



Cost Effective Interventions for the Control of Unregulated Beedi Trade in India

Policy Brief

School of Public Health, AIIMS Jodhpur and Vital Strategies

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Foreword



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The unregulated trade of beedis presents a formidable challenge to India's tobacco control efforts, undermining both public health outcomes and revenue systems. Despite their widespread consumption and well-established health hazards, beedis often operate outside the boundaries of effective regulation, taxation, and enforcement. This policy brief offers a critical and timely intervention to address this persistent gap.

By evaluating cost-effective strategies such as Tobacco Vendor Licensing (TVL) and Track and Trace (T&T) mechanisms, the policy brief not only underscores the urgency of regulating this sector but also demonstrates the fiscal and governance benefits of such regulation. These strategies are grounded in global best practices and aligned with the WHO FCTC Protocol to Eliminate Illicit Trade in Tobacco Products offering India a sustainable pathway to reduce illegal trade, increase accountability, and bolster tax compliance.

The insights in this brief are backed by rigorous cost-benefit analysis and practical feasibility assessments, making a strong case for immediate policy adoption. Moreover, they highlight the potential for channeling existing underutilized resources such as those within the NTCP to build regulatory infrastructure without additional financial strain. It is my hope that this document guides policymakers, administrators, and enforcement agencies toward decisive action to regulate the beedi sector and protect public health more effectively.

Why and how to strengthen enforcement against unregulated beedi trade

Illicit and unregulated trade is defined as any goods and services that are traded, but do not comply with judicial and regulatory frameworks, including in the ways in which they are produced, transported, certified, distributed or sold (UNCTAD, 2022). In the context of the beedi trade, this may refer to the distribution and sale of beedi sticks in violation of legal and regulatory requirements, including tax evasion, counterfeit sales, cross-border trade without excise compliance, and non-adherence to prescribed pictorial health warning norms. Although the national law- Cigarette and Other Tobacco Products Act (COTPA, 2003) is comprehensive, nevertheless due to the unregulated sale, distribution & trade of beedi, implementation becomes difficult. This further reduces revenue (otherwise to be paid) to the government and could have potentially been invested in tobacco control and public health, largely. Therefore, addressing this in advance might yield broader governance benefits. Evidence based tools and building capacities to address such issues can strengthen overall beedi related tax administration, compliance, and enforcement of tobacco control laws.

Despite the well-documented and enormous harmful effects of beedi consumption on health, economy, and environment, it largely remains an unregulated segment of the tobacco industry. Beedi, often serves as an initiation pathway for other addictions, particularly among vulnerable youth, and is widely accessible due to open regulatory violations. Compounding this issue, the beedi industry continues to benefit from subsidies under the guise of being a cottage industry. Thus, urgent policy interventions are needed to bring accountability, reduce unregulated trade, restrict youth access, and align beedi regulation with broader public health objectives.

To address this, tobacco vendor licensing (TVL) and track and trace (T&T) systems have been recommended, as per the WHO FCTC Protocol to Eliminate Illicit Trade in Tobacco Products. Furthermore, implementing these two interventions together ensures maximum operational efficiency and enforcement. Vendor licensing mandates that all the vendors and wholesalers obtain official authorization, creating accountability across the supply chain and deterring illegal sales through the threat of penalties or cancellation of license. Meanwhile, a track and trace system assign unique identifiers to tobacco products, allowing authorities to monitor their movement across the supply chain. This helps detect diversion into unregulated and cross-border markets, as well as the infiltration into mainstream distribution from unregulated channels which lead to tax evasion. When implemented in tandem, vendor licensing and track and trace systems reinforce each other, discouraging prohibited practices and strengthening the overall effectiveness of tobacco control measures, especially for beedis, due to their marked violations, and minimal regulation. Evaluating the associated economic impact is essential to ensure the long-term sustainability of any policy prior to its implementation. Accordingly, this cost-benefit analysis has been undertaken to inform evidence-based policy decisions regarding the financial implications of implementing TVL and T&T.

COST EFFECTIVE INTERVENTIONS FOR THE CONTROL OF UNREGULATED **BEEDI TRADE IN INDIA**

KEY FINDINGS





INVESTED PER CAPITA HAS THE POTENTIAL TO

An investment of per capita to regulate beedi, will yield a return of INR 101 crores in the first year of TVL and T&T implementation

1.69 times return on the money spent in the very first year of implementation

Projected increase in the return to 7.59 times with increased policy uptake in subsequent years **INCREASE IN REVENUE**

INCREASE THE ANNUAL REVENUE BY



INR 101.21 Crores

IN FIRST YEAR OF IMPLEMENTATION

NET BENEFIT

COST BENEFIT RATIO (CBR



FROM BEEDI REGULATION **THROUGH TVL AND T&T**

FUTURE SUSTAINABILITY

CBR PROJECTED TO INCREASE TO

>7.59



BY INCREASED INCERMENTAL **POLICY IMPLEMENTATION**

*CBR refers to the Cost Benefit Ratio; T&T – Track and Trace Mechanism; TVL – Tobacco Vendor Licensing

Assessment Methodology

Cost effectiveness: Cost-benefit analysis to evaluate the economic efficiency of interventions aimed at controlling unregulated beedi trade. It is a method used to compare the total costs of implementing an intervention with its anticipated financial benefits, typically expressed in terms of increased revenue or savings. In this context, the associated costs—including implementation of TVL and the T&T system—were assessed against the projected gains in government revenue. By modeling different scenarios of revenue increase, the cost-benefit ratio and the net benefit were calculated.

