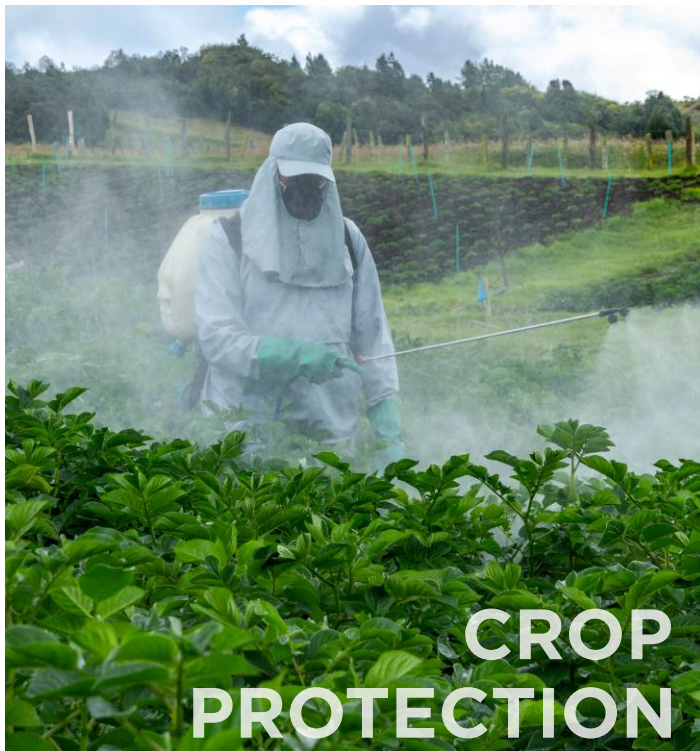


REPORT FOR NATION

Making Indian Farmer
Atmanirbhar;
Counteracting Illicit,
Spurious and
Counterfeit
Agriproducts in India.



Authentication Solution Providers' Association
Fighting fakes since 1998



Issue Date

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FOREWORD

On behalf of ASPA, we feel privileged to present this White Paper, **“Making Indian Farmer ATMANIRBHAR – Counteracting Illicit, Fake, Counterfeit and Spurious (IFCS) in India.”**

We all understand the magnitude of counterfeiting as it has a long and ignoble history. It is impacting both economically and socially. Perhaps, unlike other industries, counterfeiting in the agriculture industry may have consequences beyond economic losses to consumers, society, and the environment.

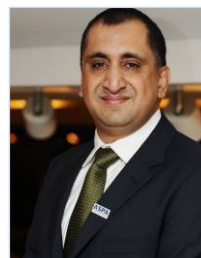
Though we know IFCS agriproducts enter the supply chain, the time and place of their entry are unpredictable. Managing this uncertainty has become more important due to the recent rise in the incidence of counterfeit reporting. We must reduce the entry and effects of counterfeit parts through increased diligence and active control measures. To accomplish this, it is necessary to have greater collaboration both within the industry and with the government.

At ASPA we believe that we can contribute in a small way to fighting this menace by bringing this issue into the limelight at all Industry and government forums. Our members are also working with brand owners and Government bodies in providing technologically advanced solutions to fight this menace.

We strongly believe that the recommendations offered in this report will help the agriproducts industry to enhance its fight against a fake. Moreover, we invite government and like-minded stakeholders to join us in further enhancing and designing solutions. We are confident that with the support of all affected parties, we can help in curbing the impact of counterfeiting.

This report is part of our initiative in building awareness of the Economic and Societal Impact of Counterfeiting and enabling all stakeholders to give a higher priority to combating this menace, often called the “Crime of the 21st Century”.

We hope you find this report useful.



Nakul Pasricha
President



Luv D Shriram
General Secretary &
Treasurer

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1.

EXECUTIVE SUMMARY

About the White Paper

Illicit, Fake, Counterfeit, and Spurious (hereinafter referred to as IFCS) Agriproducts are not a new problem and for more than a decade, regulators, industry, and farmers across various countries have been struggling with the issue. There have been many published studies on this important topic, however, this white paper intended to provide the latest update with recent increasing incidents of ICS agriproducts, along with a glimpse from ASPA and CRISIL's latest report "State of Counterfeiting in India 2022" providing consumer perception, key learnings from global best practices and way forward for India to counteract this issue.

