



REPORT FOR THE NATION

**WAYS TO TACKLE COUNTERFEIT /
DUPLICATE & ILLICIT LIQUOR PROBLEM:
A RESOURCE GUIDE FOR GOVERNMENT**

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Introduction

Illicit trade in liquor products poses a pervasive and ever-changing problem in India. The illicit liquor smuggling and counterfeiting each year seriously harms public health, erodes government's revenues and threatens public safety and supporting organized crime and terrorist's networks. Consumption of counterfeit alcoholic beverages of course has proven detrimental to health. If the intention of higher taxes is to reduce consumption, this rarely occurs at the ground level. On the contrary, consumption either remains the same, or consumers turn to neighboring states for their consumption or they turn to smuggled or counterfeit products. In addition, unrecorded consumption estimates of which vary between 50%-67%, poses a significant barrier to policymakers who are lobbying for a national policy on alcoholic beverages. Policy measures therefore need to be taken and effectively implemented to reduce/curb the growing grey markets, encourage innovation and investments in the industry, reduce the percentage of unrecorded alcoholic, as well as reduce the cost of healthcare. Concerted efforts in these directions would not only result in higher tax collections, it would also assist in prevention of the socio - economic - health risks related to consumption of alcohol purchased from the illicit markets.

This white paper analyses / explore the problem of illicit liquor in India. It's findings will help Stakeholders in understanding the illicit liquor problem, gaps in current systems and ways to tackle it with the help of technology & solutions like Tax Stamps in fighting this issue.

The size of illicit alcohol market in India?

The illicit market in the alcohol industry is growing at a large pace. In comparison with the results of the FICCI-TARI study of 2012 the grey market in the alcoholic beverages industry has increased from 10.2 *per cent* in 2010 to 16.7 *per cent* in 2012 - the largest percentage increase among all the industries under FICCI-CASCADE review. It is pertinent to note however, that it continues to be the industry with the smallest grey market percentage.

A similar trend is visible in the loss to industry estimated for 2014 in comparison with 2012.

The loss to the alcoholic beverages industry has increased from `Rs. 5,626 crores in 2012 to `Rs. 14,140 crores in 2014, a huge leap of 151*per cent*. The total loss of taxes to the government has also shown an increase. The estimated for 2014 in the alcoholic beverages industry is `Rs. 6,309 crores, up from `Rs. 2,511 crores in 2012. It needs to be highlighted, that this loss is only on account of tax revenues.

Seeing the growth of the illicit markets, it is obvious that the measures being undertaken to combat this threat to legitimate markets is insufficient, considering the impact it has on the stakeholders involved. The problem presents a conundrum as long as there is a market for such illicit goods. Governments, non-government agencies and manufacturers need to therefore work in tandem to strengthen the measures already in place particularly in creating awareness and spreading information on the negative impacts of purchasing counterfeit products including the legal consequences thereof.

Industry	Grey Market %age		Loss To Industry (Rs. Crores)	
	2012	2010	2014	2012
Alcoholic Beverages	16.7%	10.2%	14,140	5626

Source: FICCI CASCADE

Fig: Alcoholic beverages grey market in India

What are categories of illicit liquor?

Illicit alcoholic beverages are generally divided into the five categories listed below.

Category	Subcategory	Definition
Counterfeited and Illegal Brands	Substitution/refill	Illicit alcohol sold as licit brands or empty bottles of legitimate products refilled with cheaper alcohol
	Industrial manufacturing of illicit brands or unbranded beverage alcohol	Manufacturing of illicit branded or unbranded alcohol
Smuggling	Smuggling of ethanol	Illicit imports of ethanol as a raw material
	smuggling of the finished product	Illicit imports of packaged alcoholic beverages
Homebrew Artisanal Alcohol	Illicit homebrew	Illicit homebrew alcoholic beverages made for commercial purposes
	Licit homebrew	Beverage alcohol produced as part of long-standing traditional and/or cultural practices. Includes home production for personal use; excludes home production for sale
Surrogate	-	Alcohol not meant for human consumption (e.g. pharmaceutical alcohol) diverted to the alcoholic beverages market
Tax Evasion	-	Licit alcoholic beverages (locally produced) on which inappropriate or no excise production taxes are paid

