
Annexure III. Coffee-Chicory Labelling Requirements

By Gargi Surana

Case Study on FSSAI Labelling Regulations^[1]

This Regulatory Impact Analysis (RIA) assesses the implications of proposed changes to India's food labelling regulations, specifically the Food Safety and Standards (Labelling & Display) Regulations, 2020^[2] and the Food Safety and Standards (Labelling and Display) First Amendment Regulations, 2025^[3] relating to coffee–chicory mixtures. The purpose of the RIA is to evaluate whether the proposed regulatory intervention effectively addresses the market failure that exists in the current labelling landscape, and whether it represents the most proportionate and efficient option available to the Food Safety and Standards Authority of India (FSSAI). The analysis examines the extent of information asymmetry faced by consumers, explores the regulatory choices before FSSAI, and compares their anticipated costs and benefits. By adopting an evidence-based, analytic approach, this RIA contributes to transparent decision-making and ensures that the regulatory measure aligns with the objectives of the Food Safety and Standards Act, 2006.

Background and Context

Coffee–chicory blends occupy a distinctive position in India's packaged food market. Chicory is frequently used as an additive to coffee, to alter its flavour profile, and reduce production cost. The commercial value, perceived quality, and consumer expectations surrounding these blends are determined primarily by the proportion of coffee relative to chicory.

Consumer-facing discourse and industry commentary indicate that many consumers associate chicory blends with a specific taste profile rather than with inferior quality, and in certain regional and cultural contexts, chicory is actively preferred for the body and strength it imparts to brewed coffee.^[4]

National consumption data supports this differentiated market reality. The Coffee Board of India's Coffee Consumption Report 2023 indicates that a substantial share of coffee consumed in Indian households, especially instant coffee, is sold and consumed in blended form, commonly containing 20–40% chicory.^[5] This suggests that blended coffee products are not a marginal or deceptive segment of the market, but a mainstream consumption category with established consumer acceptance. At the same time, media reporting and expert commentary clarify that consumer concerns arise not from the presence of chicory per se, but from ambiguity or lack of clarity about its proportion, particularly where products are marketed primarily as “coffee”.^[6]

Under the earlier regulatory regime, the Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011 mandated that coffee–chicory mixtures contain at least 51% coffee and that the composition be declared ^[7]. However, the regulations did not prescribe how or where such information should be displayed. As a result, manufacturers adopted heterogeneous labelling practices. Some disclosed percentages on the back panel in fine print; others presented the information using terminology that was difficult to compare across brands. The absence of a uniform display standard created persistent ambiguity for consumers as information asymmetry.

In response, the Food Safety and Standards Authority of India (FSSAI) issued the **Food Safety and Standards (Labelling and Display) First Amendment Regulations, 2025**, requiring that the composition of coffee–chicory blends be stated on the **primary display panel** using the standardised wording **“COFFEE __% / CHICORY __%”**.

Regulatory History of Coffee–Chicory Labelling Regulations in India

India's regulatory framework governing coffee–chicory mixtures has evolved gradually, reflecting FSSAI's broader shift toward greater transparency and standardisation in food labelling. The earliest provisions appeared in the **Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011**, which classified coffee–chicory mixtures as a standardised food and prescribed that such blends must contain **not less than 51% coffee by mass**. These regulations also required that the presence of chicory be declared in the ingredient list. However, they did **not** mandate any specific placement, font size, or format for the declaration of percentage composition, leading to wide variation in how manufacturers communicated this information.

Over time, FSSAI identified compliance challenges in how industry presented coffee–chicory declarations. This led to multiple advisory actions, including the **FSSAI Advisory on Compliance of Coffee–Chicory Mixtures (18 November 2021)**, which reminded State Food Safety Commissioners that labels must accurately declare the composition of coffee and chicory and must not mislead consumers. ^[8]

FSSAI's broader movement toward strengthening front-of-pack labelling also influenced the regulatory trajectory. The **Food Safety and Standards (Labelling and Display) Regulations, 2020** introduced the concept of a **Primary Display Panel (PDP)**. While these regulations did not include a coffee-chicory-specific PDP requirement, they outlined general principles of label legibility, clarity, and non-misleading presentation. ^[9]

The **2025 amendment** represents the first explicit, product-specific requirement for front-of-pack quantitative ingredient disclosure in India. It also aligns India's practice more closely with international models in sectors where quantitative ingredient declaration improves consumer understanding. The regulatory history highlights that FSSAI has recognised the need for greater transparency in this product category and has increasingly adopted more prescriptive measures to achieve it.

