and skin Moderately toxic- yellow
- Warning- Toxicity Category (II)- Slightly toxic - blue
- Caution- Toxicity Category (III) and (IV)- Least toxic- Unlikely harmful- green

Gloves: Always wear unlined, elbow- length chemical- resistant gloves when handling all pesticides. The elbow length protects your wrist and prevents pesticides from running down your sleeves into your gloves.

Never use leather or cotton gloves. These types of Gloves can be mor hazardous than no protection at all because they absorb and hold the pesticides close to your skin for long periods of time.

Not all glove materials will give you the same level of protection. Some materials will last longer against certain types of pesticides and chemicals. They will be highly, moderately or slightly chemical resistant.

Apron: Wear unlined chemical – resistant apron when repairing or cleaning spray equipment and when mixing or loading. This is a good practice for all pesticides and is essential for pesticides of category I and II toxicity. Aprons offer excellent protection against spills and splashes of liquid formulations, but they are useful when handling dry formulation such as wettable powders. Aprons can be easily worn over other protective clothing and are comfortable enough for use in warm climates. Choose an apron that extends from the neck to at least the knees. Some aprons have attached sleeves.

Gum Boots: Wear unlined chemicals resistant boots which cover your ankles when handling or applying moderately or highly toxic pesticides. Purchase boots with thick soles. Do not use leather boots. If chemical- resistant boots are too hot to wear in warm climates or too difficult to put on, try wearing chemical- resistant over boots with

washable shoes (such as canvas sneakers or layered socks). Remember to put your pant legs outside the boots;otherwise the pesticides can drain into the boot.

Goggles & Face shield: Wear shielded safety glasses; a full face respirator; snug- fitting, non- fogging goggles; or a full face shield whenever the chemical could possibly contact your eyes. Safety glasses with brow and side shield are acceptable for low exposure situations. Always wear goggle or full- face respirator when you are pouring or mixing concentrates or workingin a highly toxic spray or dust. In high exposure situation when both face and eye protection are needed, a face shield can be won overgoggles. Clean them after each use. Be careful of the headband; it is often made of a material which readily absorbs and holds chemicals. Have several spares and change them often or use a chemical. Have several spares and change them often or use a chemical – resistant strap. If possible, wear the stap under your head covering.

Cap: This headgear not only protects from sun but ensures safety against any spray drift while spraying.

Mask: Face mask ensure that there are no inhalation cases as normally the fumes enter from nostrils.

As part of our training we have conducted live dummy demonstrations using water, with critical precaution in making spray solution, type of nozzles used, upkeep of spraying equipment, following direction of wind etc. Knowledge on various pests and disease on cotton, rice, vegetable, sugarcane, soybean, wheat to name few are shared with the gathering, focusing on sucking pest like white fly and borer like pink bollworm which have been the most critical pest on cotton. On paddy the focus was on stem borers, leaf folders and brown plant hopper.

We have trained nearly 1,25,000 farmers and their contract labour and distributed as many kits free of cost so that these are used during field spraying operations.

Citation Padma Bhushan Mr. R.D. Shroff: A trailblazing visionary

A living testimony to trailblazing entrepreneurship is Rajnikant Devidas (popularly known as Rajjubhai Shroff).

A graduate of Chemistry from the Bombay University, he established a novel process of manufacturing mercury salts at a plant in the UK and was paid a royalty for it by the British Company: a big achievement for any Indian, way back in 1957. Playing with chemistry was his passion. Soon after, he mastered how to make Red Phosphorous, Aluminium Phosphide a fumigant and Zinc Phosphide a rodenticide for agriculture.

With a professional career spanning over more than 50 years, Mr. Shroff will forever be remembered by the Indian industry for his unparalleled contribution to the field of agricultural technology. His dedication to his profession and the causes he supports is truly unwavering.

He is the founder of UPL Ltd., a global provider of sustainable agriculture products and integrated solutions.

Long before “Make in India” gained currency in industrial lexicon, it was under his stewardship that UPL Ltd., which began as a small-scale chemical unit in 1969 at Vapi in Gujarat involving complex chemical processes, with a seed capital of just Rs. 4 lakh, has grown today into India’s only multi-national and multi-cultural agrochemical behemoth today, employing over 14,000 people, worldwide, with a turnover in excess US$ 5 billion.

He has been spearheading a larger purpose that is, to expand industrialization of agrochemical sector in India, saving foreign exchange for the country by manufacturing standard quality products at affordable prices even for the small holding Indian farmer.