Source: Euromonitor International





Consumer	Government	Economy	Companies
 <ul style="list-style-type: none"> • Breach of trust • Health and safety risk 	 <ul style="list-style-type: none"> • Loss of tax revenues • Investments on anti-Counterfeiting and anti-smuggling measures • Additional spend on public welfare funds such as consumer awareness campaigns 	 <ul style="list-style-type: none"> • Increases flow of black money • Degradation of employment • Impacts innovation and growth • Fund criminal activities 	 <ul style="list-style-type: none"> • Loss of sale and profitability • Loss of brand image and goodwill • Additional spend on awareness campaign and special packaging • Brand and trademark dilution

Fig: Impact of spurious / illicit liquor

What is the impact of spurious / illicit liquor on society?

It affects all the stake holders in society in various terms;

3.1 Loss to State Government

Loss of tax revenue – Sale of illicit liquor or diverted liquor bypass traditional sales channels, thereby depriving government of tax revenues. According to FICCI-CASCADE study, the total loss to the government estimated for 2014, on account of the illicit markets in the alcoholic beverages industry is ` Rs. 6,309 crores, up from 2,511 crores in 2012. As stated earlier, it needs to be highlighted, that this loss is only on account of tax revenues and excluded the incremental costs incurred by government on account of welfare measures, enforcement and legislation and interest costs

Increased enforcement cost - As counterfeiting, tampering, and diversion grows government need to allocate a greater portion of their security budgets toward efforts ensuring integrity of liquor.

Funding of criminal enterprises - The people that benefit most from counterfeiting are criminals who then use their proceeds to fund other criminal activity of to further their own enterprises.

Loss of image / goodwill – The hooch tragedies occur due to illicit liquor consumption eroded the image of state governments which create challenge for state government to ensure consumer confidence.

3.2 Loss to Consumers

Loss of life or illness – Poor quality spurious liquor can cause death and serious illness, as seen in connection with several incidents of hooch tragedy in India.

What are challenges in fight against illicit liquor trade?

State excise suffer from a number of problems due to inter-state smuggling of alcohol products which further require extra vigilance on the part of excise administration.

Those engaged in clandestine manufacture of liquor push into market spurious imitations and look-alikes of branded I.M.F.L. in the market. With increased number of counterfeiting and hooch tragedies, State Government and Departments faces various challenges such as;

- How to combat smuggling and illicit liquor?
- How to ensure fool proof labeling and supply chain?
- How to ensure consumer confidence?
- How to increase excise revenue?
- Problem of identification / authentication - How to differentiate fake liquor bottles from genuine?

- a) **Curbing Illicit liquor industry:** There has been a rapid rise in the production and sale of beverage alcohol in India, over the last five decades. Parallel to this, the illicit liquor industry has also seen an increase in India. A significant proportion of the alcoholic drink in India, is produced illicitly by the informal sector or consists of "Second or D Market" (tax evaded beverages) and therefore remain undocumented. There is also a considerable volume of smuggling of alcoholic beverages, especially scotch into the country. Since, no government revenues are paid, illicit liquor is sold at low a price which causes hooch tragedy. Although it has been speculated that such unrecorded consumption may be as much as 45 percent of all use, there is very little recent data. Evidence that such use is widespread is evident in the regular occurrence of poisoning (hooch tragedies) following drinking spurious liquor, often on a mass scale.
- b) **Enhance State image / goodwill:** The hooch tragedies occur due to illicit liquor consumption eroded the image of state governments which create challenge for state government to ensure consumer confidence.
- c) **Importance of excise revenue:** Revenue from excise duties on alcohol has always become a significant contributor for many States in India. Under the Indian constitution, liquor is one commodity which the States are entitled to charge excise duty (Article 246). In fact, the revenue from excise duties was the second largest source of income for States after Sales Tax.
- d) **Easy identification:** Tax stamps plays an important role for visual authentication to differentiate fake liquor bottle from genuine, for both enforcement authorities and for individual consumer.
- e) **Save enforcement expenditure cost:** As counterfeiting, tampering, and diversion grows government need to allocate a greater portion of their security budgets toward efforts ensuring integrity of liquor.