Identification of Market Failure

A key issue affecting outcomes in the food labelling ecosystem is the presence of asymmetric information between producers and consumers, which gives rise to a **market failure in the form of adverse selection and progressive quality degradation**. Coffee and chicory blends are indistinguishable in powdered form. While chicory is a traditional additive in coffee, it is significantly cheaper than coffee beans. Without exact percentage declarations on the front of the pack, consumers cannot make informed price-value comparisons. A blend containing 51% coffee may look identical to one containing 80% coffee, leading to "**economic adulteration**" where manufacturers profit by using higher ratios of cheaper filler without transparent disclosure.

Consumers often lack clear, consistent and easily comparable information regarding ingredients, nutritional composition, allergens and product formulation at the point of purchase. At the same time, producers possess private information about product composition and may have incentives to exploit ambiguities in labelling or presentation to secure a competitive advantage. These dynamics can result in inefficient market outcomes and undermine the objectives set out under Section 23 of the Food Safety and Standards Act, 2006, which requires that food labels not be false or misleading and that they provide accurate and meaningful information to consumers.

Within this broader context, the coffee–chicory mixture segment demonstrates a particularly acute manifestation of this market failure. Chicory is a lower-cost input relative to coffee, and producers therefore have a cost-based incentive to increase its proportion in the blend. However, consumers are generally unable to easily verify the coffee–chicory ratio, especially where such information is not prominently or consistently displayed. This limits consumers' ability to distinguish between higher- and lower-coffee products and weakens price signals linked to quality.

Crucially, the market failure in this segment does not stem from the existence of chicory blends themselves. Evidence from consumption data and consumer-facing commentary suggests that there is sustained demand for blended coffee, alongside demand for pure coffee. The failure arises when products are marketed in a manner that obscures the coffee–chicory ratio, particularly where packaging imagery and branding emphasise "coffee" without enabling consumers to easily discern composition. In such cases, consumers who prefer higher-coffee blends may inadvertently purchase lower-coffee products, while consumers who actively prefer chicory blends are unable to identify them with confidence.

Consumers often lack clear, consistent, and easily comparable information regarding product formulation at the point of purchase. At the same time, producers possess private information about composition and may have incentives to downplay or visually de-emphasise higher chicory content due to perceptions that chicory is a lower-status ingredient in some consumer segments. This creates a signalling problem: even where chicory is culturally accepted or preferred, firms using higher proportions of chicory have weak incentives to make this information salient.

As a consequence, consumer willingness to pay tends to reflect average expected quality rather than actual product composition. This **weakens price–quality signalling and distorts competition**, not only by enabling economic adulteration but also by preventing honest differentiation between pure coffee products and intentionally blended products. Over time, higher-quality products are unable to

credibly signal their attributes and risk being crowded out by lower-quality alternatives, resulting in the **under-provision of higher-quality goods despite consumer preference for them**. This outcome is consistent with adverse selection dynamics observed in markets characterised by asymmetric information.

International food labelling frameworks explicitly recognise the need to address such outcomes. Codex Alimentarius guidelines by Food and Agriculture Organisation (FAO) and World Health Organisation (WHO) note that quantitative ingredient declaration (QUID) is required where omission may mislead consumers or impair their ability to compare products^[10]. Similarly, the European Commission emphasises that QUID is necessary when an ingredient is emphasised by imagery or affects consumer expectations of the product^[11]. The Indian coffee–chicory market demonstrates these exact conditions: product packaging frequently emphasises coffee imagery, while actual coffee content varies substantially across brands.

The persistence of this market failure despite existing disclosure norms reflects underlying market incentives. Manufacturers using higher proportions of chicory have limited incentives to voluntarily make such information prominent, particularly where disclosure may adversely affect perceived product quality. Voluntary or non-standardised disclosure is therefore unlikely to sufficiently correct information asymmetry or prevent adverse selection, supporting the need for clear, standardised and enforceable labelling and display requirements.^[12]

Does the Market Failure Fall Within Regulator’s Jurisdiction?