That this man who has had such an extraordinary record in the Indian industry has also given so much back to his nation as a responsible corporate, all along creating value for all the stakeholders in the agrochemical fraternity.

A man who served with integrity, lead with courage and acts with love in his heart for the family and friends. An accomplished gentlemen who all his life executed his tasks with dignity sndhonour. We salute his skills and intelligence.

Rightly so he was conferred one of the India’s highest civilian award, the Padma Bhushan in 2021, for his role in the field of trade and industry.

All the members present heartedly to confer upon Mr RD Shroff the title of “Chairman Emeritus” with a standing ovation !

We at the CCFI take this opportunity to wish him both long and active life in the years to come so that his wise counsel guides us to the path of eternal glory.

Agri Tech India 2021

CCFI participated in Agri Tech India 2021 held at Bangalore during 28th to 30th October, 2021.

Agri Tech synchronized with greenhouse grower's conference on 28th October, 2021 at the same venue.

This is India's largest exhibition on Agriculture , farm machinery, dairy, poultry, livestock equipment, agri processing technologies, Tractor, Agriculture seeds manufacturers, Agro chemicals, Green house, Storage Equipments Floriculture & nursery Industry, Aquaculture technologies, vertical Farming solutions and many more.

Agriculture is the main source of livelihood for about 58% of India's population. The Indian food industry is poised for huge growth increasing its contribution to world food trade every year due to its immense potential for value edition.

It contributes around 8.80% and 8.39% of Gross Value Added (GAV) in manufacturing and agriculture representatively 13% of India's exports and 6% of total industrial investment.

India is expected to achieve the ambitious goal of doubling farmers income by 2022. The agriculture sector in India is expected to generate better momentum in the next few years due to increase investment in agriculture infrastructure such as irrigation facilities, warehousing and cold storage. Furthermore, the growing use of agri inputs improve the yield of Indian farmers. India is expected to be self- sufficient in pulses in the coming few years due to concerted effort of scientist to get early- maturing varieties of pulses and the increase in the minimum support price.

Agritech India 2021 was an eye opener for the growers, whole sellers, importers, exporters and all others stakeholders of every segment of agriculture for expanding and diversifying their business activities. An ideal platform for business traders to display and introduce their latest product ranges, mechanization and technological innovations for farmers at one place.

Enjoying multiple advantages and being the capital of Karnataka, Bangalore was undoubtedly our prime choice to participate in 12thAgri Tech India 2021 moreover Bangalore is the main distribution hub of Southern India and is also easily accessible from all the neighbouring states and overseas destination.

CCFI participated in these 3 day deliberations and was represented by Ms. Nirmala Pathrawal, Executive Director CCFI.

Token of appreciation presented by organizers.

Ms. Nirmala Pathrawal, Executive Director CCFI addressing the gathering

CCFI felicitates doyen of Agrochemicals Industry Padma Bhushan Shri RD Shroff

The Hon'ble President Shri. Ram Nath Kovind conferred Padma Bhushan to Shri. Rajnikant Devidas Shroff (popularly known as Rajju Bhai) with one of the India's highest civilian award, the Padma bhushan in 2021, for his role in the field of trade and industry. A founder of UPL Ltd. a global provider of sustainable agriculture products and integrated solutions.

A professional career spanning over more than 50 years, spearheading a large purpose, to expand industrialization of agrochemical sector in India, saving foreign exchange for the country by manufacturing standard quality products at affordable prices even for the small holding Indian farmer.

The man who has such an extraordinary record in the Indian industry giving so much back to his nation as a responsible corporate, all along creating value for all the stakeholders in the agrochemicals fraternity.

CCFI felicitated Padma Bhushan R. D Shroff on 7th December 2021 at Hotel Taj Santacruz, Mumbai by organizing an industry get together in which imminent industry stalwarts were present.

Mr. Deepak Shah, Chairman, CCFI and Rajesh Aggarwal, Vice Chairman, CCFI lauded the achievements of Rajju Shroff as he is popularly known. He was one of the first entrepreneurs to set up a chemical plant, register several molecules for the Indian crop segment, undertake large scale demonstrations and set up manufacturing plants not only in India but abroad. One of the first corporations in the agrochemical sector to export molecules which were matching global standards at a competitive price earning valuable foreign exchange. This was all successfully implemented during license raj in spite of competition from imported chemicals and MNCs.