Purpose of the White Paper

Various factors contribute to the increase in IFCS agriproducts. The foremost factor is the lack of awareness about the severity and impact of this menace. The White Paper is the part of ASPA initiative in building awareness of the Economic and Societal Impact of counterfeiting across the sectors. It is designed to provide insight to all stakeholders (including brand owners and government authorities) to deepen their understanding of IFCS agriproduct's latest trends, and consumer and industry perception and help policymakers to formulate stronger strategies and policies to fight this menace.

Key highlights of this White Paper

- Consumer perception on the extent of counterfeiting: 30% of the market.
- Counterfeiting prevalence across cities. However, Uttar Pradesh, Bihar, Madhya Pradesh, Jharkhand, Karnataka, Haryana, Maharashtra, Tamil Nadu, and Telangana are most affected by the menace of illicit agriproducts.
- Reasons: Price sensitivity, peak demand in seasons and lack of awareness, lack of monitoring and surveillance, inadequate judicial frameworks, and penalties. 40% of farmers bought counterfeit products because of low prices. Lower cost and unavailability of original products.
- Methods adopted by the industry to check counterfeit: Few brands are using anti-counterfeiting technologies, however, educating them on these tools is crucial and needs to be done on a mass level.

Methodology

This White Paper has been made by methodically monitoring and collating news from leading English and vernacular print and digital media across the country, ASPA & CRISIL Report State of Counterfeiting in India 2022 along with database available at the ASPA established Counterfeit News Repository (A single stop source for all counterfeiting incidents reported in India,

<https://www.counterfeitrepository.com>).

2.

INTRODUCTION

IFCS AGRIPRODUCTS (CROP PROTECTION, SEEDS, AND FERTILIZERS) – THE GROWING PROBLEM

Counterfeiting is a challenge for every sector and agricultural input sectors in India is not immune. For more than a decade, regulators, industry, and farmers across various countries have been struggling with the growing IFCS agriproducts. Over the few last years, we have noticed a steady increase in the number of infringements. Beyond economic losses, these practices are commonly connected with criminal activities leading to tax evasion, fraud, corruption, and even labor exploitation, which hurts society on a large scale. The few worldwide statistics are as follows:

Europe (2016): The legitimate industry loses approximately EUR 1.3 billion of revenue annually due to the presence of counterfeit pesticides in the EU marketplace, corresponding to 13.8 % of the sector’s sales.

Ukraine (2016): illicit pesticides make up about 25 percent of the total pesticide market.

Africa: It is estimated that Africa loses up to 70 percent of their food production because of low-quality or counterfeit seeds. According to the African Seeds Access Index (TASAI), the challenge of fake and sub-standard is partly responsible for the massive disparity in maize production among African countries, with Egypt producing an average of 7.7 tons per hectare compared to Ethiopia’s 3.7 tons and Kenya’s 1.5 tons per hectare. An estimated 30% of the seed on the Ugandan market alone is fake, according to the Uganda National Bureau of Standards.

Brazil: It’s 20 percent — \$2 billion annually.

Ecuador: At least 30 percent of the seeds have an illegal origin.

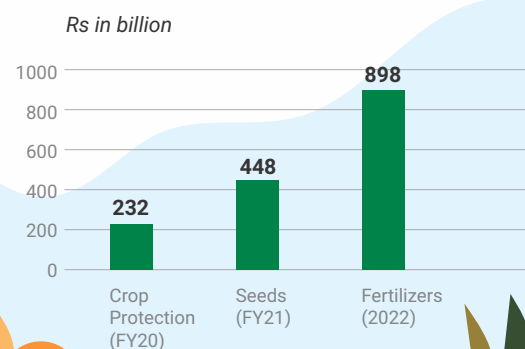
India: As per a FICCI report, nongenuine/ illegal pesticides account for ~25% by value and ~30% by volume of the domestic agrochemical market in India. Similarly, last season in 2021, Telangana authorities seized more than 346 tonnes of spurious seeds, mainly cotton and chili.

“Counterfeiting is a challenge for every sector and agricultural input sectors in India is not immune

Stakeholders	Counterfeit expectation
FICCI-TATA Strategic Management Group (TSMG) report 2015	~25% by value and ~30% by Volume
ASPA & CRISIL Survey: Consumers/Farmer’s perception	~30%
Retailers/ distributors/ manufacturers	30-35%
Associations/Industry experts	30-35%

Table: Stakeholder/reports for counterfeit expectations-Agriproducts

Agriculture input sectors market size in India



3.

