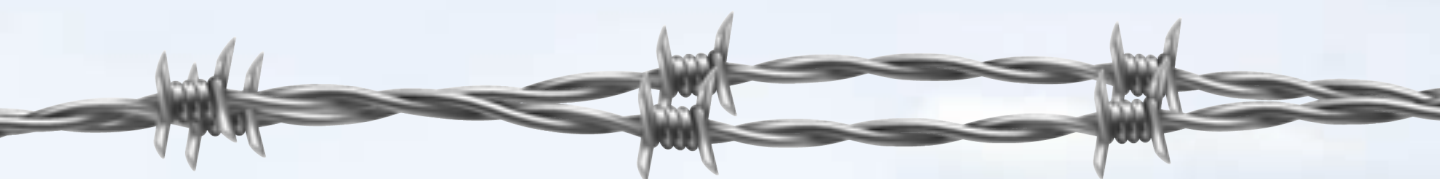




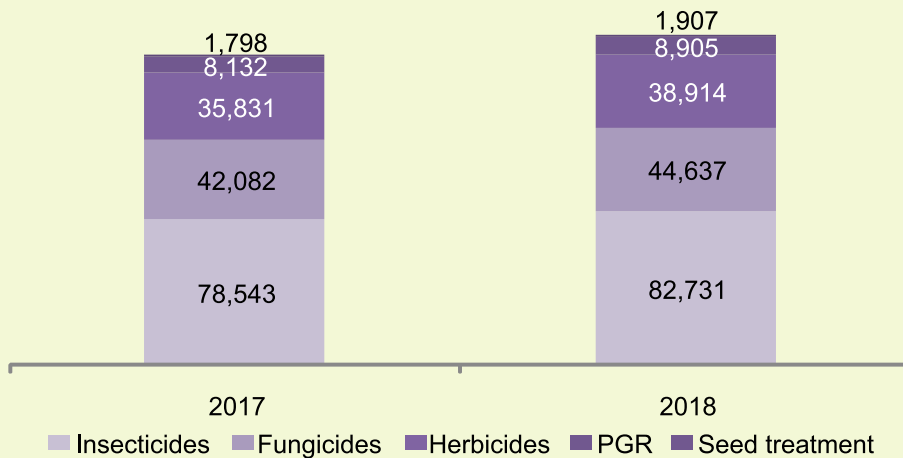
# Recognising & Fighting the Counterfeit

In Agro Chemicals



# Crop Protection Market Performance in 2018

Market size of crop protection products in India is estimated at INR 177.1 billion by sales in year 2018. It has registered annual growth of 6.4% over 2017, when the market was valued at INR 166.4 billion



Segment	2017 Value (INR Mn)	2018 Value (INR Mn)	YoY Growth %
Insecticides	78,543	82,731	5.3%
Fungicides	42,082	44,637	6.1%
Herbicides	35,831	38,914	8.6%
PGR	8,132	8,905	9.5%
Seed Treatment	1,798	1,907	6.1%
<b>Total</b>	<b>166,385</b>	<b>177,094</b>	<b>6.4%</b>

- Insecticides are the largest product segment by value, estimated at INR 82.7 billion in 2018, and has registered year-on-year growth of 5.3%
- Insecticides contribute 46.7% share of total crop protection product sales in 2018, marginally lower from previous year at 47.2%
- Herbicides have registered the year-on-year growth at 8.6%, with market value of INR 38.9 billion in 2018
- PGR was the fastest growing segment, with annual growth of 9.5% in 2018

# OVERVIEW & CHALLENGES OF COUNTERFEIT / SPURIOUS / ILLEGAL PESTICIDES

As per UN Forecast, India will have 1.5 billion people by 2030 and will be the most populated Country by 2030. There will be huge expectations from farmers to grow more food from less farm holdings. Crop Protection will play a big role in growing more and safe food for the country. The Indian Crop Protection Market size is estimated at INR 177.1 billion by sales in the year 2018. It has registered annual growth of 6.4% over 2017, when the market was valued at INR 166.4 billion.

With a fairly large market to be explored and with virtually negligible

check in the rural areas, the market attracts the counterfeiters. Spurious products are flourishing because of poor enforcement of law. If State Department officials can become strict on duplicate and counterfeit products, farmers can be saved from this menace which will help them improve their productivity.