Among the other guest who spoke on the occasion were Mr. Ashwin Shroff, Dr. Ashwani Mahajan of Swadeshi Jagran Manch, Farmer leader Dr. Krishan Bir Chaudhary, Dr. C. D. Mayee and Mr. Ashish Shelar who praised his technical competence and passion for chemistry besides being the second highest contributor in corporate social responsibility (CSR).

A video film "Trailblazing Visionary" depicting the initial achievements of Shroff family and recapturing the years gone by was released much to the surprise and appreciation of the august gathering.

A memento was presented by CCFI team to Padma Bhushan Rajju Shroff and his wife Sandra Shroff to mark the occasion.

Caring for the crops

Crop Care Federation of India (CCFI) is not only the oldest but an apex federation of over 50 Indian manufacturers dealing in agriculture inputs like pesticides, fertilisers, seeds and farm equipment with a pan India presence. **Rajnikant (Rajju) D Shroff**, chairman emeritus, CCFI and chairman of the $5 billion Mumbai-based UPL, was conferred the **Padma Bhushan** award for trade and industry 2021 by the President of India. In order to felicitate him, the agrochemical industry organised a get-together, as UPL was one of the first corporates in the agrochemical sector to export molecules which matched global standards at a competitive price, earning valuable foreign exchange. "I strongly urge that MSP be viewed as a fiscal tool used to giving direction towards much needed crops and to diversify the Indian Cropping Pattern. A guaranteed MSP must be able to make farmers shift from the water-guzzling paddy to oilseeds. A well thought push for oilseed cultivation is an urgent necessity and if an assured pricing helps, so be it. We import more than half of all the edible oils that we consume. It is in our interest to satiate cent per cent domestic demand for mustard, sunflower, safflower, groundnut, sesame, and coconut oil by domestic production. Doing this with a guaranteed MSP will make us self-reliant faster and ensure success. Sprucing up lentil production and nullifying the protein deficiency plaguing the country with MSP guarantees should also be fast tracked," says Shroff.

Mr. Deepak Shah presented shawl

Agro Vision
Workshop, National Expo & Conference

Agrovision a National Expo & Conference was organized at Nagpur during 24th to 28th December 2021.

Hon'ble Minister of Agriculture & FWShri Narendra Singh Tomar was the chief guest besides the event was addressed by Hon'ble Minister of Fisheries, Animal Husbandary and Dairying Shri PurshotamRupala.

Shri. Sanjay Agarwal Secretary, Department of Agriculture Cooperation, Shri, Davendra Fandavis, Hon'ble leader of opposition, Maharashtra State, Shri Chandrashekhar Bawankule, Former Minister of Energy, New & Renewable Energy, Dr. C D Mayee, Chaiman Advisory Council Agrovision, were among the other dignitaries.

CCFI had put up a stall focusing on proper use of agrochemicals and distribution of PPE Safety Kits to the farmers and there contract labour who visited our stall.

Besides we participated in workshop to create awareness on safe & judicious use pesticides.

Ms. Nirmala Pathrawal and Mr. Harish Mehta attended the workshop and conference.

A view of CCFI Stall

Registration & distribution of PPE kits

PMFAI-SML Annual Award, 3rd Edition, 2022

CCFI participated in the 3rd PMFAI SML Annual Agchem awards on 14th February 2022 at Dubai represented by Ms. Nirmala Pathrawal.

PMFAI SML Annual Agchem award is an annual feature to recognize the achievements and capabilities of Indian agrochemical companies. The awards were presented for categories in exports performances, company performances, innovations, CSR, lifetime achievements etc.

Mr. Deepak Shah, Chairman and Managing Director of Sulphur Mills was awarded the lifetime achievement award for his dedicated work in the field of agrochemical.

Mr. Vikram Shroff in his key note address attributed the success of UPL ltd. to his parents when Rs. 150 Cr. was contributed to various Covid relief projects.

Ms. Nirmala Pathrawal at the venue of PMFAI -SML Annual Award

Mr. Vikram Shroff addressing the Conference

Life time achievement award to Mr. Deepak Shah, Chairman CCFI

Agri Tech 2022, Andhra Pradesh
Rajahmundry

Another event of importance was Agri Tech 2022 Andhra Pradesh, Rajahmundry during 14th to 16th March 2022, at Government Art College Rajahmundry.