What can Government do to control this problem?

a) Tax Stamps

Excise stamps have been around for many years, but what is new their evolution in last 30 years, in response to demands for high security and integrated supply chain control.

According to International Standard Organization (ISO), Tax Stamp refers to “tax stamps that are physical in nature, having an appearance which is obvious to the human senses of sight or touch, which are applied to a consumer good or its packaging and which allow material authentication.”

In normal layman language: Tax stamps is a stamp affixed to certain products or documents to indicate that a required tax has been paid. According to its usage, it is known by a variety of names for example cigarette tax stamps, excise stamps, excise adhesive label (EAL), banderols etc. etc. In India they are generally refer as Excise Adhesive Label (EAL).

b) Purpose & use of Tax Stamps

The main purpose of any Tax Stamp is to provide a physical & visible means of collecting tax. Perhaps, they have been used by many Governments across the globe to ensure;

- That liquor bottle is not tampered
- Plugging the leakages in supply chain
- Providing consumer / authorities tool for easy identification of genuine liquor vs fake / spurious / duplicate liquor
- Revenue enhancement & control supply chain

c) Types & Characteristics of Tax Stamps - Same security as Banknotes

Tax Stamps – just like banknotes - require the highest levels of security that aid different stakeholders in authenticating the product and the stamp. These features are typically divided into four levels: overt, semi-covert, covert and forensic. Today's Tax Stamps are more than likely to carry all four levels. They are also more than likely to incorporate a tracking code or number.

In India alone more than 23 States & Union Territory are using Tax Stamps as a security product for Excise revenue & consumer protection for liquor industry. 75% of these are in the form of full polyester holographic labels and 25% are paper-based, with holographic elements. Majority of tax stamps are produced on polyester film (security hologram), mainly because it provides high grade of tamper evident facility with easy overt authentication.

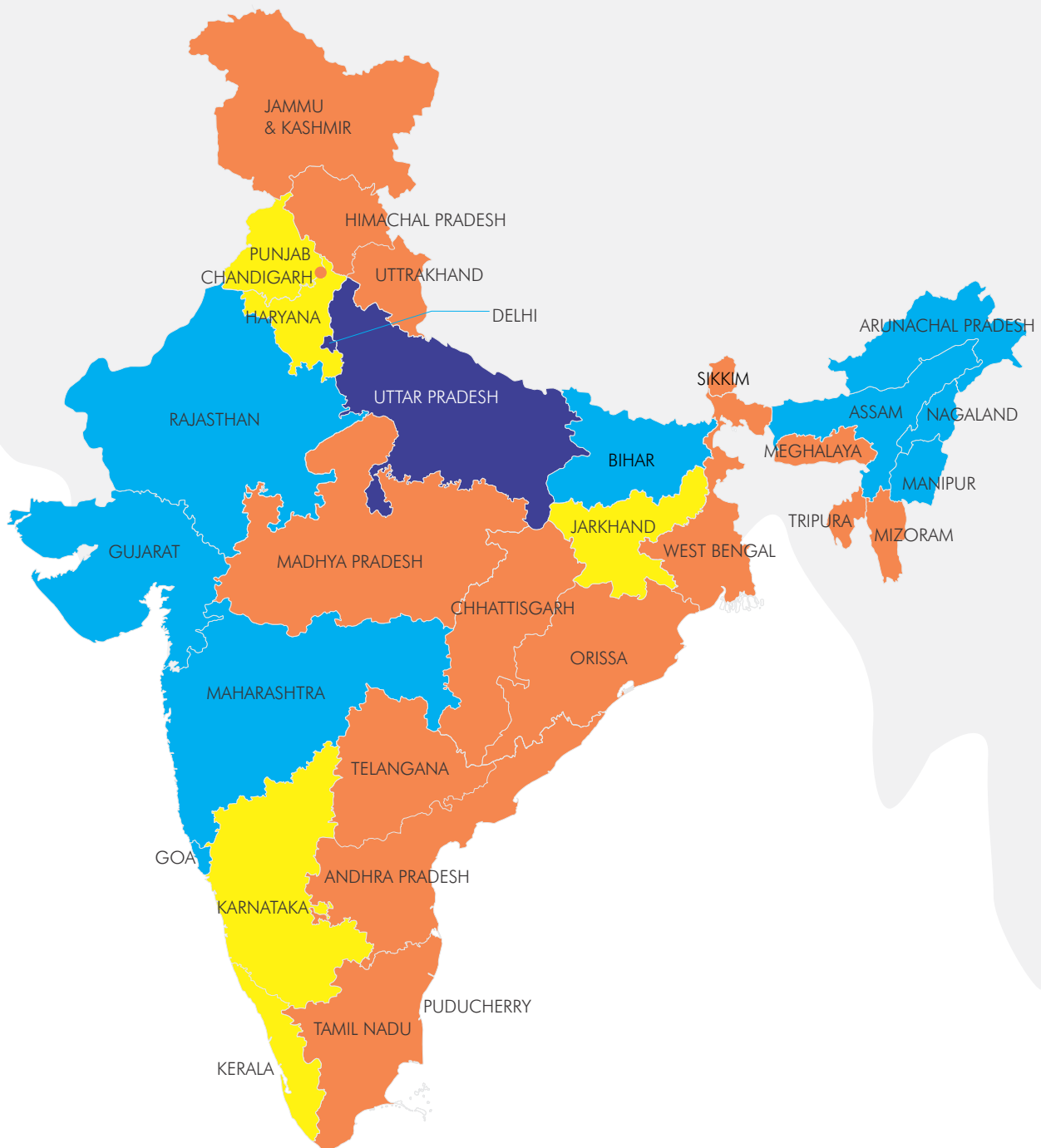
Some tax stamps, however- and are produced on security paper, perhaps, it is be noted that even these papers based Tax Stamps are using holographic component as important overt feature for physical authentication. Tax stamps is generally of a lighter weight that used for banknotes and passports. These Tax Stamps are using various combination of physical technologies including hologram, Optical effect inks, Luminescent inks, Machine-readable inks, UV ink, special paper, color changing ink, isotopic taggant, organic taggants, Nano-technology, micro-text with digital traceability technologies.