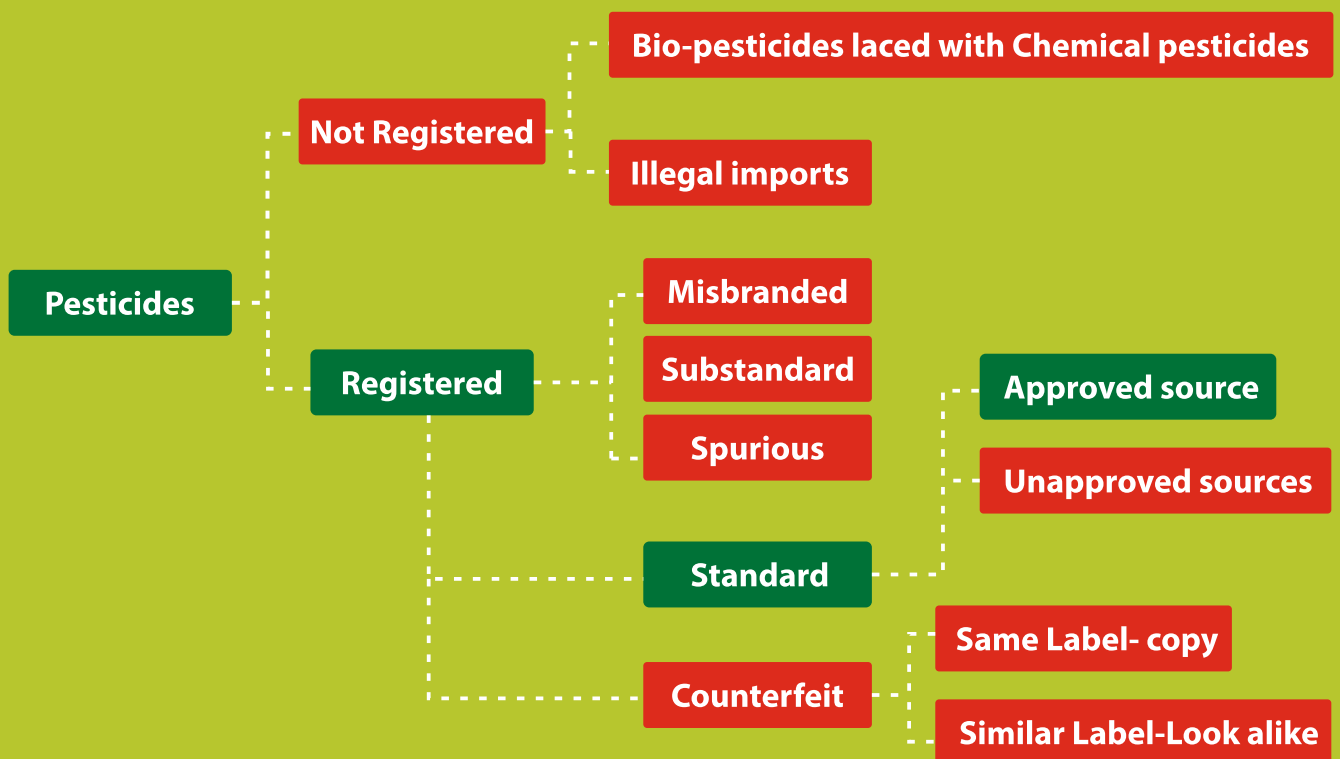
As per FICCI Report, It is estimated that 25% of products are being sold as illegal or counterfeit which threaten not only the efficacy for controlling the pest but also risk to the environment. This also has a knocking effect on the economy. As per

estimate of Indian chamber of commerce, due to use of these ineffective and illegal pesticides, there is annual loss up to 11 mio tons of food grains.

The exports of agricultural commodities received serious blows, when traces of these illegal pesticides are found in the country of exports.

## What are Counterfeits/Spurious/Illegal Crop Protection Products?

It is better to understand misbranded, substandard, spurious, illegal and counterfeit products based on the following chart:



\*Red signifies the illegal/spurious/Counterfeits

# Counterfeit and illegal pesticides

Counterfeit and illegal pesticides are often mislabeled and not registered for sale or use. They can pose a risk to human health and the environment, and can lead to severe damages or even a total loss of the crop.

## ORIGINAL PESTICIDES

- 4 Protect yields due to effective pest control.
- 4 Allow a sustainable production of high quality produce.
- 4 Enable farmers to freely trade their produce.
- 4 Pose no unacceptable risks when applied according to the label instructions.



## COUNTERFEIT AND ILLEGAL PESTICIDES

- 8 Pose a significant risk to human health and the environment.
- 8 Can result in trade bans for the produce.
- 8 Damage the reputation and image of the farmers.
- 8 Can lead to a full destruction of the crop.

## 9 TIPS FOR RECOGNIZING COUNTERFEIT AND ILLEGAL PESTICIDES

- The product is offered by a non-authorized dealer on the street or sold directly from a truck.
- The seller refuses to provide a proper invoice for the purchase.
- The price of the product is significant lower compared to the original.
- The label is not written in the local language and/or shows mistakes in grammar or spelling.
- The cap of the container is different from the original.
- The container is not properly sealed.
- The shape of the container is different from the original.
- The logo/trademark on the container or label looks different from the original.
- The holograms do not exist or are different from the original.

DO NOT PURCHASE OR USE COUNTERFEIT OR ILLEGAL PESTICIDES, BE ATTENTIVE AND ALERT, SAFEGUARD YOUR CROPS, PROTECT HUMAN HEALTH AND THE ENVIRONMENT.