The exhibition inaugurated by Shri. K. Kannababu Hon'able Minister for Agriculture, Horticulture, Sericulture, Cooperation, Marketing and Food Processing, Andhra Pradesh to emphasize the need to promote Horticulture and Vegetables as against cereal crops.

There is voluntary shift in the cropping pattern because of resilient climate and soil for higher income to the farmers.

Among the leading participants were Crop Protection & Nutrition, Seeds & Seedlings, Warehousing & Collateral Management, Agri Finance & Banking, Farm Mechanization, Irrigation and Fustigation Solution and Food Processing & Value Addition.

CCFI stall attracted a large number of visitors in Horticulture and Floriculture. The local dance & song troupe was a major attraction to focus on the usefulness of pesticides and benefits to increase their income, to propagate judicious use of agrochemicals and the important role of using these inputs to minimize the crop losses.

Display of CCFI members on Standee


Token of appreciation to CCFI as partners

Dance & drama Troupe in action

Memento to CCFI by the organizers

PPE kits sponsored by Members

3rd Farm Tech Asia
Raipur, Chhattisgarh

Crop Care Federation of India (CCFI) participated in 3rd Farm Tech Asia during 11th to 14thMarch 2022, at Raipur, Chhattisgarh. It is an International Exhibition and Conference on Agriculture, Horticulture, Dairy & Food Processing Technologies.

The exhibition was inaugurated by Shri Ravindra ChaubeyHon'able Agriculture Minister Government of Chhattisgarh and was addressed by the Vice-Chancellor Dr. Girish Chandel of Indira Gandhi Krishi Vishwavidyalaya, Raipur, Chhattisgarh.

Our Stall primarily focused on stride made by Indian Agriculture, Dairy and Fish Production/ Rice.

Over 600 farmers were explained the importance of using plant protection chemicals and were given PPE Safety Kits for use during field spraying. Besides, we distributed calendars, key chains, and promotional materials. Our films had shown which elucidatekeen interest by visitors.

The event was attended by Ms. Nirmala Pathrawal and Mr. Harish Mehta.

Addressing a press conference

Interactive session with visitors

PPE kits distribution

PPE kits to Farmers

4th Farm Tech Asia
Indore, Madhya Pradesh

The 4th Farm Tech Asia Exhibition was held at Indore, Madhya Pradeshbetween 8th to 11thApril 2022 in the premises of College of Agriculture Indore, Madhya Pradesh is a very important area for crops like cotton, paddy, sugarcane, soybean and vegetables farmers from not only adjoining district but from adjoining states like Uttar Pradesh, Gujarat, Chhattisgarh and Maharashtra.

Our theme was demystifying the myths on pesticides explaining the reality to the end consumer.

We have displayed prominently the logos and name of all our members who have contributed immensely to this industry.

The Hon'ble Minister of Agriculture Shri. Kamal Patelinaugurated the exhibition and visited our stall.We explained the rationale behind or intensive training.

Over 750 farmers visited our stall. We also meet the Dean of the College of Agriculture and explained him the advantage of using PPE Kits during the spraying seasons.

Agriculture minister of M.P. at CCFI Stall, Indore

Front view of CCFI stall

Dean, College of Agriculture Indore being presented a safety kits

NNS

दैनिक
व्यापार केसरी

नई दिल्ली, 9 अप्रैल 2022

क्रॉप केयर फेडरेशन ऑफ इंडिया ने कृषि मेले में किसानों को दी मुफ्त पीपीई सुरक्षा किट

इंदौर। क्रॉप केयर फेडरेशन ऑफ इंडिया (CCFI), 50 से अधिक भारतीय कंपनियों का एक शीर्ष संगठन है, जो कृषि रसायन के निर्माण में शामिल है, जो किसानों के क्षेत्र में फसल के नुकसान को कम करने के लिए एक प्रमुख इनपुट है।

हमारा प्रयास कृषक समुदाय को कृषि रसायनों के सुरक्षित उपयोग के संदर्भ में शिक्षित करना है जो कि कीटनाशक हैं जिनका उपयोग मध्य प्रदेश में कपास सोयाबीन गेहूं गन्ना वगैरह जैसी आर्थिक महत्व की सभी फसलों पर किया जा रहा है।

