TOWARD ECONOMIC GROWTH

he proposed European Union-India Free Trade Agreement (EU-India FTA) marks a significant milestone in strengthening economic ties between two of the world's most influential economies. Negotiations for this landmark agreement, which aim to reduce tariffs, enhance market access, and foster investment, have been ongoing for several years. Its conclusion would not only deepen bilateral trade but also strengthen strategic, technological, and geopolitical cooperation between the EU

For India, the FTA presents a tremendous opportunity to expand exports of goods and services, including pharmaceuticals, textiles, IT-enabled services, and engineering products. By securing preferential market access, Indian industries could become more competitive in European markets, supporting the country's "Make in India" and export-led growth strategies. Simultaneously, the FTA is expected to attract greater European investments in India's manufacturing, renewable energy, and digital sectors, contributing to employment generation and technology transfer.

For the European Union, the FTA provides access to India's rapidly growing consumer market, offering opportunities for European companies in sectors such as automotive, aerospace, machinery, and renewable energy. The agreement would also facilitate collaboration in research, innovation, and sustainability initiatives, aligning with global environmental and climate goals. Strengthened economic ties could further solidify Europe's strategic partnership with India in the Indo-Pacific region, where both actors share interests in stability, security, and sustainable devel-

However, the agreement is not without challenges. India has historically expressed concerns over protecting domestic industries. particularly in agriculture and dairy, from competition with highly subsidized European products. Similarly, the EU seeks better access for its services, investment protections, and intellectual property rights. Achieving a balanced agreement will require careful negotiation, addressing tariff reductions while safeguarding sensitive sectors, and ensuring mutual benefits.

Beyond economics, the EU-India FTA has broader geopolitical significance. Strengthening trade ties reinforces India's global economic integration while enhancing cooperation on technology, digital governance, and climate action. It reflects a shared commitment to rules-based international trade and can serve as a model for trade agreements between emerging and developed economies.

The EU-India Free Trade Agreement holds the potential to transform bilateral relations by boosting trade, investment, and innovation. By navigating domestic sensitivities and ensuring equitable benefits, both sides can leverage this agreement to accelerate economic growth, technological advancement, and sustainable development. It represents a strategic opportunity to align economic interests with global responsibilities, strengthening a partnership that promises prosperity, resilience, and stability for

Viksit Bharat G RAM G-Rozgar Guarantee for Empowering Rural India

■ SHRI SHIVRAJ SINGH CHOUHAN



ublic debate around welfare reform is both necessary and healthy. Concerns expressed by some quarters over the Viksit Bharat - Guarantee for Rozgar and Ajeevika Mission (Gramin) (VB-G

RAM G) stem from a legitimate apprehension: that any change to a historic employment guarantee could dilute hard-won worker rights. That concern deserves respect. But it also calls for a careful reading of what the Viksit Bharat G RAM G Bill actually provides, rather than assumptions. The most prominent feature of the Bill is that it gives legal guarantee of 125 days of wage employment in a year, to each rural household. The Bill also provides for unemployment allowance in case the employment is not provided within 15 days of application, by removing MGNREGA-era disentitlement provisions.

The weakness of India's rural employment framework lay not in intent, but in structural shortcomings that called for reform.

VB-G RAM G must be assessed against this reality. Far from weakening entitlements, the proposed framework addresses MGNREGA deficiencies directly. By removing dis-entitlement provisions that had the effect of denying workers their due, and by strengthening statutory obligations relating to transparency, social audit and grievance redressal, the Bill seeks to restore credibility to the employment guarantee. Enhanced accountability mechanisms and time-bound grievance resolution are not peripheral features; they are central to making the right meaningful on the ground. In this sense, VB-G RAM G does not

retreat from social protection. It seeks to convert a frequently frustrated entitlement

From Paper Entitlement to Real Empowerment

The most common criticism is that VB-G RAM G undermines the demand-driven nature of rural employment. This claim does not withstand a plain reading of the Bill. Clause 5(1) places a clear statutory obligation on the Government to provide not less than 125 days of guaranteed wage employment in every financial year to any rural household whose adult members volunteer to undertake unskilled manual work.