REPORT ANY COUNTERFEIT AND ILLEGAL PESTICIDES TO YOUR LOCAL CROP PROTECTION ASSOCIATION OR TO THE RELEVANT AUTHORITIES.



[www.croplife.org](http://www.croplife.org)

Helping Farmers Grow

It is evident, that the situation is grave and needs to be addressed collectively by farmer Associations, industry players, government and pesticide regulatory bodies, in a time bound manner to curb further proliferation. If actions are not taken, the consequences can be disastrous because it's not just the industry which is suffering from image and revenue loss, all key stakeholders including farmers will face loss in their personal and regional reputation and their respective revenues. It's the farmer, who will lose the most, as he would bear the brunt of the presence of

non-genuine / illegal pesticides due to crop damages and low productivity.

At present Pesticides Registration, imports, manufacturing, distribution etc., is fully governed by Insecticides Act 1968 and rules framed. A draft Pesticides Management Bill 2008 was framed, which was further revised in 2017. Definitions of misbranded, substandard and spurious pesticides have been defined in the revised draft of PMB 2017. **This bill is yet to be tabled in the Parliament.**

Bio-Pesticides laced with Chemical pesticides, illegal imports, spurious pesticides manufacturing and counterfeits constituent the major portion of this segment.

Counterfeits are manufactured goods of inferior quality, under a trademark that is identical to or substantially indistinguishable from the brand owner's trademark for the same goods, without the approval or oversight of the trademark owner. Counterfeiting can be distinguished from traditional trademark infringement or passing off, which involves the use of confusingly similar trademarks or service marks on or in association with similar—as opposed to fake—products or services.



# Original Vs. Misbranded Pesticide Samples



Local brands selling chemical pesticides in the name of bio-pesticides



Un-registered Bio Product



Product with no place of manufacturing written

# CropLife India : Vision & Mission

## Vision

Food security enabled by innovative agriculture

## Mission

Safe, secure food supply



We, at CropLife India (a crop protection chemicals association), strongly believe that all key stakeholders should make a collaborative effort to curb this menace, which is in the interest of consumers, farmers, environment, government and industry as a whole.

Our objective is to promote sustainable agriculture through crop protection products. This plays a vital role in controlling the pests and diseases that threaten our food supply.

One of our main effort is the fight against counterfeit, illegal and spurious pesticides. We work regularly with relevant Government agencies – Ministries of Agriculture, Pesticide Regulators in different Countries and Customs Agencies, to eliminate illegal pesticides that have disastrous effects. Our efforts are aimed at making Customs and Pesticide Regulators work in collaboration with each other for efficient counterfeit pesticide identification and seizures.

We also conduct regular trainings and

host farmer education programs to ensure that farmers firstly, buy regulated and registered pesticides to protect their crops and secondly to instruct them on the favorable and efficient use of such pesticides. This not only maintains their land to be fertile but also ensures that their crops yield the maximum output.

## COUNTERFEIT / ILLEGAL ROUTES:

- Unregistered Bio Products laced with Chemicals
- Counterfeiting the Popular Brands (Look-a-likes)
- Illegal imports

## WHY DO FARMERS BUY??

- Low awareness
- Think that these bio products are safe and improve soil health
- Getting desired results
- May be comparatively cheaper
- Retailer or Peer influence

## WHY ARE COUNTERFEIT CPPS HARMFUL?

- Produced by mixing together substances that are unknown (Products not registered in the country may also be present)
- Promoted by unscrupulous dealers as "Bio Products", as they get high margins on such products.
- Can contain toxic impurities of the active ingredient (a.i.) copied. Safety profile not established
- Manufactured by companies with dubious credibility.
- No registration by the Central Insecticide Board.
- Operate pretending that they are not covered under the Insecticide Act.

# Challenges Faced by Farmers During Cultivation of Crops

Potential damage & risks caused by counterfeit and illegal Pesticides

- Health risks to farmers & operators applying them
- Potential to damage or destruction of the treated crop, ruining farmer's livelihood
- Unknown residues in food crops
- Environmental risks to wildlife, water and soil
- Environmental waste problems in terms of disposal