सीसीएफआई ने अब तक अखिल भारतीय आधार पर एक लाख से अधिक किसानों को प्रशिक्षित किया है ताकि जब किसान खेत में काम कर रहे हो तो उन्हें साँस लेने में परेशानी न हो, हम इन डी सेफ्टी पीपीई किट को वितरित करते हैं जिसमें हेड गियर कैप, गॉगल्स, फेस मास्क, हैंड ग्लव्स, फुल एप्रन और गॉट के जूते शामिल हैं। इस तरह के प्रयास को

राज्य सरकार, मंत्रालयों और कृषक समुदाय द्वारा बहुत सराहना की गई है। सीसीएफआई एकमात्र भारतीय महासंघ है जो महामारी से पहले के वर्षों में प्रशिक्षण और मुफ्त वितरण देता है ताकि हमारे कृषि उत्पादन में काफी वृद्धि हो।

हम चाहते हैं कि किसान इस लाभ को उठाने के लिए हॉल 4 में हमारे स्टॉल 133 पर आएं स्टाल पर शैक्षिक फिल्में एक अतिरिक्त आकर्षण हैं हमारे सदस्य 90 प्रतिशत कृषि रसायन निर्यात के लिए जिम्मेदार हैं। किसानों की आय दोगुनी करने के हमारे प्रयास के साथ भारत अब कृषि उत्पादन में दुनिया में दूसरे स्थान पर है।

CCFI मेक इन इंडिया के माध्यम से आत्मनिर्भर भारत के लिए प्रतिबद्ध है भारत में रेडीमेड फॉर्मूलेशन आयात करने वालों की तुलना में बहुत कम लागत पर गुणवत्तापूर्ण उत्पाद बनाने की क्षमता है।

हरीश मेहता की रिपोर्ट वरिष्ठ सलाहकार सीसीएफआई क्रॉप इंदौर

देश की कृषि उपज को बढ़ाने के लिए हो रही है फार्मटेक अंतरराष्ट्रीय कृषि प्रदर्शनी

इंदौर। फार्मटेक एशिया की अंतरराष्ट्रीय कृषि प्रदर्शनी के चौथे संस्करण का आगाज कृषि महाविद्यालय में किया गया। इस चार दिनी आयोजन का शुभारंभ मध्यप्रदेश के माननीय किसान कल्याण एवं कृषि विकास विभाग मंत्री, श्री कमल पटेल जी ने किया।

इस प्रदर्शनी में भाग लेने वाले किसानों को सीसीएफआई (क्रॉप केयर फेडेरेसन ऑफ इंडिया)की ओर से निःशुल्क किट दी गई, जिसमें कैप, चश्मे, नोज मास्क, फेस शील्ड, हैंड ग्लव्ज, एप्रेन, जूते, गम्बूट, टी शर्ट शामिल है। सीसीएफआई के सीनियर एडवाइज़र हरीश मेहता ने बताया कि हमारी कंपनी दिल्ली बेस्ड है और हम फार्मटेक एशिया के साथ मिलकर देश भर के किसानों में जागरूकता लाने और उन्हें खेती की नई तकनीकों

के बारे में जानकारी देने का काम करते हैं। हम साल भर किसानों के संपर्क में रहते है और उनकी समस्याओं का समाधान करते हैं। सीसीएफआई की एक्सिक्यूटिव डायरेक्टर निर्मला पथरावी कहती हैं कि हमारा उद्देश्य देश की कृषि उपज को बढ़ना है इसलिए हम पूरे देश के अलग-अलग गांवो, कस्बों और ज़िलों में जाकर जागरूकता कार्यक्रम करते हैं। जो किसान साल भर हमारे साथ जुड़कर किट का उपयोग करते हैं, उन्हें हम साल के अंत में पुरस्कार भी देते हैं।

Skill Training Project at Ujjawala Home, Guntur

CCFI ventured into another area of Skill development for destitute women from farming families at Guntur Andhra. Mr Arun Kumar IAS (earlier Spl Agri commissioner) now elevated as Secy Administration & APUPSC & the new Agri Commissioner Mr Hari Kiran IAS graced the inauguration function on 19th April 2022 at Ujjawala Home, Guntur.

The inmates were presented with Automatic Electric Sewing Machine for commercial use as revenue model. We also appointed two trainers to impart training for a period of two months.

The idea was to sustain this endeavor, generate profits and grow as these ~~deflate~~ farming women had no source of income. This was CCFI effort to rehabilitate such group of women under Sister Rosalina who was spearheading this centre for last 10-12 years.
We took the opportunity to show the dignitaries, our complete PPE safety kit which is distributed free during Farmers Training Programs by CCFI, mostly sponsored by member companies whose representatives were also present.
Sister Rosalina in charge of Ujjwala Home and CCFI give mementoes to mark the occasion. There was also a cultural program, demonstration of extracting coconut oil, making of idli batter and block printing.