Far from weakening this right to demand, the Bill strengthens it by expanding guaranteed employment to 125 days and removing MGNREGA-era dis-entitlement provisions, thereby restoring unemployment allowance as a real statutory safeguard. A right embedded in statutory guarantees and enforceable accountability mechanisms is inherently stronger-and VB-G RAM G does precisely this in real terms.

Strengthening the Livelihood Guarantee

Another criticism suggests that the reform prioritises asset creation at the cost of employment. The Bill clearly enshrines a statutory livelihood guarantee, while simultaneously linking employment to the creation of productive and durable public

Clause 4(2) read with Schedule I identifies four thematic domains-water security, core rural infrastructure, livelihood-related infrastructure, and works to mitigate extreme weather events. This ensures that wage employment contributes not only to immediate income support, but also to long-term resilience and productivity. Employment and assets, therefore, are not competing objectives; they are mutually reinforcing, laying the foundation for a prosperous and resilient rural Bharat.

Decentralization through Convergence, Not

Far from centralisation, Clauses 4(1) to 4(3) anchor all works in Viksit Gram Panchayat Plans (VGPPs) prepared at the village level based on local needs and approved by the Gram Sabha. The Bill also addresses a deeper structural flaw of the earlier framework-fragmentation-by requiring all works to be aggregated into the Viksit Bharat National Rural Infrastructure Stack, creating a unified planning and visibility framework.

This is not centralisation by fiat. Clauses 16, 17, 18 and 19 vest planning, implementation and monitoring authority in Panchayats, Programme Officers and District authorities at appropriate tiers. What the Bill facilitates is visibility, coordination and coherence-not centralisation of decision-making authority. Gram Sabhas continue to drive planning based on local pri-

Balancing Worker Security and Farm

Concerns regarding agricultural labour shortages during peak seasons are explicitly addressed. Clause 6 empowers State Governments to notify, in advance, periods aggregating to sixty days in a financial year covering peak sowing and harvesting seasons during which works under the Bill shall not

Crucially, Clause 6(3) allows States to issue differentiated notifications at the level of districts, blocks or Gram Panchavats based on agro-climatic conditions. This built-in flexibility ensures that the enhanced employment guarantee complements, rather than disrupts, agricultural operations-a calibrated balance few welfare legislations have

Equity through Rule-Based Allocation

Critics also point to fears of fiscal tightening. Clause 4(5) and Clause 22(4) require State-wise normative allocations to be determined on objective parameters prescribed in

At the same time, the framework treats States not as mere implementing agencies but as partners in development. State Governments are empowered to notify and operationalise their own Schemes within the State, consistent with the minimum statutory framework laid down in the Bill. This ensures that while allocations are rule-based and equitable, implementation retains flexibility-cooperative federalism in practice.

Technology as Enablement, Not Exclusion Apprehensions about technology-driven exclusion overlook the safeguards built into the Bill. Clauses 23 and 24 mandate technology-enabled transparency through biometric authentication, geo-tagged works, real-time dashboards and regular public disclosuresaddressing concerns around fake attendance,

ghost workers and unverifiable records. Technology is not conceived as a rigid gatekeeper but as an enabling tool, with exception handling as a core design feature. Clause 20 strengthens social audits by the Gram Sabha, reinforcing community oversight. Technology here does not bypass accountabil-

Reform as Renewal

By enhancing the employment guarantee, embedding local planning, balancing worker security with farm productivity, converging schemes, strengthening frontline capacity through enhanced administrative support, and modernising governance, the Bill seeks to restore credibility to a promise that too often fell short in practice.

The choice is not between reform and compassion: it is between a static entitlement that under-delivers and a modern framework that delivers with dignity, predictability and purpose. In that light, VB-G RAM G is not a retreat from social protection-it is its renewal

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Sabka Bima Sabki Raksha: A Structural Reform to Deepen Insurance Penetration in India

he passing of the Sabka Bima Sabki Raksha (Amendment of Insurance Laws) Bill, 2025 by the Parliament represents a significant milestone in the evolution of India's insurance framework. By amending the Insurance Act, 1938, the Life Insurance Corporation Act, 1956, and the Insurance Regulatory and Development Authority Act, 1999, the Bill addresses the need for a modern, flexible, and inclusive regulatory architecture aligned with India's long-term development pri-

Insurance is a critical pillar of economic resilience and social security. As India advances towards its centenary of Independence, the challenge before policymakers, regulators, and insurers alike is to ensure that insurance protection becomes universal, affordable, and trusted.