FSSAI derives its powers from **Section 92(2)(k)** read with **Section 23** of the Food Safety and Standards Act 2006. The 2020 Regulations apply to all pre-packaged food (Reg. 1(2)). Thus, regulating labelling accuracy is *within FSSAI’s mandate*. Coffee–chicory blends fall within **Schedule-II commodity-specific labelling**.

The 2020 Regulations address coffee-chicory mixtures in Schedule II para 2.2, but the lack of a clear front-of-pack percentage requirement limited transparency. The 2025 draft amendment replaces para 2.2 and mandates explicit declarations of “Coffee ...% / Chicory ...%” (including instant coffee–chicory) thereby targeting the information asymmetry in this niche market.

Options Before the Regulator

Regulatory options must be assessed in light of the broader question of how FSSAI can most effectively address information asymmetry through labelling interventions.

Food markets are frequently characterised by “asymmetric information,” where producers possess superior knowledge about product composition compared to consumers. In the context of coffee–chicory blends, the exact ratio is a “credence attribute” (a quality that consumers cannot easily verify

even after consumption). While voluntary labelling schemes are often effective for positive attributes where firms are incentivised to disclose premium qualities, they consistently fail for cost-reducing attributes or inferior qualities. Firms rarely have an economic incentive to voluntarily disclose that their product contains a higher percentage of cheaper fillers like chicory, necessitating mandatory regulatory intervention to correct this information asymmetry. [13]

However, the intervention must be designed for maximum utility. Research on food labelling in India shows that consumer **awareness** of labels often **does not translate into comprehension or effective use in purchase decisions**, with many consumers prioritising factors like **price and expiry date** over detailed nutritional or compositional information. [14] This behavioural reality confirms that **mere disclosure** on the back-of-pack is insufficient. Evidence from consumer studies shows that front-of-pack labels with more salient and intuitive formats (e.g., colour coding) are more noticeable and perceived as easier to interpret than less prominent designs, suggesting that improvements in the prominence and presentation of information will go a long way in influencing purchase behaviour. [15]

Regulatory options must, therefore, move beyond mere disclosure to focus on effective consumer communication. The World Health Organisation (WHO) emphasises that for labelling to be effective, it must be noticeable, easily understood, and strategically placed (such as on the Front-of-Pack or FOP) to overcome consumer inertia and influence purchasing decisions. [16]

Therefore, the options below are evaluated on a continuum from ‘soft’ interventions (voluntary codes) to ‘hard’ interventions (prescriptive mandates):

- **Option 1: Baseline** entails retaining the 2020 Regulations as they are: relying on existing Schedule II disclosures and ingredient lists without introducing mandatory front-of-pack percentage declarations. This approach carries minimal immediate cost for industry since no new label redesign or format requirement is imposed, but it leaves the transparency gap unfilled.
- **Option 2: Performance-based regulation (outcomes focus)** requires that consumers are provided with clear, comparable information about coffee-chicory composition at the point of sale (either via front-of-pack or prominent online display) but does not mandate exact wording or format. Instead the regulator sets outcome-based standards such as “declaration readable at two metres” or “percentage composition displayed in the primary display panel.” This preserves flexibility for industry innovation in presentation while ensuring consumer clarity.

To support this approach, **FSSAI may permit or encourage digital supplementation**, such as a QR code or digital link on the package that directs consumers to detailed composition data, sourcing information, or testing reports. While this allows extended disclosure without overburdening physical labels, its effectiveness would depend on consumer access, scan rates, and digital literacy, which may vary across consumer segments and purchasing contexts.

- **Option 3: Co-regulation (Industry code + government endorsement)** envisions FSSAI working with relevant trade associations in the coffee-chicory sector to develop a voluntary industry code that specifies a standard front-of-pack format and testing protocols for coffee-chicory blends. Under Section 44 of the FSS Act, FSSAI may recognise organisations or agencies for the purposes of food safety audit and compliance verification; such recognised audit agencies could verify
-

compliance with the industry code and label declarations, while the regulator retains enforcement back-stop.