Cutting the ribbon to inaugurate the training program, JMJ Ujjawala Guntur

Inmates involved in tailoring training

A view of the ladies undergoing stitching session

Display of kits to the guests

Mr. Harish Mehta addressing on the event

3rd national Seminar
Role of agrochemicals for sustainable Agriculture

CCFI participated in a seminar on 'Role of agrochemicals for sustainable agriculture' Empowering farmers for a prosperous India was organized by Indian Chemical Council (ICC) and Department of Chemicals & Petrochemicals, Govt. of India.

The purpose of this seminar was to highlight the role of agrochemicals which plays a significant role in enhancing agricultural yield by protecting plants from pest, fungi, insects, rodents, weed etc. As the exponentially growing population demand for more food hence these agrochemicals are necessary in agriculture to sustain crop productivity. Therefore, there is a need to use a strategy for the management of the agrochemicals to promote their judicious use. He sustainable crop production process need to be developed. The effective way of pesticides use for sustainable agriculture. The improper or extensive use of pesticides has impact on human and environmental health. It also discussed the role of regulation, the importance of labels good practices and recommendations to the farmer.

Important session was on academic and industry prospective. The key note addressed was delivered by Padma Bhushan Shri. Rajju Shroff , Chairman Emeritus CCFI. It was a matter of pride that India now is te 2nd largest producer of agri commodities having surpassed USA, in spite of average land holding of less than 2 hc. He was confident that India has a lot of potential in vegetable (Bengal) in fish (Andhra Pradesh) and milk (Haryana & Uttar Pradesh) There was a need to demonstrate the advantage of using quality agro inputs like seeds, fertilizers, agrochemicals which have been well accepted and use extensively by the Indian Farmers.

The Farmer in certain crops have earned more than four times against their normal earning by adopting Good Agriculture Practices (GAP). India is becoming a large manufacturing hub for agrochemicals to produce Technical and Formulations which are in demand domestically and for exports.

Mr. S K Malhotra (Fmr. Agriculture Commissioner) Project Director DKMA in his address complimented the Indian Industries and farmers for surpassing production figures in food grains and Horticulture. There was enough scope to export food grains, fruits, milk products spices & tea.

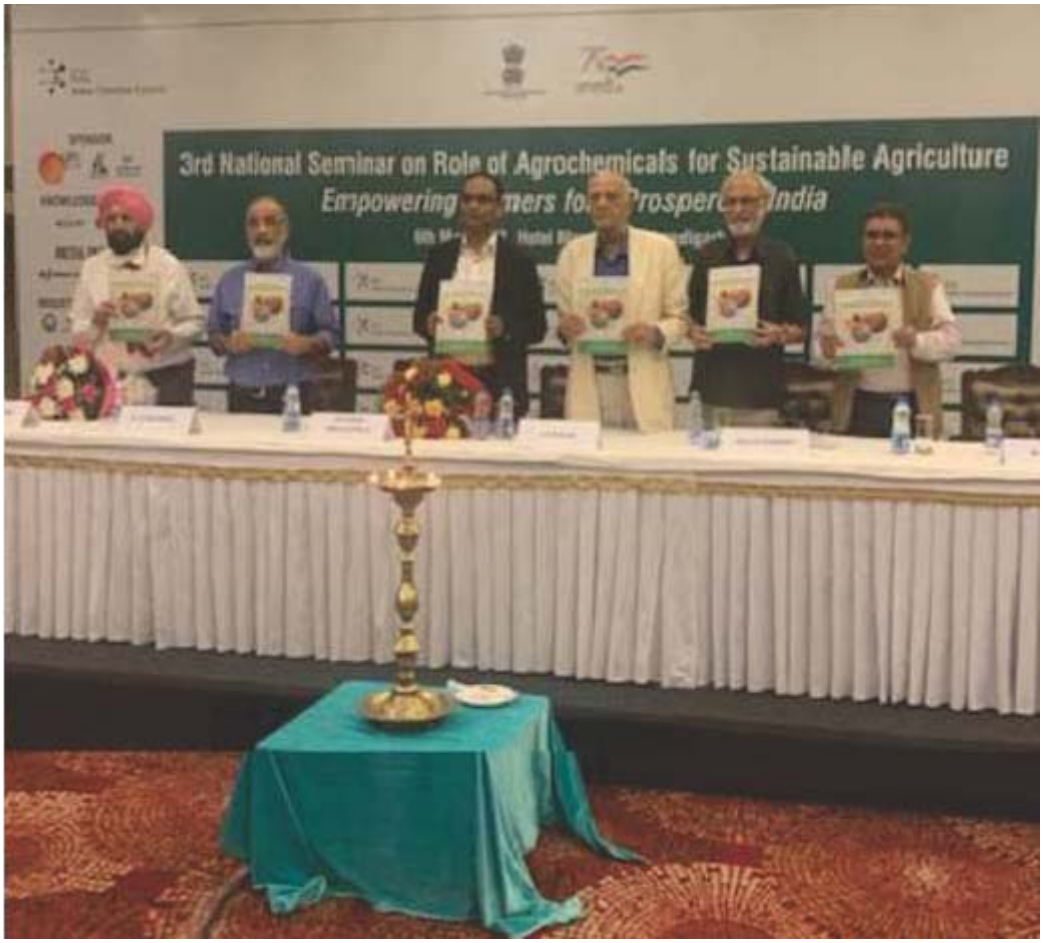
Padma Bhushan Shri. Rajju Shroff , Chairman Emeritus CCFI welcomedMs Arti Ahuja, IAS, Secretary (Chemicals & Petrochemicals) with a bouquet of flowers who had specially come to Chandigarh to attend this seminar.