The amendments proposed under this Bill are timely and necessary to support the national mission articulated for "Insurance for All by 2047."

A key strength of the Bill lies in its emphasis on policyholder protection and regulatory robustness. By updating legacy provisions and strengthening governance norms, the amendments reinforce transparency, accountability, and prudential oversight across the insurance ecosystem. For policyholders, this translates into stronger safeguards, improved service standards, and enhanced confidence in long-term insurance commitments, an essential factor in a sector built on trust.

Welcoming the Insurance Amendment Bill in the Lok Sabha, the Minister of Finance, Nirmala Sitharaman, emphasised the urgent need to deepen insurance penetration and awareness across the country. She stated that greater awareness would enable citizens not only to protect themselves against risks but also to ensure that they receive their rightful insurance claims. In this context, she highlighted the creation of the Policyholders' Education and Protection Fund, which will be financed through penalties levied by the Insurance Regulatory and Development Authority of India (IRDAI) and utilised specifically to promote policyholder education and protection.

The Finance Minister further underscored the necessity of enhanced capital infusion into the insurance sector to support its long-term growth and resilience. She noted that increased capital would facilitate access to advanced technology, world-class risk assessment frameworks, and globally competitive insurance products. She explained that the removal of the upper cap on foreign direct investment in the insurance sector would serve as a significant catalyst in achieving these objectives, while also fostering a more conducive and investorbusiness environment. Additionally, she informed the House that regulatory processes would be strengthened through the introduction of standard operating procedures for regulation-making and mandatory public consultations on all regulations issued by IRDAI, thereby ensuring transparency, consistency, and a consultative approach.

The Bill also provides a framework for greater operational agility and innovation, enabling insurers to respond effectively to changing demographic, economic, and social realities. India's insurance needs today extend beyond traditional products to include retirement security, longevity solutions, healthlinked protection, and risk cover for emerging livelihoods. A modernised legislative environment will allow insurers to design and distribute products that are more targeted, efficient, and responsive, while remaining within a sound regulatory perimeter.

From the perspective of financial inclusion, the proposed amendments will help accelerate the expansion of insurance coverage across underserved segments, including rural households, informal sector workers, women, and first-time policyholders. By facilitating simplified processes, digital adoption, and scalable distribution models, the Bill supports the broader public policy objective of extending formal financial protection to every citizen.

The enhanced role envisaged for IRDAI under the amended framework is particularly significant. A strong, empowered, and forward-looking regulator is indispensable for balancing growth with stability in a rapidly expanding insurance market. The Bill strengthens IRDAI's ability to guide orderly sectoral development, safeguard consumer interests, and foster innovation in alignment with national priori-

For the Life Insurance Corporation of India, these reforms reaffirm our mandate as a trusted national institution with a deep developmental role. For nearly seven decades, LIC has been at the forefront of extending life insurance protection across geographies and income segments. The proposed legislative changes provide an opportunity to further strengthen our reach, leverage technology at scale, and contribute meaningfully to the national goal of universal insurance coverage.

Importantly these changes have come just after the Bonanza of Full GST waiver on all Individual policies to great relief and joy of Life Insurance Policyholders.

As India works towards becoming a developed economy by 2047, the insurance sector will play a vital role in protecting households, mobilising longterm savings, and supporting economic stability. The Sabka Bima Sabki Raksha Bill is a forward-looking reform that underscores the Government's commitment to building a secure, inclusive, and resilient insurance ecosystem- one that ensures every Indian is protected against life's uncertainties.