- **Option 4: Mandatory standardised front-of-pack quantitative ingredient declaration:** A mandatory, prescriptive regulation requiring front-of-pack declaration of “COFFEE ...% / CHICORY ...%” (and equivalent for instant blends), with specified wording, placement and format under Schedule II, para 2.2. This option offers immediate clarity for consumers but entails higher transition costs for industry. To mitigate these costs, this option may incorporate **phased implementation and transition measures**, such as extended compliance timelines (e.g., 12–18 months), exhaustion-of-stock provisions, or the temporary use of sticker-labels for existing inventory. These measures allow manufacturers to adapt to the new requirements while reducing packaging waste and short-term financial burden.
- **Option 5: Strengthened Consumer Signalling through Health-Oriented Labelling and Product Definition Standards:** This option moves beyond numerical disclosure to improve how composition-related and health-relevant attributes of coffee–chicory products are communicated to consumers at the point of purchase. Drawing from global nutrition labelling frameworks such as traffic-light systems,^[17] this approach would use standardised visual cues or descriptors to signal compositional characteristics that may be relevant to consumer health considerations, sensitivity, or consumption preferences, rather than to denote product quality in absolute terms.

The objective would be to support informed choice for consumers who may prefer higher-coffee formulations, blended formulations, or lower-caffeine options. By embedding composition signals directly into symbols or nomenclature, this approach simplifies consumer decision-making and reduces reliance on numerical interpretation of percentages. However, unlike purely informational interventions, this option has **structural effects on the market**, as it influences how products are categorised, named, and positioned.

Stakeholders Impacted

Understanding this stakeholder landscape helps identify who bears compliance burdens, who receives informational benefits and where support mechanisms or transitional arrangements may be required. In the context of the coffee–chicory amendment, the primary stakeholders include:

- **Food Business Operators (FBOs) producing coffee/chicory blends** (large brands & small packers) - primary compliance burden.
 - **Packaging suppliers / label printers** - retooling, plate changes, inventory write-offs.
 - **Retailers / e-commerce platforms** - product listing updates and shelf display changes.
 - **Consumers** (regular coffee buyers, price-sensitive buyers, health-conscious buyers) - main beneficiaries (better info).
 - **Chicory producers / traders** - potential demand and price effects if labelling alters perceived value, given that chicory constitutes a distinct supply chain and is not a proximate crop of coffee cultivation.
-

- **Testing & certification labs** - increased sample testing demand.
- **FSSAI** - enforcement, market surveillance, guidance.
- **Trade associations** (co-regulatory partners) and consumer organisations.

Identification of Costs

Any regulatory intervention imposes direct and indirect costs on regulated entities, regulators and market intermediaries. These costs arise both from one-time transition activities and from ongoing compliance obligations such as testing and verification. While the magnitude of these costs varies by regulatory option and firm size, the following categories broadly capture the cost components relevant to labelling regulations:

- **Familiarisation:** time and cost for firms/regulators to understand guidance/regulations.
- **Design & Reprinting:** new label art, reprinting packaging, plate changes.
- **Inventory/Stock devaluation:** obsolete pre-printed packages.
- **Testing:** lab tests to verify percentage composition; frequency dependent.
- **Procedural Costs:** updating quality systems, ERP, e-commerce listings.
- **Third party verification / certification:** optional third-party audits under some options.
- **Compliance & Enforcement:** inspector training, market sampling by FSSAI.
- **Market Impact:** updating retailer listings, in-store signage.

TABLE 13.1

Cost Type	Status Quo	Outcome-Based	Co-regulation	Mandatory FoP	FoP + Health
Familiarisation	Low	Medium	Medium (industry + FSSAI)	Medium	High
Label redesign	None	Medium (flexibility allowed)	Medium	Medium (spread over time)	High (symbols, testing)
Inventory write-off	None	Medium	Medium	Low-Medium (transition reduces cost)	High
Testing/verification cost	None	Medium	High (audit-based)	Medium	High (grading-based testing)
Procedural/ERP updates	Low	Medium	Medium	Medium	Medium

Cost Type	Status Quo	Outcome-Based	Co-regulation	Mandatory FoP	FoP + Health
Third-party certification	None	Optional	High	Optional	High
Enforcement cost for FSSAI	Low	Medium	Medium-High	Medium	High
Market impact / reform costs	None	Low	Medium	Low	Medium