EXTENT OF THE PROBLEM – MOST AFFECTED STATES IN INDIA AND CONSUMER PERCEPTION

The problem of IFCS agriproducts has spread across India, with hardly any region not affected by it. Uttar Pradesh, Bihar, Madhya Pradesh, Jharkhand, Karnataka, Haryana, Maharashtra, Tamil Nadu, and Telangana are most affected by the menace of illicit agriproducts.

As per the ASPA and CRISIL consumer survey, ~35% of consumers willingly purchased counterfeit agriproducts; out of these, 40% brought them due to lower cost and 31% due to the non-availability of original products. Consumers in Chennai, Hyderabad, and Kolkata had seen higher instances of counterfeit agriproducts as compared with other cities.

DELHI NCR	AGRA	JALANDHAR	MUMBAI	AHMEDABAD	JAIPUR
15%	4%	9%	14%	12%	7%
INDORE	KOLKATA	PATNA	CHENNAI	BANGALORE	HYDERABAD
11%	22%	13%	40%	12%	21%

Figure 18: City wise extent of counterfeits-Agro chemicals

Table: Glimpse of a few counterfeit Incidents reported in Media in the last few years

S.No	DD/MM/YY	Location (State)	Incident
1	25-03-2022	Purnia, Bihar	Fake fertilizer factory busted
2	07-03-2022	Begusarai, Bihar	Fake pesticide drug factory busted
3	24-02-2022	Gopalganj, Bihar	Fake urea factory exposed
4	20-01-2022	Prayagraj, Uttar Pradesh	Fake DAP fertilizer factory busted
5	20-01-2022	Khagaria, Uttar Pradesh	Fake fertilizer business exposed once again
6	27-11-2021	Chitrakoot, Madhya	Pradesh Fake fertilizer factory unearthed; 300 sacks recovered
7	25-11-2021	Jabalpur, Madhya Pradesh	Crime branch raids on suspicion of selling fake pesticides
8	04-09-2021	Ludhiana, Punjab	Counterfeit pesticides, fertilizers seized
9	07-08-2021	Kushinagar	Fake fertilizer factory busted; 675 kg of duplicate fertilizer seized
10	02-08-2021	Delhi	Delhi police busted a spurious pesticide factory in Mundaka

4.

TYPES OF IFCS PRODUCTS IN THE AGRI-VALUE CHAIN:

The key forms of illicit agriproducts include.

4.1 Fakes:

These products are often sold in simple packs (white bottles) with minimal information on the label about their use and no mention of any health or environmental precautions. For example, in the case of pesticides, it contains anything from water or talc to diluted and outdated or obsolete stocks, including banned or restricted materials. Some fakes also provide a degree of biological control, as they sometimes may contain an illegal and untested copy of the proprietary active substance.

4.2 Counterfeit of genuine branded products:

These are sophisticated copies of legitimate branded products, usually with high-quality labeling and packaging. Most contain a copy of the original active substance; however, their efficacy is often diminished owing to a high level of impurities and process byproducts. It is often difficult to distinguish such products from genuine ones. Mostly, farmers are

fooled into buying them unknowingly in the absence of proper education and awareness. In various cases, counterfeiters purchase genuine, empty bottles from farmers for as high as 25% of the MRP mentioned on the original bottle. The counterfeiters then put substandard ingredients into the bottle and resell it. The products are labeled with false variety names or minimum quality standards.

4.3 Illegal parallel imports:

These are legitimate parallel traded products substituted with illegal generic copies, repackaged, and sold as legitimate products.



5.

THREATS AND RISKS BEYOND ECONOMIC LOSSES

Illicit agriproducts pose a significant threat to various stakeholders. While the extent of the size of IFCS agriproducts can be debatable, no one doubts the impact of severity beyond the economic losses. The greatest loss is for farmers and society.

The agriproduct manufacturers' brand integrity and sales are always at risk, there are issues with product recalls and liability clauses. For the industry inputs providers and governments, it leads to a decline of public confidence and trust in their Agri value chain system, professionals, and agencies, and increased enforcement costs. There is a high risk of environmental contamination and adverse effects on groundwater, crops, and biodiversity. Firstly, the production of counterfeit products may subvert environmental regulations leading to the production processes and waste contaminating the land, air, and water. Secondly, the use of Counterfeit products, such as pesticides, may cause severe crop and environmental damage. Thirdly, the destruction of counterfeit products can result in more landfill waste or toxic fumes from incineration. Various cases of farmers committing suicide due to the loss of crops have also been reported by the media. The few incidents showcasing the impact are as follows:

- **2015:** Agro-exports worth Rs 27 billion are at stake due to fake pesticides.