India's Dominance in Global Milk

Globally, annual milk production stands at nearly 966 million tonnes. and India alone contributes close to one-fourth of this volume. In 2023-24, India produced about 239 million tonnes of milk, supported by a high per capita availability of 471 grams per day. Approximately half of this output comes from cow milk, while buffalo milk accounts for nearly 44%, giving India a strong advantage in producing high-fat, high-SNF dairy products. Nearly 65% of the total milk is sold as liquid milk, while value-added products-such as curd, paneer, ghee, cheese, yoghurt and ice cream-have emerged as the fastest-growing segment, now accounting for almost 45% of the diversified product range offered by organised dairies. Yet, despite this impressive growth, almost two-thirds of India's milk still flows through the unorganised sector, underscoring the crucial need for modern processing plants, testing facilities and quality-control laboratories.

Milk Adulteration: A Persistent and Deepening Public-Health

Concern Recent assessments reveal that milk adulteration continues to be a widespread and deeply rooted challenge across India. Several state surveillance reports and national studies indicate that over 65-70% of sampled milk fails to meet foodsafety standards, underscoring systemic weaknesses from farm production to retail distribution. Adulteration today is not limited to simple dilution; it increasingly involves multi-ingredient chemical manipulation, making detection more difficult. Common adulterants include added water, starch, maida, glucose, detergents, synthetic sur-

factants, salt, urea, neutralisers, and bicarbonates. Several states have also reported the use of hydrogen peroxide, formalin, and benzoates to prolong shelf life, especially in hot climates. Heavy metals such as lead, chromium and arsenic have been detected due to contaminated feed and polluted water sources, as noted in multiple State Food Safety Laboratory investigations (2023-24). A particularly alarming trend is the rise of synthetic milk, a chemical mixture made using detergent, urea, vegetable fat emulsions and water. According to The Times of India (2024), synthetic milk rackets were busted across Uttar Pradesh, Rajasthan, Haryana and Madhya Pradesh, with units producing between 2,000 and 10,000 litres per day, especially during festival sea-

Several major incidents across India reveal the scale of adulter-

- ▶ 30,400 litres of salt-adulterated milk were destroyed in Sangli, Maharashtra after inspections found dangerously high salinity lev-
- ▶ 900 kg of adulterated paneer made using starch and hardened vegetable fat was seized in Dhanbad.
- ▶ A massive ?250-crore fake ghee scam linked to the Tirumala Tirupati Devasthanams (TTD), in which the implicated dairy had not procured any milk or butter, was uncovered by investigators.
- ▶ Tankers transporting milk in northern India were found containing urea concentrations up to three times the permissible limit, according to FSSAI regional enforcement reports (2024).
- ▶ In Rajasthan and Madhya Pradesh, police uncovered multiple units manufacturing synthetic milk

and khoa, especially ahead of Holi and Diwali (Rajasthan Food Safety Department Bulletins, 2023-24).

These cases highlight not only intentional adulteration for profit but also adulteration caused by lack cold-chain infrastructure, spoilage prevention measures, and price fluctuations. To combat the issue, state agencies have deployed mobile milk-testing vans, introduced lactometer-based checks, mandated vendor registration, strengthened identity verification at collection points, and increased penalties for offenders. Despite these efforts, the fact that nearly two-thirds of India's milk flows through the unorganised sector continues to make monitoring difficult. Experts stress that addressing adulteration requires strengthening testing laboratories, wider availability of FTIR analysers, adoption of portable IR biosensors, digital traceability systems, and enhanced training for farmers and smallscale vendors. Public awareness campaigns are increasingly recommended as a complementary approach to enforcement.

Consumption Patterns

Expansion of Value-Added Dairy India's milk utilisation pattern reflects a large traditional consumption base coupled with strong demand for modern dairy foods. Roughly 50% of domestically marketed milk is consumed as fluid milk, while around 35% is used for traditional products such as curd, lassi, paneer, khoa and Indian sweets. The remaining 15% goes into industrial dairy products including butter, ghee, skim milk powder (SMP), whole milk powder (WMP), whey, casein and ice cream.