Identification of Benefits

The benefits of regulatory intervention primarily flow to consumers, but also accrue to firms and regulators through improved market functioning and reduced ambiguity. The following categories summarise benefits relevant to the coffee–chicory case and broadly applicable across food products:

- **Improved consumer information / reduced deception**
- **Consumer Trust and transparency**
- **Better comparability across brands**
- **Reduction in misleading claims**
- **Reduced complaints / enforcement cost over time**
- **Market discipline: product differentiation & quality signals**
- **Regulatory Certainty & Ease of Monitoring**
- **Long term customer welfare through increased transparency and trust**

TABLE 13.2					
Benefit Type	Status Quo	Outcome-Based	Co-regulation	Mandatory FoP	FoP + Health
Improved consumer information	Low	Medium	Medium	High	Very High
Comparability across brands	Low	Moderate	Moderate	Medium-High	High (visual cue)
Trust / transparency	Low	Medium	Medium-High	High	High

Benefit Type	Status Quo	Outcome-Based	Co-regulation	Mandatory FoP	FoP + Health
Reduction in misleading claims	Low	Medium	Medium	High	Very High
Reduction in complaints	Low	Medium	Medium	High	High
Market discipline	Low	Medium	Medium-High	High	High
Ease of enforcement for FSSAI	Low	Medium	Medium	High	Medium
Long-term consumer welfare	Low	Medium	Medium	High	High

Cost of Compliance: Labelling Requirements

This section quantifies the compliance costs associated with different labelling options for coffee–chicory products in India. The objective is to derive cost of compliance for Back-of-Pack (BoP), Front-of-Pack (FoP), and Front-of-Pack with Health/Nutritional Labelling (FoP + Health) using India-specific cost data. Compliance costs arise from packaging-related inputs such as labels, printing plates, and printed pouches, as well as laboratory testing required to substantiate declared information where applicable. The analysis first sets out itemised cost components for each labelling format and then converts these into per-unit and per-SKU costs using transparent assumptions.

Back-of-pack labelling generally involves minor textual updates or the application of adhesive labels and does not require redesign of the primary display panel or new printing plates. Front-of-pack labelling requires redesign of the principal display panel, creation of new artwork, and new printing plates, leading to higher fixed and variable costs. Front-of-pack health or nutritional labelling entails all FoP costs and additionally requires laboratory testing to generate compliant nutritional information. These differences translate into progressively higher compliance costs across labelling formats.

Cost components: Back-of-Pack (BoP) labelling

TABLE 13.3	
Cost component	Cost amount (India)
Labels / stickers (unit cost)	₹3.06 per label

Cost component	Cost amount (India)
<u>Artwork / text layout modification</u> (one-time, average)	₹10,000 per SKU
Printing plates	Not required
Laboratory testing	Not required

Cost components: Front-of-Pack (FoP) labelling

TABLE 13.4	
Cost component	Cost amount (India)
<u>Artwork redesign & pre-press</u> (one-time, average)	₹15,000 per SKU
<u>Printing plates</u> (average)	₹3,000 per plate
<u>Printed laminated pouch / pack</u> (average incremental cost)	₹4 per pack
<u>Composition testing (ingredient verification)</u>	₹9,500 per sample

Cost components — Front-of-Pack + Health / Nutritional labelling

TABLE 13.5	
Cost component	Cost amount (India)
<u>Artwork redesign & pre-press</u> (one-time, average)	₹15,000 per SKU
<u>Printing plates</u> (average)	₹3,000 per plate
<u>Printed laminated pouch / pack</u> (average incremental cost)	₹4 per pack
<u>Nutrient testing</u> (standard nutrition panel)	₹2,500 + GST per sample
<u>Composition testing (ingredient verification)</u>	₹9,500 per sample

Per-SKU and per-unit compliance cost calculation

Assumptions (common across labelling types)

- Production run: 100,000 packs per SKU
- One printing plate per SKU
- Laboratory testing required once per SKU for compliance

Calculation method:

Fixed cost per unit = Fixed cost per SKU ÷ 100,000 packs

Total per-unit cost = Fixed cost per unit + Variable cost per unit

Per-SKU and per-unit cost comparison

TABLE 13.6				
Labelling format	Fixed costs per SKU (₹)	Variable cost per unit (₹)	Fixed cost per unit (₹)	Total cost per unit (₹/pack)
BoP	10,000	3.06	0.10	3.16
FoP	27,500 (15,000 artwork + 3,000 plate + 9,500 testing)	4.00	0.28	4.28
FoP + Health	30,000 (15,000 artwork + 3,000 plate + 9,500 composition + 2,500 nutrient)	4.00	0.30	4.30

Estimating Consumer Benefits

Consumer benefits are estimated by linking improved disclosure to price correction and expenditure savings. Cost-reflective benchmark prices for common coffee–chicory blends are constructed using observable input prices. The gap between observed retail prices and these benchmarks is treated as an excess premium attributable to limited transparency.