<https://www.thedollarbusiness.com/news/agri-exports-worth-27-billion-at-stake-due-to-fake-pesticides-says-study/30799>

- **2015:** The use of spurious chemicals in the country is expected to cause the loss of 10.6 million tonnes of food production loss.

<https://fikki.in/pressrelease/2142/fikki-press-oc8-chem.pdf>

- **2020:** Fake pesticides cause huge losses to apple industry in Kashmir

<https://www.siasat.com/fake-pesticides-cause-huge-losses-to-apple-industry-in-kashmir-2009076/>

Pulses production can increase up to 25 percent if farmers apply genuine pesticides on time, according to industry body Crop Life India. At a time when the country is facing a shortage of two million tonnes of pulses in the country which leads to price inflation.

<https://economictimes.indiatimes.com/news/economy/agriculture/use-of-genuine-agrochemicals-can-raise-pulses-output-by-25-crop-life-india/articleshow/49968109.cms?from=mdr>



6.

KEY REASONS FOR THE INCREASE OF IFSC AGRIPRODUCTS IN THE VALUE CHAIN

The problem is growing because of various factors, such as:

a. Lack of awareness about the

magnitude of this issue: Perception of the harmfulness of agrochemicals is moderate among farmers as per the survey findings, leading to more farmers buying counterfeits. On the other hand, national anti-counterfeit activities tend to focus on high-profile sectors of the economy, such as luxury goods, pharmaceuticals, alcohol, and tobacco. Illicit trade in agricultural sectors need urgent attention.

b. Difficulty in the identification of fake

products due to lack of awareness: In India, most farmers lack awareness of the usage and identification of pesticides. Many do not ask for specified chemicals or brands, and often ignore them if specific details are not available on the products. Ironically, even though food manufacturers and producers are consumer-oriented companies, they do not publicly highlight this issue. Farmer organizations and co-ops must play a leading role in increasing awareness about the risks of using counterfeits.

c. Price: Price is a major factor in the buying decision of agrochemicals, but awareness of risks associated with counterfeits is important. As many as 40% of farmers bought counterfeit products because of low prices. prices and lower

yields and earnings, a higher number of farmers are looking for low-priced alternatives.

d. Incentivizing trustworthy stakeholders:

it is important to find champions in farming communities. Trustworthy Agriproducts dealers are forced out of the market when they cannot compete with cheap, counterfeit manufacturers – forcing some farmers to travel further for genuine inputs.

e. Lack of monitoring and surveillance:

Since the responsibility of enforcement is divided between regional and national authorities, political divisions and sensitivities have led to weak enforcement coordination and action. At the national level, this requires multi-disciplined specialist teams with skills in policing and prosecution, chemicals, agriculture, customs, environment, etc.

f. Inadequate judicial frameworks and

penalties: India does not have adequate legislation to properly prosecute counterfeiting.

g. Challenge of quantifying the problem:

It is difficult to present detailed data on the extent and growth of the problem of illicit trade because of the nature of the activity. This is a common problem with all the sectors facing counterfeiting. The estimates of the size of the problem are generally very wild.

Table: Stakeholder/reports for counterfeit expectations-Agro products

Consumer	Price is a major factor in the buying decision of agrochemicals, but awareness of risks associated with counterfeits is important. As many as 40% of farmers bought counterfeit products because of low prices. Perception of the harmfulness of agrochemicals is moderate among farmers as per the survey findings, leading to more farmers buying counterfeits.
Retailers	The availability of agrochemicals during the peak demand season and distributors' inflation determines the demand for counterfeits in the market.
Industry	The counterfeit market is growing faster than agrochemicals supply, manufacturers/ leading to higher penetration of counterfeits. Further, with higher industry experts' prices and lower yields and earnings, a higher number of farmers are looking for low-priced alternatives.



TECHNOLOGICAL TOOLS AND SOLUTIONS AVAILABLE TO COUNTERFEIT IFCS AGRIPRODUCTS

Protecting **Agricultural products** from counterfeiting, tampering, and diversion demands a new mindset for manufacturers and regulators alike: they must recognize the need to treat the product packaging like a valuable currency and secure it with robust security and authentication features.