Industry analyses show similar trends: about 65% of production is sold as liquid milk, while around 8% each comes from ghee and

curd/yoghurt, and approximately 5% from infant foods. In recent years, value-added dairy products (VAPs) have recorded rapid growth rates of 16-18%, with their share in organised dairy portfolios rising to nearly 45%. This expansion spans traditional dairy items such as ghee, makkhan, shrikhand, paneer and dahi, as well as western-style products like cheese, mozzarella, spreads, ice cream and frozen desserts. Functional dairy beverages, probiotic drinks, whey-based beverages, high-protein milks and reduced-sugar variants are also gaining popularity. Emerging niches-such as organic dairy, A2 milk, artisanal cheeses, goat/camel milk products and lactose-free lines-are reshaping consumer preferences.

Economically, the Indian dairy market was valued at ?21.3 lakh crore in 2025 and is projected to nearly triple by 2034. In global terms, the dairy market was valued at USD 135.3 billion in 2024 and is expected to exceed USD 274 billion

Dairy contributes nearly 3% to India's Gross Value Added (GVA) and almost 5% of its GDP, while livestock as a whole contributes over 30% to agricultural GVA. India is also strengthening its presence in global dairy exports, particularly in SMP, ghee, butter, cheese, whey and casein, with SMP alone making up nearly 30% of total export value.

Shifts, Climate Sectoral and Technological Challenges Transformation

Structurally, the sector is undergoing a major shift from commodity liquid milk toward higher-margin value-added products. Several large private dairies have strategically reduced or exited the low-margin fluid milk business to focus exclusively on products such as cheese,

paneer, desserts, and flavoured beverages. This mirrors a broader trend in the organised sector, supported by new investments in automated processing plants, chilling centres, cold-chain systems and quality-assurance infrastruc-

However, climate change poses a growing challenge. Extreme heatwaves can reduce milk output by nearly 10%, and even one hour of high wet-bulb temperature above 26°C can significantly depress daily yield. South Asia, particularly India, is highly vulnerable to these temperature fluctuations. As a result, there is increasing emphasis on heat-tolerant breeds, improved housing designs, cooling measures within dairies, and climate-smart feeding practices.

Technological innovation reshaping dairy production as well. Advanced digital systems-such as AI-enabled estrus-detection tools. IoT-based herd monitoring, automated milking parlours, and predictive health analytics-are becoming common in leading farms. For quality assurance, modern laboratories now rely on FTIR analysers, rapid adulteration kits, and tests for antibiotic residues, aflatoxin M1 and chemical contaminants. Policy support through incentives, foodsafety regulations, GST reforms, and national disease-control programmes (such as FMD and Brucellosis eradication) further strengthens the sector.

Rising Interest in Species-Specific Functional Milks

Globally, cow milk contributes nearly 80-81% of total milk production, while buffalo, goat and sheep milk account for most of the remaining share. In India, cow and buffalo milk together contribute more than 95% of national output. Within cow milk, crossbred and

exotic cows contribute around 33% while indigenous and non-descript breeds account for roughly 21%. Buffaloes, particularly indigenous types, contribute nearly 45%, and

goat milk adds about 3.4%. Scientific and commercial interest is rising in functional and specialty milks. A2 cow milk is gaining popularity due to reported better digestibility. Buffalo milk, richer in fat and minerals, is widely recognised as a superior base for probiotic cultures, functional yoghurts and premium dairy foods. Goat milk is valued for its anti-inflammatory, antioxidant, antimicrobial and immune-modulating components. Sheep milk, with its high fat and protein levels, is increasingly used for nutraceuticals, specialty cheeses, and even skincare applications. Camel milk has shown potential benefits in conditions such as diabetes, metabolic syndrome, and developmental disorders, while donkey milk is emerging as an ingredient for hypoallergenic infant formulas and cosmetic products.

Conclusion

India's dairy sector is expanding rapidly in scale, diversity and technological sophistication. However, the rising threat of milk adulteration underscores the urgent need for stronger quality-control systems, improved cold-chain infrastructure, farmer training, and widespread adoption of rapid testing technologies. As the sector continues to evolve, the future of Indian dairy will be defined not only by production volumes but also by the nation's ability to ensure that every litre of milk is pure, safe and nutritionally reliable for con-

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