A conservative partial price correction assumption is applied, reflecting that only a portion of this excess premium is likely to adjust following improved disclosure. This correction is further weighted by empirically observed consumer responsiveness to different label formats, based on Indian studies of label use.

Differential consumer response across label types

Empirical evidence from Indian consumer studies shows that consumers respond very differently depending on the *format* of information disclosure. The key distinction is between dense textual information and salient, interpretive cues.

TABLE 13.7		
Label type	Evidence from studies ¹¹⁶¹ ¹¹⁹¹	Assumed Share of consumers whose behaviour changes
Back-of-Pack (BoP) labelling	Least-checked element was ingredient list (~20%)	15% - 25%
Front-of-Pack (FoP) labelling	Numeric nutrition info checked by <40%; FoP improves noticeability	35% - 45%
FoP + Health labelling	~60% of consumers read quality symbols	55% - 65%

Price correction under different labelling regimes (numerical modelling)

Step 1: Calculation of Cost-Reflective Prices

Market retail price for 100% instant coffee

TABLE 13.8	
Brand	Price (₹/kg)
Nescafé Classic	3,968
BRU Gold	3,600
Tata Grand Premium	3,300

Average pure coffee price (used for modelling):

$(3968+3600+3300) / (3)=3,623 \text{ ₹/kg}$

Assumption: Chicory is 10× cheaper than coffee (per kg). Therefore, implied chicory price:

$3,623 \div 10=362 \text{ ₹/kg}$

Coffee–chicory blends

TABLE 13.9		
Brand	Price (₹/kg)	Ratio
Nescafé Sunrise	2,350	60:40
BRU Instant	3,100	70:30
Tata Coffee Grand	3,250	70:30

Cost-reflective blend prices (based on cost of supply)

Formula

$(\text{Cost of Coffee} \times \text{Coffee Ratio}) + (\text{Cost of Chicory} \times \text{Chicory Ratio})$

TABLE 13.10			
Brand	Actual price	Ideal price	Difference
Nescafé Sunrise	2,350	2,319	+31
BRU Instant	3,100	2,645	+455
Tata Coffee Grand	3,250	2,645	+605

Step 2: Excess premium identified at baseline

Using observed prices and cost-reflective benchmarks:

TABLE 13.11				
Brand	Blend	Observed price (₹/kg)	Cost-reflective price (₹/kg)	Excess premium (₹/kg)
Nescafé Sunrise	60:40	2,350	2,319	~0
BRU Instant	70:30	3,100	2,645	455
Tata Coffee Grand	70:30	3,250	2,645	605

Only the excess premium is relevant for estimating consumer welfare gains.

Step 3: Partial pass-through assumption

A conservative **25% correction** of the excess premium is assumed where consumers respond to improved disclosure.

TABLE 13.12		
Brand	Excess premium	25% correction (₹/kg)
BRU Instant	455	114
Tata Coffee Grand	605	151

Step 4: Adjustment by label-specific consumer response

The *effective* price correction varies by label format.

Back-of-Pack (BoP) (Effective correction = 25% price correction × 15%-25% consumer change)

TABLE 13.13	
Brand	Effective correction (₹/kg)
BRU Instant	₹17.1 - ₹28.5
Tata Coffee Grand	₹22.65 - ₹37.75

Front-of-Pack (FoP) (Effective correction = 25% price correction × 35% - 45% consumer change)

TABLE 13.14	
Brand	Effective correction (₹/kg)
BRU Instant	₹39.9 - ₹51.3
Tata Coffee Grand	₹52.85 - ₹67.95

FoP + Health labelling (Effective correction = 25% price correction × 55% - 65% consumer change)

TABLE 13.15	
Brand	Effective correction (₹/kg)
BRU Instant	₹62.7 - ₹74.1
Tata Coffee Grand	₹83.05 - ₹98.15

Monthly consumer savings (Using a conservative monthly household coffee spend of **₹500**)

The per-kg savings are converted into monthly household savings using a representative monthly expenditure of ₹500 on instant coffee at prevailing retail prices. Brand-specific estimates for BRU and Tata Coffee Grand are averaged to obtain a representative household-level saving for each labelling option.