Farmers do not have any tool/medium to differentiate genuine pesticides from fake ones at the time of purchase. Due to a lack of awareness and illiteracy, they rely on visual appeal and can only check the quality of products with the marking of ISI/AGMARK. However, with advancements in digital technology, it has become easy for unethical manufacturers to produce fake ISI/AGMARK products as well. Integrated with track-and-trace technologies, tools such as security hologram seals and labels, tamper evident security films, low-cost transponder tags, and light-sensitive ink designs can help farmers and enforcement authorities identify genuine and fake pesticides. However, educating them on these tools is crucial and needs to be done on a mass level.

The key technologies available in the market are as follows:

Layers of Security

Uses a multi-technology approach, including layers of overt, covert, digital, and analytical technologies, to address counterfeiting, tampering, and diversion through a strategy of interdiction, authentication, and digital verification.

Overt Technologies

Overt technologies are designed to be easily recognizable but difficult for counterfeiters to replicate. They deliver

unique visual features that a consumer can easily validate in a point-of-sale environment with the tools they carry with them every day—their eyes. These features include inks, holograms, labels, and tamper-evident seals and provide the first layer of protection against the fraudulent use of a product.

An overt mark gives caregivers something to look for before administering a product to know that they have the right product in hand and that it is authentic. At the same time, overt authentication technologies empower consumers to take part in the authentication process as well since little training and no equipment is required to identify a well-executed overt mark as authentic.

Covert Technologies

Covert technologies contain hidden features that are not visible to the human eye and can only be detected with commercially available microscopes or specialized readers, making them ideal for second-level field investigators looking for an added degree of certainty in the authentication process. Covert solutions can be incorporated into products along with overt authentication solutions or can function on a stand-alone basis to protect against counterfeiting. A hospital worker concerned about a potential simulation of packaging may not have time to send a questioned drug out for third-party analysis. A covert feature can provide a field investigator (such as a food regulator security officer) an additional level of assurance that a product is authentic (or verifiable cause for concern that it is not). Current technology features a broad spectrum of covert authentication solutions that varies from machine-readable technology and micro-text.

Track-and-Trace Digital Technologies

Digital-authentication solutions provide actionable intelligence to brand owners through electronic means so that they can pinpoint unauthorized sellers on the internet, track-and-trace products through the distribution chain, and remotely authenticate a product anywhere and anytime by scanning a product label with a smartphone or by entering a code into a web-platform. A robust digital authentication program can help prevent IFCS agriproducts from entering the supply chain providing a key complement to the benefits of overt and covert technologies.