Taggants are in widespread use in tax stamps. Just as holograms are the principal overt security features for stamps, so taggants have become the most generally accepted technique for covert and forensic identification, product diversion tracing, bulk material identification and authentication. According to the Forensic Science Laboratory (FSL) of the US Bureau of Alcohol, Tobacco, Firearms & Explosives, if counterfeiters can see a feature, they will attempt to copy it. Therefore, products with covert features, such as taggants, are the most difficult to effectively counterfeit and therefore the easiest to examine. Having said this, taggant readers for use in the field should be as robust as possible, advises the FSL. Taggants are applied to the stamps in a number of ways, embedded in either the paper pulp or fibers, the ink, the holograms or even the adhesives – but they are generally incorporated into the ink.

Type of Tax Stamps	Physical Authentication	Traceability
Polyester based full holographic	Overt – Yes Covert – Yes Forensic – Yes	Yes
Paper label with / without holographic components	Overt – Yes Covert – Yes Forensic – Yes	Yes
Plain BOPP based	Overt – No Covert – No Forensic – No	Yes

The key is the more complex the features, the more difficult they are to counterfeit.

Tax stamp usage in India (2018)



- States using full polyester holographic Tax Stamp-16
- States using paper based Tax Stamp with or without holographic feature -5
- States using Plain BOPP label -2

Development of a comprehensive plan: Key Elements to be considered while designing Tax Stamps: Lessons to be learnt from current systems

Although track and trace technology that uses a unique 2D barcode is considered a good technology for traceability purposes, the general, international, consensus is that a barcode on its own is not much help when it comes to solving the problem of counterfeiting.

Instead, track and trace technologies must work in tandem with a dedicated physical anti-counterfeiting technology like a security hologram. If they don't, an excise department may leave itself exposed to acts of sales diversion and loss of revenue – which is what happened in Delhi. It is therefore astounding that Uttar Pradesh has nevertheless opted to follow in Delhi's footsteps.