**Harmful to our Health Hazardous to our Environment Toxic to our Crops**

**Pest Attack**

**Disease Attack**

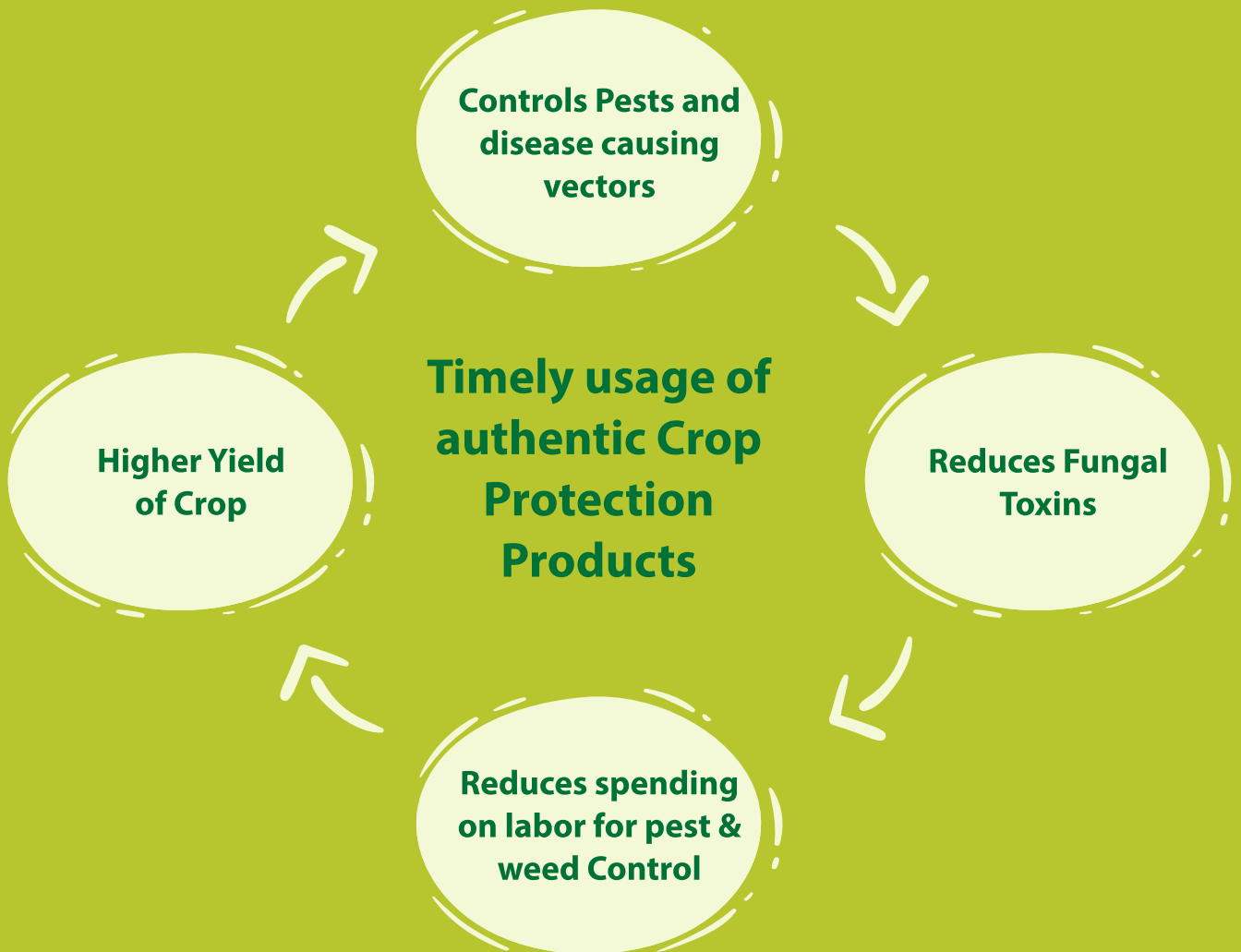
**High Labor Cost**

**Weed Problem**

**Labor Scarcity**

**Low Yield of Crop**

## Importance of Crop Protection Products in Farming



## Causes of Concern for use of Counterfeit Products

### Human Health

- ❖ Health risks to farmers who are applying them in field
- ❖ May leave toxic residues in food crops

### Environment

- ❖ May pose unknown risks to livestock, water and soil

### Crop Safety

- ❖ Effect on crop and its pest unknown
- ❖ Possibility of damage to the crop

### Brand Value

- ❖ Devalues IPR & Brand value of genuine CPPs
- ❖ Revenues of credible CPP companies adversely

### Revenue

- ❖ Governments lose out on unpaid tax and incur large costs in enforcing intellectual property rights

### Trade

- ❖ Impact on import MRLs and Tolerance leading to rejections of export consignments

### Can cause crop damage - crop safety not established



### Applicators safety not established / hence can cause health hazards





## Role of Crop Protection Companies

- Reputed Crop Protection companies spend over Rs.1500 crore a year for developing effective crop protection products
- Crop Protection Product goes through extensive field trails keeping human health, safety and environment as top priority
- Crop protection products are registered with Central Insecticide Board & Registration Committee as per law

Manufacture, Import, Registration,

Sale, Transport, Distribution and use of pesticides in India is regulated by The Insecticides Act, 1968 and Insecticides Rules, 1971.

All pesticides (Insecticides, Fungicides, Herbicides, Public health insecticides) must be registered with Central Insecticides Board & Registration Committee (CIB & RC), Ministry of Agriculture under various sections of Insecticides Act before they can be imported/manufactured for sale and distribution.