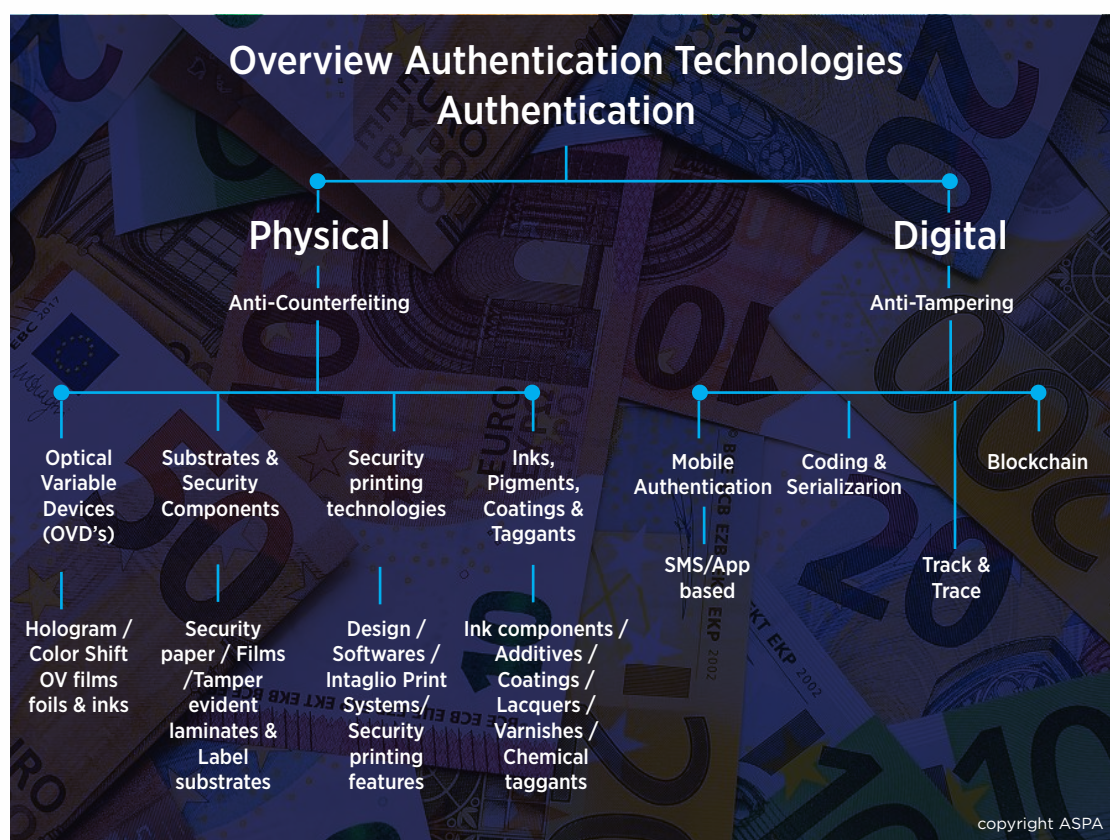
Spectroscopic Analytical Technologies

Field instruments capable of characterizing and analyzing the unique light signature of organic materials can play an important role in the fight against counterfeiting by determining a product's authenticity (and safety) quickly and

reliably. Once only available for lab use due to their size and cost, vendors have developed relatively low-cost and portable instruments that are suitable for non-destructive analysis in the field.

The idle Solution

To generate the best solution, industry and regulators should use ISO 12931 to consider all appropriate technologies and match the best features and techniques with their customers' particular challenges. In many cases, only a combination of technologies will meet customer requirements. While it is difficult to establish specific rules across various challenges and issues, strategies that incorporate an amalgamation of overt, covert, and forensic security technologies provide the most functionality to deliver the optimal level of authentication.



8.

GLOBAL EXPERIENCE

While there have been some notable movements in the seed digitization space, with countries adopting legal traceability acts; however, in most cases, they are poorly enforced. At the primary production level, the traceability system is poorly developed, and the primary product traceability is low (lack of control, unorganized markets, etc.), while the conformity of many Food Business Operators, especially farmers, is the bare minimum.

Recent developments in the African Region

The African Union (AU) launched a new initiative to improve access to quality seeds for small-scale farmers across the African continent amid efforts to boost food production in the post-COVID-19 pandemic era. In the latest industry updates, the African Union Development Agency-NEPAD (AUDA-NEPAD) and the African Agricultural Technology Foundation (AATF) have signed a collaboration agreement that will, among others, facilitate a standard method of ensuring quality seeds are available to farmers.

Apart from this, the 21-member Common Market for Eastern and Southern Africa has also launched an initiative known as the Alliance for Seed Industry in Eastern and Southern Africa that enforces stringent seed regulations and educates farmers on hazards linked to counterfeit seeds.

So far, various African countries have launched different initiatives to assist farmers in detecting counterfeit seeds. For instance, the Kenya Plant Health Inspectorate Service (KEPHIS) requires certified seed manufacturers to print a 12-digit code on seed packets the farmer scratches. The farmers can send the code back to the agency via an SMS, confirming

if the seeds are genuine or not. The KEPHIS seed sticker label has been hailed as a breakthrough and has proven effective in establishing whether the seed in a particular package is certified genuine. A similar verification system was launched in Tanzania and Ghana that also makes use of the mobile phone to reach out to small-scale farmers.



Over the last four years, KEPHIS has initiated and rolled out several Information and Communications Technology (ICT) tools to enhance seed inspection efficiency and other services, including Automated Certification System, Seed Sticker Labels, and Electronic Certification System (ECS) to prepare the export documentation.

Plant Import and Quarantine Regulatory System (PIQRS) is a web-based system designed to enhance plant import regulation efficiency and Seed Card, which is used for online seed labeling. Like a barcode, the card has vital information about the variety, including the company that produced the seed, year of release, and varietal characteristics, among other crucial pieces of information.

Developments in Ecuador

In Ecuador, the Ecuadorian Seed Association (Ecuasem) has partnered with SICPA to combat seed piracy and counterfeiting in the country. SICPA will strengthen existing elements by applying



brand protection technology that allows for rapid authentication of products, validation of their legal origin, and protection of the integrity of the supply chain. The proposed solution combines physical and digital security, including visible, invisible, and encrypted features allowing real-time verification through mobile applications.