Input Costs

Table 1: Annual input costs for enforcement of TVL and T&T systems for beedi

Cost variables	Cost* (in INR)
Capacity Building & Operational Sustainability (Training Initiatives for involved personnel in all districts/jurisdictions of the	₹ 3,36,00,000
country for 1 year, Gazette Digitization, and other operational costs) Human Resource	
(Additional salaries of dedicated human resource and person-time for nodal officers and enforcement officials)	₹ 56,17,20,000
Software Implementation and Maintenance	
(One-time software development, and annual maintenance, cloud hosting &	₹ 50,00,000
data management charges)	
*The costs presented are median estimates/approximates and may vary depending upon	specific legislative

^{*}The costs presented are median estimates/approximates and may vary depending upon specific legislative areas/administrative units

Projected Impact

Table 2: Projected financial impact of implementation in terms of net increase in revenue

Assumed policy implementation (%)	Increase In Revenue (in crores)	Cost Benefit Ratio (CBR)	Net annual benefit (in crores)
15%	₹101.21	1.69	₹41.18
50%	₹278.44	4.64	₹218.40
85%	₹ 455.66	7.59	₹395.63

Annual government revenue from beedi increases by INR 101 crores at a nominal first-year policy implementation of 15%, this included revenue obtained from currently unregulated beedi manufacturers and vendor licensing fees with a potential to increase to INR 456 crores annually at 85% policy implementation, with net positive benefit and cost-benefit ratios.

Impact of the available NTCP funds - Budget Impact Assessment

Median amount of INR 54 crores of the allocated NTCP budget remains underutilized. The total estimated cost, INR 60 crores, of implementing Tobacco Vendor Licensing (TVL) and Track & Trace (T&T), highlights a clear opportunity to channel the unspent funds towards impactful beedi regulatory measures.

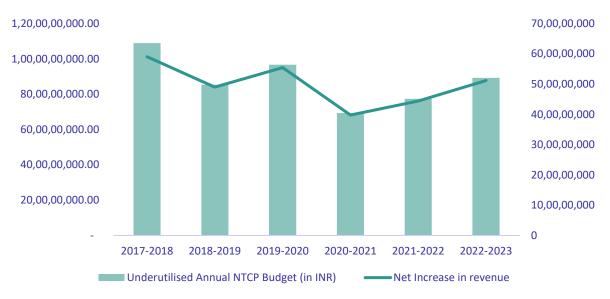


Figure 1: Potential annual net revenue gains from redirecting underspent annual NTCP funds towards regulation of beedi trade

and T&T			
Strengths Increase in government revenue Leveraging existing trade license system for TVL Better implementation of existing tobacco control laws To identify the number of licensed tobacco vendors in a city/state and ensure compliance through regular monitoring	Weaknesses • Potential delays in implementation due to development and integration into a digital infrastructure		
 Opportunities Revenue gains can be directed towards health programs Integrate digital solutions for real-time tracking and analytics 	 Threats Opposition by vendors & industry front groups due to perceived complexity or cost or bar-coding and licensing fee 		

Recommendations

- Based on the cost-benefit analysis a positive net CBR (Cost Benefit Ratio) suggests the implementation of Tobacco Vendor Licensing (TVL) and Track & Trace (T&T) systems as a highly cost-effective strategy for controlling unregulated beedi trade with modest input cost.
- The government can aim at an incremental increase in the revenue obtained from beedi industry by over INR 430 crores through effective implementation of TVL and T&T systems.
- Beedi rolling being predominantly based in households, is recommended to be classified under the Occupational Safety, Health and Working Conditions (OSH) code for better implementation of the proposed regulatory norms.
- The additional revenue can be strategically reinvested into evidence-based interventions for beedi control, including building of institutional capacity for enhanced cessation support, enforcement of regulations, and stringent tax compliance, thereby creating a self-sustaining public health investment cycle.
- By leveraging existing financial capacity within NTCP, the policymakers can ensure sustained implementation of high-impact interventions like TVL and T&T, thereby strengthening the enforcement framework and advancing public health goals with greater fiscal responsibility.
- At the subnational/district level, periodic induction trainings for new staff and refresher capacitybuilding programs for inducted staff, along with hands-on training for the operational side of the programme is recommended.

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