Once a crop protection product is approved by CIB&RC, it will be further approved by State Governments of each State for local distribution.

As per Insecticides Act pesticides are defined as those substances that are listed on the "Schedule" of the Insecticides Act, 1968. List of Insecticides in schedule can be obtained from the official website of CIB&RC. If there is any pesticide other than listed in schedule then it must be included in Schedule before it can be applied for registration with CIB & RC.

## Fines & Punishment under various Acts:

**1) Copyright Act, 2002:** Any person who knowingly infringes or abets the infringement of-

- (a) The copyright in a work, or
- (b) any other right conferred by this Act, 125[except the right conferred by section 53A] 126, shall be punishable with imprisonment for a term which shall not be less than six months but which may extend to three years and with fine which shall not be less than fifty thousand rupees but which may extend to two lakh rupees.

**2) Trademarks Act, 1999:** Any person who falsifies any trade mark shall be punishable with

imprisonment for a term which shall not be less than six months but which may extend to three years and with fine which shall not be less than fifty thousand rupees but which may extend to two lakh rupees.

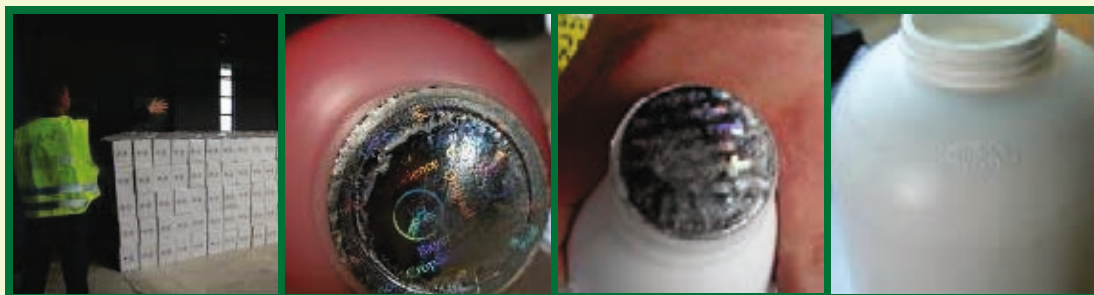
**3) Insecticides Act, 1968:** Whoever Imports, manufactures, sells, stocks or exhibits for sale or distributes any insecticide deemed to be misbranded under sub-clause (1) or sub-clause (iii) or sub-clause (viii) of clause (k) of section 3, shall be punishable...

- i. For the first offence, with imprisonment for a term which may extend to two years, or with fine which may extend to two thousand rupees, or with both;

- ii. For the second and a subsequent offence, with imprisonment for a term which may extend to three years, or with fine, or with both.

**4) Section 420 of Indian Penal Code (IPC):** Whoever cheats and thereby dishonestly induces the person deceived to deliver any property to any person, or to make, alter or destroy the whole or any part of valuable security, or anything which is signed or sealed, and which is capable of being converted into a valuable security, shall be punished with imprisonment of either description for a term which may extend to seven years, and shall also

**If an importer fails to furnish the complete details, then penal action may be warranted.**



*Counterfeit pesticides - well reproduced packaging with untested and unknown chemicals*

# Pointers for Customs Interception in India

## How can Customs help?

Enhanced cooperation is crucial for this. One of the ways in which Counterfeit Pesticides enter the local market is through smuggling in to the country – imports.

To address this challenge global best practices include Customs and Pesticide Regulators collaborate to fight against the entry of smuggled/illegal/counterfeit

pesticides. Pesticide Regulators can help Customs identify the chemical composition of the pesticide in question to determine whether it is illegal. Pesticide Regulators will also assist Customs in safely dealing with illegal pesticides. Being exposed to large amount of such chemicals can threaten health and safety.

Shipping Document hold the key in

identification of illegal pesticides' shipment, entering the country. /A simple search on the Internet will indicate whether the company truly exist and / or call the phone numbers furnished on the shipment details.

Customs can ask for accurate information from the Regulators – the Ministry of Agriculture for example. Information sharing can help Customs and vice-versa.

## Pointers for Customs

- CIB & RC Registration mandatory.
- In case of imported pesticides, it is necessary to properly declare basic information like:
  - ❖ complete description of goods,
  - ❖ common name and
  - ❖ Chemical name, grade, specification, etc.
- The traders often declare the pesticide in chapter-28 or 29 instead of Chapter 38.
- If import is from China: Customs must demand the ICAMA information:

### The China ICAMA ('One-Pager') Document

The ICAMA document ensures the identity and authenticity of the pesticide being exported from China and allows ICAMA to verify the registration status of the pesticide before each release.