There was also a display of drones which would be used for surveillance survey and spraying pesticides.

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

The issue like stubble burning was also taken up by executive of Nurture Farm for quick clearing of fields as a cheaper option and to totally avoid pollution. This concept of using decompositorhas worked well in Punjab and Haryana under the project initiated by UPL ltd.

The event was attended by Ms. Nirmala Pathrawal and Mr. Harish Mehta.



The panelists releasing the souvenir on the occasion

Padma Bhushan Shri. R D Shroff delivering the theme address.

Krishi Mahotsav- 2022
Dapoli, Maharashtra

CCFI participated in the Krishi Mahotsav-2022 from 13th to 17th May 2022 at Dr Balasaheb Sawant Konkan Krushi Vidyapeeth, Dapoli,Maharashtra.

The inauguration was done by Governor Bhagat Singh Koshyari in the presence of Maharashtra's Agriculture Minister Dadaji Bhuse. Dr. Sanjay. D. Sawant. Vice – Chancellor Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, agricultural university at Dapoli in Ratnagiri district, Maharashtra was present on this occasion.

Among the topic discussed were on mango and fruit cultivation, drip irrigation, control of pest and diseases, animal's husbandry and fish cultivation.

CCFI was represented by Ms. Nirmala Pathrawal. We had a open stall to carry demonstrate and training of the farmer who were given complete PPE safety kits free of cost sponsored by our member companies.

Front view of our open stall at Dapoli

Ms. Nirmala Pathrawal explaning the use of safety kits

Raksh Sutra- Hisar
Organized by CCFI & SWAL Corporation Ltd.

CCFI along with their member Swal Corporation Ltd. organized back to back 3 Farmers Training program and Technical session to create awareness among the farmer specially on control of pest on cotton.

Ms. Nirmala Pathrawal and Mr. Harish Mehta conducted these programs along with executive from Swal almost 700 farmers attended in which Dr. Rishi Kumar Sr. Scientist (Agri. Entomology) from ICAR- Central Institution for Cotton Research (CICR) made a presentation on agochemical practices and Pink Boll warm (PBW) management of successful cotton cultivation. He was of the firm view that PBW can be controlled by initiatively action both biological and chemical. He emphasized the need to follow Package of Practices of the state government to minimize the crop losses with timely application.

Mr. Vishal Sharma and Mr. Pramod Tiwari from Swal Corporation Ltd. explained on the damage caused by sucking pest on cotton. New product launches on this occasion a very well received by the farmers.
We distributed complete PPE kits to all the farmers and their contract labours. A press conference was organized by where executive from Swal Corporation Ltd. and Mr. Harish Mehta from CCFI explained the purpose of such seminar and media carried several stories on the event.

Inauguration ceremony

Kits being worn by the farmer

Dr. Rishi Kumar during the technical session

Raksh Sutra- Bhatinda
Organized by CCFI & SWAL Corporation Ltd.