The label is a very plain, purely digital affair that seems to go to the opposite extreme of its earlier full-face hologram. It is devoid of color, as well as of any material-based overt or covert security features for physical authentication. There is no way of telling, just by looking at the label, whether it is a fake, unless it happens to be sitting next to a label with an identical code. This lack of visible security is one reason duplicates have been able to slip into the market so easily.



Delhi's barcode label showing 14-digit GTIN number and unique serial number, both as human - readable text and 2D data matrix code without any physical authentication feature.

Since the implementation of the label in Delhi, there have been reported cases in the media of rampant misuse of the 2D code – including by excise and law enforcement officials themselves. For instance, in April 2015, nine excise officials were held in Delhi for liquor smuggling activities which had allegedly caused an estimated loss of INR 25 billion (\$365 million) to the exchequer.

In addition, enforcement authorities discovered that a large proportion of liquor products were not even going inside some of the warehouses after the barcode scanning process but were instead being unloaded right at the warehouse gate and transported directly to liquor shops. The liquor was then being sold off as a priority, and the police were even reported to be issuing fake transport permits to ward off excise inspectors.

Then in December 2016, criminal cases involving forged barcodes on bottles of foreign liquor brands were reported. Investigations revealed that the bottles with the original barcodes had been sold many months back, whereas the bottles of liquor with fake barcodes had been purchased more recently.

Physical authentication tools are still be needed both during and after the development of track and trace systems around the world. If we do not integrate both digital and nondigital (physical and sensory) authentication methods into our approach, then we risk wasting the major investments that are about to be made in track and trace.

Examiner may need to verify the liquor bottle visually due to lack of availability of reader, power failure, network failures or simple time constraints at crowded control sites. An electronic authentication is not possible everywhere especially in remote areas, so it generates a requirement of an instant visual authentication like a hologram with advanced levels of security features for authentication (One such example is Visa / MasterCard which is continuously using hologram as overt feature since 1998).



Fig: Example of Consumer Awareness

Conclusion

The layered approach is always better. The success of Tax Stamps in India comes from their dual role in supply chain monitoring and visual authentication, for both enforcement authorities and consumers. However, this dual role needs to be supported by the appropriate organization and regulation of the Indian liquor trade.

Tax stamps is the main tool now used by the government and the enforcement to authenticate sealed IMFL and Beer bottles sold in the State. Hence the efficacy of these Tax Stamps, as an advanced and true tamper evident seal, has great value. This is true regarding other Indian States also. There are no magic bullets in anti-counterfeiting, but it can be curbing to a great extent with proper combination of overt and covert feature, and proper anti-counterfeiting strategy comprising proper co-ordination between government officials, enforcement teams and anti - countering technology suppliers.

Of course, there are no completely foolproof processes or systems. There, are however, complexities within these processes and systems that can deter both professional and not-so-professional counterfeiters. There are always two primary objectives involved: one is to provide, safe, genuine products while protecting the revenue stream of the government, and second, of course, is to be able to catch offenders.

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About ASPA

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 a one of its kind association in the world, primarily focused on the adoption and advancement of authentication technologies and solutions for brand, revenue and document protection. As an industry body of authentication solutions providers, ASPA encourage 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 identification of genuine products and documents. ASPA works closely with global organisations such as International Hologram Manufacturers Association (IHMA), CII, FICCI CASCADE, Indian Beverage Association (IBA) & others.

For more information, visit us at www.aspaglobal.com

Glimpse from our current awareness campaign



The Authentication Forum 2018 inaugurated by Shri Suresh Prabhu Hon'ble Union Minister, Ministry of Commerce & Industry & Civil Aviation



ASPA's second Brand Protection Awareness Workshop at Hyderabad in October 2017



ASPA's first brand protection and Awareness Workshop at Indore in July 2017



The Authentication Forum, India's first conference of its kind was organised by ASPA in association with MFI at New Delhi where more than 200 delegates participated in February 2017

ASPA Trademarks and brands



Authentication Solution Providers' Association

21-Ground Floor, Devika Tower 6, Nehru Place,
New Delhi-110019, India
GSTIN: 07AAAAH3405R1ZJ

☎ : +91 11 41617369
✉ : info@aspaglobal.com
🌐 : www.aspaglobal.com

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