## Look for lies in Shipping Documents

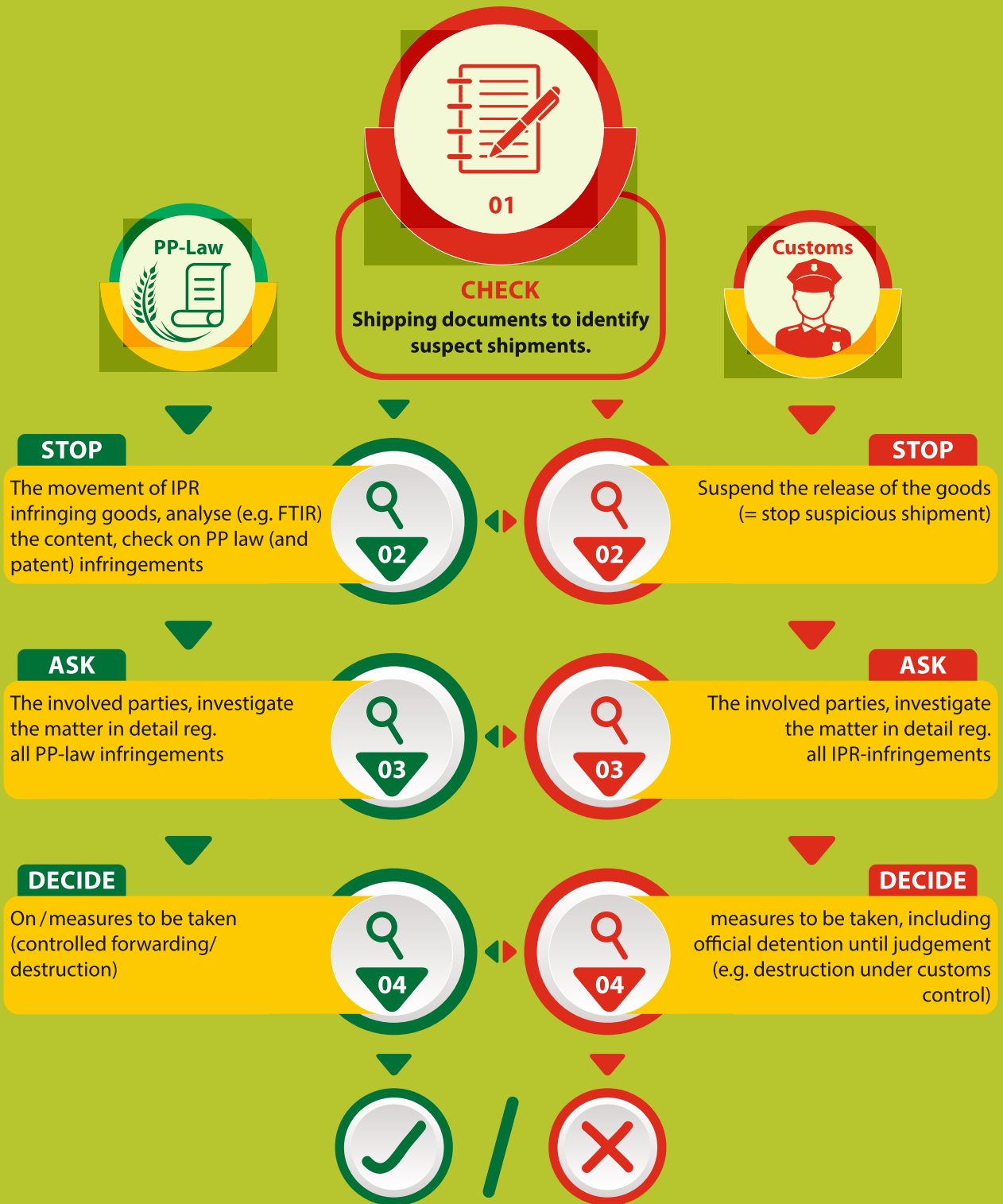
- False companies, consignees and phone numbers
- Vague chemical description; terms used include:
  - White powder or liquids
  - Unfinished products
  - Emulsifiers

ICAMA one page document required for pesticides export/Import China, Customs must ask for this, or the pesticides may be smuggled/illegal



# Detailed process of the 4 Steps

(Customs = first access)



## CropLife Suggestion: Technology can be of help

### FTIR an effective tool for faster screening of chemicals

The FTIR technology – is the Fourier Transform Infrared Spectroscopy



FTIR is a tool for quantitative analysis and has the ability to detect illegal materials which would help competent authorities to act and create a strong deterrent to criminal activity. FTIR meets the vision of a technology that can rapidly authenticate Crop Protection products, and detect hidden actives in illegal materials, at the borders and in the marketplace. The Industry would like to support authorities (Customs, State Department of Agriculture, Central Insecticide Board, Central Pesticides Testing Laboratory, and Department of Revenue Intelligence etc.) to find and implement solutions to detect and stop criminal activity with highly regulated pesticides.