Traceability and Blockchain

Many countries and organizations are evaluating blockchain applications focusing on improving the traceability of agricultural inputs. For instance, the blockchain-based system aims to enhance the traceability of seeds in Brazil and ensure regulatory compliance. The OECD Seed Scheme also explores how blockchain technology can improve the security of the existing paper-based seed lot identification and traceability system in OECD countries.

However, as with many emerging technologies, there are several risks to manage and challenges to overcome to

harness the full potential of blockchain. The adoption of blockchain in developing countries – where illegal pesticides constitute a significant issue – seems particularly challenging given the more limited financial resources and often lower quality of the IT infrastructure. Further, there are additional challenges such as a lack of quality control of the information entered the blockchain and the current absence of an adequate legal and regulatory framework.

Blockchain should not be considered a panacea for fighting counterfeiting. It is a promising system, but perhaps, needs to be implemented with a focus on anti-counterfeiting along with traceability. Until and unless we take a comprehensive approach, this issue of falsification will continue to exist in some form.

9.

DEVELOPMENTS IN INDIA

a) Government: Regulators play an important role and in recent years, they had made important announcements. For example:

1. PROJECT SATHI (Seed Authentication, Traceability and Holistic Inventory):

The Govt of India project SATHI provides a holistic approach to encompass the complete seed life cycle over multiple seed generations. This measure is achieved through automation of the entire seed supply chain, starting from seed production to certification, licensing, seed inventory, and seed sale by certified dealers to seed growers and includes traceability of seeds. Ministry of Agriculture has announced the introduction of the system in 2019. Irrespective of being a great initiative, this system could not take off at a national level for various reasons; however, as of now Telangana, Jharkhand and Jammu & Kashmir have claimed to become the State implemented the seed traceability system in the state at a regional level. It is simple software and can be used by farmers using a smartphone. Upon scanning the QR code, the farmers can assess and learn about the quality and genuinity of seeds. The QR Codes can be printed and displayed anywhere on the containers and labels. However, the crucial question about the ability to stop counterfeiters from replicating this packaging remains.

2. Insecticides:

In similar line, The Ministry of Agriculture and Farmer Welfare via its notification on 27th October 2022, announced the introduction of the QR Code for insecticides labelling. The QR code shall contain at least the following information:

- (a) Unique Identifier or GTIN
- (b) Batch Number
- (c) Date of Manufacturing
- (d) Date of Expiry
- (e) Web link/URL

b) BRANDS: Many Agriproducts companies have anticounterfeiting departments, which keep vigilant eyes tracking counterfeiters. They regularly engage with third party investigators, police, and government to conduct raids and seizures. Manufacturers have/are also setting up inhouse brand protection department to keep a close watch on the supply chain, as well as using anti-counterfeiting solutions, such as QR codes, holograms, tamper proof packaging, real-time track, and trace, etc. To address the lack of communication with consumers, crop protection associations and brands are actively working to bridge the gap.



10.

THE WAY FORWARD FOR INDIA:

No Country or Organization can tackle this international issue alone, collaboration and coordination of efforts are critical to success. The counterfeiting, tampering, and diversion of agriproducts are on the rise because of many reasons including the imbalance between supply and demand for the authentic product or its ingredients, poor practices along the supply chain, inadequate quality control at the manufacturing site, weak regulatory measures, non-adoption and right use of anti-counterfeiting technology, enforcement measures and above all awareness. As said by the experts, “Amid every crisis, lies great opportunity”. We are amid one today, and we must ensure we take the opportunity to protect ourselves and our loved ones – protect them against the pandemic by taking the recommended precautions, but also protect them against the harm of these illegal, harmful, and counterfeit products.

Regulators

- Fighting fakes is not a silver bullet and regulators need to recognize the problem and create a long-term strategy for building an authentication ecosystem.
- Need to step up their anti-counterfeiting enforcement activities.
- Ensure appropriate legislation to tackle the issue and coordination amongst various bodies.
- Support the industry by the incentive to industry anti-counterfeiting regulations and products.
- Increase awareness about the risks of using counterfeit products.

Farmers

- Need to be more vigilant about the product they purchase.
- Report illegal sellers/distributors to authorities and participate in the authentication system.

Food value-chain

- Farmer organizations and co-ops should play a leading role in awareness of the risks of using illicit and counterfeit products among farmers and distributors.
- Educate farmers/distributors in the identification of genuine products and reporting through anonymous channels to remove culprits in the system.