TABLE 13.16	
Label type	Average monthly saving per household (₹)
Back-of-Pack (BoP)	~₹2.42 - ₹4.02
Front-of-Pack (FoP)	~₹5.64 - ₹7.25
FoP + Health	~₹8.86 - ₹10.47

Net Benefit Calculation

Step 1: Annual Savings

TABLE 13.17		
Label type	Monthly saving	Annual saving
BoP	~₹2.42 - ₹4.02	₹29.04 - ₹48.24
FoP	~₹5.64 - ₹7.25	₹67.68 - ₹87
FoP + Health	~₹8.86 - ₹10.47	₹106.32 - ₹125.64

Step 2: Annual Cost of Compliance

Assumptions to calculate annual cost of compliance:

- Average monthly spend: ₹500
- Representative retail price: ~₹3,100/kg
- Monthly quantity: ~0.16 kg
- Standard pack size: 100 g
- Packs purchased: ~1.6 packs/month → **19.2 packs/year**

TABLE 13.18		
Label type	Cost per pack (₹)	Annual cost (₹/hh/year)
BoP	3.16	₹61
FoP	4.28	₹82
FoP + Health	4.30	₹83

Step 3: Annual Net Benefits and Benefit–Cost Ratios (Per Household)

TABLE 13.19				
Label type	Annual consumer benefit (₹)	Annual compliance cost (₹)	Net benefit (₹/hh/year)	Benefit–Cost Ratio
BoP	₹29.04 - ₹48.24	61	(–31.96) - (–12.76)	0.48 – 0.79
FoP	₹67.68 - ₹87	82	(–14.32) - (+5)	0.83 – 1.06
FoP + Health	₹106.32 - ₹125.64	83	(+23.32) - (+42.64)	1.29 – 1.51

Conclusion (Preferred Regulatory Approach):

This case study assesses alternative labelling approaches for coffee–chicory blends by comparing their compliance costs with consumer welfare gains arising from improved disclosure. The analysis combines market price data, conservative behavioural assumptions, and empirically grounded evidence on consumer responsiveness to different label formats.

The results indicate that **back-of-pack disclosure alone does not generate net welfare gains**, as limited consumer engagement with such information constrains price discipline and resulting savings. Front-of-pack disclosure performs better but yields **mixed results**, with net benefits turning

positive only at the upper end of plausible consumer-response assumptions. This suggests that while front-of-pack disclosure improves noticeability and comprehension relative to back-of-pack information, its welfare impact is **sensitive to actual levels of consumer engagement**.

The analysis further shows that **front-of-pack disclosure combined with interpretive or health-oriented cues yields the strongest outcomes**. This option produces the highest consumer savings, the largest net benefit, and the most favourable benefit–cost ratio, while imposing only marginally higher compliance costs than simpler front-of-pack formats.

Overall, the findings suggest that **regulatory effectiveness in food labelling depends not only on the availability of information, but also on how that information is presented**. Labelling formats that enhance salience and interpretability are more likely to translate disclosure into meaningful consumer choice and market discipline. On balance, **front-of-pack labelling with interpretive health labels emerges as the most welfare-enhancing regulatory option** among those considered.