**“Technology allows rapid analysis of pesticides and significantly improves Government’s enforcement capability”.**

CropLifeIndia would recommend to use Portable FTIR technology instead of bulk machine. The machine can be used absolutely anywhere along with a laptop and internet connection. This can be very helpful if taken directly to

farmers, for in-market operations and for Customs to identify whether the pesticide is legitimate.

**Custom officers can be trained to utilize this technology to identify fake products.**

- CropLife India is working with Pesticides Regulators to induct this technology for in-Market investigations, through Pilot Projects.
- CropLife India can facilitate infusion of Portable FTIR technology through demonstration to Customs and Pilot Project in collaboration with Pesticides Regulators.
- CropLife India conduct trainings across the country in collaboration with Customs Department.



The Workshops concluded that FTIR is an effective tool in screening and a Pilot Project was proposed to be implemented in collaboration between Department of Agriculture and Cooperation and CropLifeIndia.

**These technologies are being used by Regulators in Brazil and China.**

## Checklist for Farmers Buying Counterfeit CPPs

- ❖ Always buy CPPs from reputed stores/trustful suppliers only.
- ❖ Beware of illegal mobile sellers.
- ❖ Insist cash receipt on every purchase
- ❖ Refuse to purchase pesticide if there arises a doubt in pricing
- ❖ Check for Registration number on the pack
- ❖ Check for manufacturing and expiry details on the pack
- ❖ Seal shouldn't be tampered at the time of purchase
- ❖ The pack or bottle should not be broken or cracked.
- ❖ Ensure that the products have proper labels with complete instructions in English/local language, which guarantees the authenticity of the product

## Government Checklist for Dealers/Retailers

The Government therefore, requests all licensed dealers and retailers of crop protection products to come forward and participate to make the endeavour to 'Grow Safe Food' so that our health and environment continue to remain safe and protected.

Here are a few simple advices for dealers consideration and necessary action:

- i. Refrain from stocking/distributing/exhibiting/sale of counterfeit/fake products.
- ii. Do not stock/distribute/exhibit/sell products that do not possess a valid certificate of registration and license from the State Government under the provisions of Insecticides Act, 1968 and Insecticides Rules, 1971.
- iii. It is mandatory under the law to have a valid pesticides license in order to sell, stock or exhibit for sale or to distribute pesticides.
- iv. All dealers/retailers of pesticides products should procure their stock from legitimate sources with proper bill/invoice.
- v. It is mandatory to provide a bill or invoice in the form prescribed by law with details of batch no, manufacturing and expiry dates, to customers/farmers on sale of crop protection products.
- vi. Do not sell pesticides past their date of expiry.
- vii. Advise the farmers to read instructions on the labels and leaflet of the pesticides before use. Please assist the farmer by reading and explaining the contents of the label and leaflet. Please do not tender any advice to farmers or customers that is not contained in the pesticide label or leaflet.
- viii. Do not recommend dosage, timing and numbers of sprays, mixing with other pesticides to farmers and customers that is not expressly printed on the pesticide label or leaflet.
- ix. As a responsible citizen, please inform the nearest police stations/agriculture office about any information related to sale of spurious pesticides.
- x. Please cooperate with authorities in promoting bonafide and quality products and their use as per instructions on labels and leaflets.
- xi. Please advise farmers about the proper disposal of packing and unused material.
- xii. Please refer to the Insecticides Act, 1968, the Insecticides Rules, 1971 and guidelines of the Registration Committee.



## CropLife India's major Anti-Counterfeit Activities:

### Some significant steps

- ❖ Farmer & Dealer Engagement: Driving Farmer & Dealer awareness: By media and Posters
- ❖ Letter to Dealers under Grow Safe Food Campaign
- ❖ Policy Advocacy: Meeting with key officials of critical States to inform them about the issues and encourage joining in the campaign.
- ❖ Support Enforcement & Prosecution
- ❖ Customs Workshops/FTIR: FTIR Technology training programs for Custom officers across India
- ❖ Public Information Campaign: Yearly publication of CropLife India ACF Newsletter to spread awareness on ACF activities conducted till date.
- ❖ Educating Farmers on how to buy genuine products through Pilot projects & Awareness campaign
- ❖ Showcasing ACF Film in various languages
- ❖ Inclusion of an Anti-Counterfeit Module in the curriculum of Diploma for Agriculture Extension Services for Input Dealers (DAESI) Course managed by SAMETI, Government of West Bengal, India.

## Enforcement

Every year member companies conduct 300+ raids with the help of local enforcement officers which include seizures, cancel of licenses, registration of FIRs' etc.

- To make it more impact-ful, every action is captured by the Media.
- Print Media clippings of few of the many cases registered by various Member Companies through different Enforcement Authorities viz Police, Agriculture Dept. etc. can be seen here.