Another seminar is organized at Bhatinda which is the main belt for cotton to create awareness among the farmers on Pink Boll Worm (PBW).

The program was inaugurated by lighting of lamp in which several dignitaries were present. On the Technical side Dr. Roopesh Arora and Dr. Harjit Brar talked about the agronomy practice for pest management on cotton.

Ms. Nirmala Pathrawal and Mr. Harish Mehta conducted a live demonstration on proper use of agrochemicals which included the dose and time of spray, making spray solution, types of nozzle and the spay to be used and the need to follow SOPs as recommended in package of practices of the state. The farmers raised several questions which were promptly answered by the panel.

Mr. Pankaj Joshi. and Mr. Pramod Tiwari from Swal Corporation Ltd. gave the company overview, their list of pesticides readily available and the judicious and safe spray. Dr. Vinay Singh presented the agronomic and pest management of controlling Pink Boll Worm which had resurfaced during Kharif 2022. There was also a session to state farmers experiences on new launch by SWAL Corporation Ltd. mainly Panama and other for which publicity was under taken by the company.

Free complete PPE Kits were distributed and farmers told to send their photographs while spraying wearing complete safety kits.

Happy farmers with the safety kits

Training in progress

A view of Attentive Farmers

Raksh Sutra- Hanumangarh
Organized by CCFI & SWAL Corporation Ltd.

As a part of joint endeavor between SWAL Corporation Ltd. and CCFI a Farmers Training Program was conducted at District Hanumangarh at Rajasthan which was attended by 800 farmers.

Under the theme “Raksh Sutra” to control Pink Boll Warm, since Rajasthan, Punjab and Haryana are areas with overlapping Bt cotton cultivation it was necessary to conclude the program on a very high pitch at Hanumangarh.

Dr. Rishi Kumar, Sr. Scientist (Agri. Entomology) ICAR- CICR, presented slides on pest management on PBW which was specifically noticed in the area. Hanumangarh adjoining cotton belts have irrigation by canal system and are imperative to ensure maximum yields by reducing crop losses.

Ms. Nirmala Pathrawal and Mr. Harish Mehta under took a live demonstration on safe use of pesticides and the need for wearing complete PPE kits which were distributed free. Special emphasis is on use of gumboots as snake are major problems in the area. CCFI and SWAL Corporation Ltd. also give mementoes to mark the occasion.

Inauguration with lighting of lamp

Explaining the Importance of Leaflet

Farmers Training cum Demonstration Programm At Mandal, Ahmedabad

CCFI along with their prominent members Meghmani Organics Ltd. organize Famers training cum demonstration program on 17th July, 2022 at Mandal 88 kms. from Ahmedabad, Gujarat.

Mandal is a historical town from where the owners of Meghmani groups originated their business. The area is extensively cultivating Tur (Red Gram). Almost 1000 farmers were present to listen to the package of practice for Tur.

The CCFI team comprising of Ms. Nirmala Pathrawal and Mr. Harish Mehta gives live demonstration on proper use of pesticides.

Mr. Jayanti Patel CMD, Meghmani group and Mr. Natwarlal Patel welcomed the farmers and gave an overview of their business. They also expressed gratitude to the CCFI team which was felicitated by them. Services of farmers were used for demonstrating the PPE kit and its advantages.

Earlier Mr. Ankit Patel, Mr. Ramesh Bhai, Mr. Anil Bhai, & Mr. Dilip Bhai praised the local farmers for making Modasa a hub for Tur cultivation.

Mr. Mohinder Punia, Mr. Vijay Veer Singh and Mr. Sachin Tomar worked around the clock to mobilize the farmers. The entire arrangements were overlooked by Mr. Abhishek Singh and Mr. Kushal Patel.

The purpose of the seminar was on enhancement of crop productivity at Mandal dist Ahmedabad. On this occasion Drone manufacturers organized a live demonstration on deployment of drones for spraying crop protection chemicals.

A press conference was organized where queries by media were responded to by us and there was major coverage on local T.V.

A traditional lunch was organised by the Meghmani Group for all the guests and the local farmers.

This was one of the exclusive training programmes conducted with one corporate member M/s. Meghmani Organics Ltd.

Farmers Paying full attention at the training session

Mr. Harish Mehta explaining on making spray solution

Dignitaries in the training program, at Mandal, Gujarat

Live demonstration by Drone manufacturers