Footnotes and references

1. This case study has been prepared by Civis

↑

2. Food Safety and Standards (Labelling & Display) Regulations, 2020. https://fssai.gov.in/upload/uploadfiles/files/Comp_Labelling.pdf

↑

3. Food Safety and Standards (Labelling and Display) First Amendment Regulations, 2025. https://fssai.gov.in/upload/notifications/2025/08/689d8d163d422coffee%20chicory_gazette.pdf

↑

4. Southfirst, Do you like your coffee with chicory? Coffee Board is considering a ban on this mixture, 2023. <https://thesouthfirst.com/news/do-you-like-your-coffee-with-chicory-coffee-board-is-considering-a-ban-on-this-mixture/>

↑

5. Coffee Board of India, Coffee consumption trends in India, 2023. https://coffeeboard.gov.in/Publications/Coffee_Consumption_2023.pdf

↑

6. India Today, Is coffee adulteration for real?, 2025. <https://www.indiatoday.in/lifestyle/food/story/is-coffee-adulteration-for-real-2745115-2025-06-24>

↑

-
7. Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011. https://fssai.gov.in/upload/uploadfiles/files/11_%20Chapter%2010%20%28BEVERAGES%2C%20%28Other%20than%20Dairy%20and%20Fruits%20%26%20Vegetables%20based%29.pdf
- ↑
8. FSSAI Advisory on Compliance of Coffee–Chicory Mixtures, 2021. https://fssai.gov.in/upload/advisories/2021/11/6195ef50cb7b3Letter_Compliance_Coffee_Chicory_18_11_2021.pdf
- ↑
9. Food Safety and Standards (Labelling and Display) Regulations, 2020. https://www.fssai.gov.in/upload/uploadfiles/files/Compendium_Labelling_Display_23_09_2021.pdf
- ↑
10. FAO, Handbook on Food Labelling to Protect Consumers, 2016. <https://openknowledge.fao.org/bitstreams/71b7d4e0-966e-45c5-9f74-da5ebc133f66/download>
- ↑
11. Official Journal of the European Union, Commission Notice on the application of the principle of quantitative ingredients declaration (QUID), 2017. [https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52017XC1121\(01\)#:~:text=The%20QUID%20is%20a%20mandatory%20particular%20listed,of%20Article%2013%20'Presentation%20of%20mandatory%20particulars'](https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52017XC1121(01)#:~:text=The%20QUID%20is%20a%20mandatory%20particular%20listed,of%20Article%2013%20'Presentation%20of%20mandatory%20particulars')
- ↑
12. Schmitt, S. & Bruckner D., (2023). Unaware consumers and disclosure of deficiencies. *Games and Economic Behaviour*, 142, 1018-1042. <https://www.sciencedirect.com/science/article/abs/pii/S0899825623001628>
- ↑
13. United States Department of Agriculture, Beyond Nutrition and Organic Labels—30 Years of Experience With Intervening in Food Labels, 2017. https://ers.usda.gov/sites/default/files/_laserfiche/publications/85687/ERR-239.pdf?v=14476
- ↑
14. Pahlani, M., Narendra Talati, K., Lopez-Arana, S., & Narayanan, P. (2025). Food labelling in India: a scoping review of consumer engagement, comprehension, and purchase behaviour. *Global health action*, 18(1), 2574132. <https://pmc.ncbi.nlm.nih.gov/articles/PMC12608109/#s0003>
- ↑
15. Oswald, C., Adhikari, K., & Mohan, A. (2022). Effect of front-of-package labels on consumer product evaluation and preferences. *Current research in food science*, 5, 131–140. <https://pubmed.ncbi.nlm.nih.gov/35036933/>
- ↑
-

-
16. WHO, Guiding principles and framework manual for front-of-pack labelling for promoting healthy diet, 2019. <https://cdn.who.int/media/docs/default-source/healthy-diet/guidingprinciples-labelling-promoting-healthydiet.pdf>

↑

17. Shrestha, A., Cullerton, K., White, K. M., Mays, J., & Sendall, M. (2023). Impact of front-of-pack nutrition labelling in consumer understanding and use across socio-economic status: A systematic review. *Appetite*, 187, 106587. <https://pubmed.ncbi.nlm.nih.gov/37169260/>

↑

18. Vemula, S. R., Gavaravarapu, S. M., Mendu, V. V., Mathur, P., & Avula, L. (2014). Use of food label information by urban consumers in India - a study among supermarket shoppers. *Public health nutrition*, 17(9), 2104–2114. <https://pmc.ncbi.nlm.nih.gov/articles/PMC11108719/>

↑

19. Ghosh, R.K., Sanghvi, R., & Sahay, A. (2023). Consumer preference for nutrition front-of-pack-label formats in India: Evidence from a large-scale experimental survey, 111(0950-3293). <https://www.sciencedirect.com/science/article/abs/pii/S0950329323001878?>

↑