## Recommendations for Key Stakeholders

### Urgent Steps for checking illegal/counterfeits

Different stakeholders are involved in the process of curbing the menace these fake products. Some of the steps suggested are as follows:

- 1) Ministry of Agriculture , Cooperation & Farmers Welfare, Govt. of India (MOA & FW) shall constitute a Task Force on non-genuine pesticides with following points to consider:
    - Should ensure that Pesticide Management tabled and passed by Parliament Bill be 2017
    - Uniform interpretation and understanding of various provisions and definitions of the Insecticides Act 1968 between both central and state governments for better coordination; thus minimizing chances of misunderstandings and confusions among industry, traders and farmers
    - Standardization of sampling procedures & improvement in working & quality of laboratories
    - Creation of National repository for certified reference standards
    - Stringent action against those involved in supplying non-genuine pesticides and Bio-products laced with pesticides while separating it from PGRs
    - Use of FTIR technology for quick scanning and to enhance Centre-State(s) coordination
  - 2) The State Government laboratories should be accredited with NABL and must be upgraded with proper equipment for quality check.
  - 3) Regulatory authority both at Centre and State to ensure that the compliance of such norms framed with a system and defined process.
  - 4) MOA & FW in coordination with state govt. should define process for a periodic check on all manufacturers of pesticides to whom the registration certificates are issued. This will involve the inspection of premises, infrastructure, quality control labs, equipment's and man power to ensure that products manufactured conform to standards.
  - 5) All reputed manufacturers ensure that all products manufactured by them conform to the vigorous quality control check and are released in the market only when they are cleared by their R & D. Drawing samples of these manufacturers just to fulfill the quota of samples which the State Department of Agriculture has fixed will not serve any purpose. Random sampling procedure should be used on computer to draw samples for testing quality of crop protection products. This can be used to enhance transparency and accountability.
  - 6) Central Insecticide Board should grant registration only to those units which have requisite infrastructure for manufacturing and quality assurance. Necessary procedure need to put in place for routine audit of such units.
  - 7) Central Insecticide Board may consider deploying cutting edge technologies such as QR code to ensure delivery of quality pesticides.
  - 8) There is a need to educate farmers to increase their awareness about quality in puts. This can be done under PPP mode.
  - 9) GST on all agri inputs should be reduced with at par with other agriculture inputs so that the benefits reach all farmers.
  - 10) Run a mass awareness campaign like ' Jago Bharat Jago' addressed to farmers, dealers and agri officials
- For any clarification / doubt, the farmers should call on Toll free numbers provided on packs.

*With all these factors into consideration, the onus of embarking an approach to address the issue of non-genuine / illegal pesticides lies on Government of India, State governments, regulatory bodies and industry. A collaborative and comprehensive approach is needed to overcome the menace of non-genuine / illegal pesticides in the Indian agriculture sector, thereby ensuring food and nutrition security for the nation and export crops for the national economy.*

## About CropLife India

CropLife India (<http://croplifeindia.org/>) is an industry association of 16 R & D driven member crop science companies. We jointly represent approximately 70% of crop protection market and are responsible for 95% of the molecules introduced in the country so far. Our member companies have annual global R & D spend of 6 billion USD and are firmly committed to engaging with the farming community to enable Safe, Secure Food Supply. We are part of the CropLife international network; and work closely with CropLife Asia & CropLife International, the global parent organizations spread across 91 countries, to drive programs to promote safe, responsible and judicious use of crop protection solutions under the Integrated Pest Management (IPM) approach through Product Stewardship, Progressive Regulation, Intellectual Property Rights and Data protection.

## Our Members



## Our Associate Members

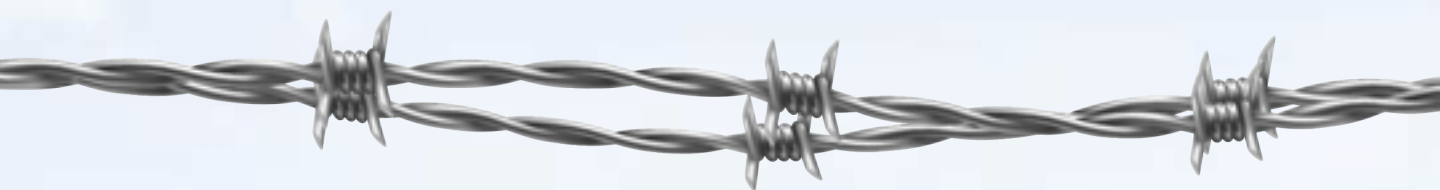


### References:

- FICCI Report 2015
- Inputs & Photographs from the CropLife India Member Cos'

**Disclaimer:** This Handbook is distributed free of cost as a service to the Key Stakeholders for purposes of information only. Stakeholders are advised to take decisions based on their own intelligence & sources judgment. While every care has been taken while compiling and publishing the information contained in this handbook, CropLife India or its principals and affiliates shall not be responsible for any errors or omissions or for any consequences arising out of reliance on its contents.

## Counterfeit Pesticides – Dangers Gallore



**Let us join hands to combat this menace  
for a better tomorrow**



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