Agriproduct Industry

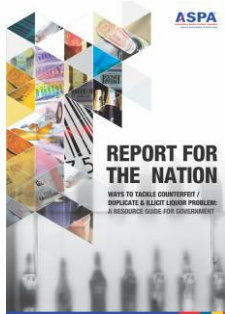
- The industry is engaged in increasing awareness. Need to broaden awareness across a wide audience and improve legislation to control counterfeit and illegal imports.
- Plug the gaps, collaborate, and secure your supply chain with your brand protection partners.
- Discuss the supply chain.

11.

ANNEXURE

1. ASPA & CRISIL Report – *The Study of Counterfeiting in India 2022*
2. OECD Report – *New Digital Technologies to tackle Trade in Illegal Pesticides*
3. Cunningham, M. (n.d.), *Use of Pesticides: Benefits and Problems Associated with Pesticides*, Study.com, <https://study.com/academy/lesson/use-of-pesticides-benefits-and-problems-associated-with-pesticides.html>
4. Europol (2018), *Largest-ever seizure of illegal or counterfeit pesticides in Europol SILVER AXE operation*, <https://www.europol.europa.eu/newsroom/news/largest-ever-seizure-of-illegal-or-counterfeit-pesticides-in-europol-silver-axe-operation>.
5. EY (2019), *Total cost of ownership for blockchain solutions*
6. Federation of Indian Chambers of Commerce and Industry (2015), *Study On Sub - Standard, Spurious/Counterfeit Pesticides in India*, [http://dx.doi.org/10.1016/s0166-4972\(01\)00041-4](http://dx.doi.org/10.1016/s0166-4972(01)00041-4)
7. IBM (n.d.), *IBM Food Trust*, <https://www.ibm.com/blockchain/solutions/food-trust>
8. OECD (2019), *Is there a role for blockchain in responsible supply chains?*, <http://www.oecd.org/finance/oecd-blockchain-policy-forum.htm>.
9. OECD (2019), *Recommendation of the Council on Countering the Illegal Trade of Pesticides*, <https://legalinstruments.oecd.org/public/doc/642/642.en.pdf>
10. <https://seednet.gov.in/>
11. <https://seedtrace.gov.in/>
12. OECD (2018), *Best Practice Guidance to Identify Illegal Trade of Pesticides*, OECD Environment, Health and Safety Publications Series on Pesticides No. 99

ASPA PUBLICATIONS



Ways to tackle Counterfeit, Spurious & Illicit Liquor problem

Publication: 2019
Language: English
www.aspaglobal.com



Confronting illicit Tobacco trade in India for Economic & Socio Development

Publication: 2019
Language: English
www.aspaglobal.com



Importance of Authentication and Traceability in Indian Food value chain

Publication: 2020
Language: English
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The State of Counterfeiting in India

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Digital Product Passport to boost the Circular Economy

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State of Counterfeiting in India 2022

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As a nation, we now face a serious threat and challenge from the illicit economy.

Illegal activities slowed industrial growth, thus affecting producers, and stunted revenue, hitting job growth. Consumers were the ultimate victims of counterfeiting, smuggling, and piracy as they paid excessive prices for substandard products that also increased exposure to health and safety risks.

To fight the crime of the 21st Century, the involvement of all stakeholders is important and therefore, we must maintain all that we can do to prevent it. A hand is what is required to come out of the and this is where we prove our responsibility.

JOIN US IN FIGHT AGAINST FAKES!

About



The Authentication Solution Providers' Association (ASPA) is a self-regulated, non-profit organization of authentication solution providers.

Formed in 1998 with the objective to curb counterfeit products in various sectors, it is the only association of its type in the world primarily focused on the adoption and advancement of authentication technology and solutions for brand, revenue, and document protection. As an industry body of authentication solutions providers, ASPA encourages its members to adopt best practices, standards, and usage of advanced technology in providing cost-effective anti-counterfeiting solutions against counterfeiting. ASPA members protect over 15,000 brands worldwide through the identification of genuine products and documents. ASPA works closely with global authorities such as International Hologram Manufacturers Association (IHMA), Counterfeit Intelligence Bureau (CIB), FICCI-CASCADE, CSIR-NIIST, ACMA, CII & other industry bodies in India.

For more information:

Contact at +91-11-41617369

Email: info@aspaglobal.com or visit us at www.aspaglobal.com