

A graphic of a bright sun rising over a curved horizon line, with rays of light emanating from the sun.

SWARNIM UDAAN 2047

UNLOCKING THE FULL POTENTIAL OF GOLD TOWARDS
VIKSIT BHARAT 2047

A vision for India's gold economy



Foreword

The Indian gold sector stands at an inflection point.



India stands at a defining moment in its economic journey. As the country advances towards the vision of Viksit Bharat 2047, it has a unique opportunity to build on the strengths that have long distinguished it on the global stage while creating new engines of growth for the future.

Among these strengths, few are as enduring, or as uniquely Indian, as gold.

Gold has been woven into India's economic, cultural and social fabric for centuries. It supports millions of livelihoods across refining, manufacturing, retail and exports, while serving as one of the nation's most trusted stores of value and a significant repository of household wealth. Yet, despite its importance, discussions around gold have often been framed primarily through the lens of imports and consumption.

While prudent management of imports remains important, this perspective captures only part of gold's contribution to India's economy. Gold is a strategic strength that India already possesses and whose potential lies in its ability to drive formalisation, investment, innovation and higher-value economic activity across the gold ecosystem. With the right policy environment, market infrastructure and institutional support, gold can become an even more powerful contributor to India's economic resilience, industrial competitiveness and development.

The global gold ecosystem is undergoing profound transformation. Rapid technological change, evolving consumer preferences, sustainability imperatives and shifting geopolitical dynamics are reshaping how gold is produced, traded and utilised. At the same time, countries around the world are increasingly recognising gold's broader strategic importance,

not only as a trusted store of value, but also as a high-quality liquid asset that strengthens financial resilience, supports economic security and underpins emerging technologies.

India is uniquely positioned to benefit from these changes. It possesses one of the world's largest household gold holdings, an internationally recognised jewellery manufacturing ecosystem, unparalleled craftsmanship, growing digital capabilities and one of the world's largest consumer markets. Together, these advantages provide a strong foundation to build a globally competitive gold ecosystem that creates greater value across manufacturing, exports, financial markets and innovation.

Unlocking this opportunity requires a broader shift in perspective. Gold should not be viewed solely as a consumer product, but as a strategic national asset capable of advancing India's wider economic ambitions. Strengthening domestic mining, expanding recycling, deepening financialisation, enhancing manufacturing competitiveness and integrating more effectively with global markets can collectively enable gold to play a much larger role in India's growth story. It is in this context that the World Gold Council partnered with Monitor Deloitte to undertake this study. Swarnim Udaan 2047 is not a sectoral analysis, but a vision document that reimagines gold's role in India's economic future. Drawing on global leading practices and insights from policymakers, industry leaders and market participants, it sets out a practical roadmap to strengthen the gold ecosystem and enhance its contribution to India's development by 2047.

The opportunity before us extends far beyond preserving gold's enduring relevance. It is about harnessing one of India's oldest strategic strengths to advance one of its greatest national ambitions – a resilient, globally competitive and developed economy by 2047. Realising this vision will require sustained collaboration across government, industry, financial institutions and consumers. We hope that Swarnim Udaan 2047 serves not merely as a roadmap for the gold ecosystem, but as a catalyst for reimagining gold's role in India's growth story and unlocking its full potential as a driver of national development.

Sachin Jain,
Regional CEO, India
World Gold Council



Executive Summary

Role of Gold in India's Growth Story

India stands at the cusp of a transformative economic era. Anchored in the vision of Viksit Bharat 2047, the country is seeking to accelerate capital formation, strengthen manufacturing competitiveness, deepen financial markets, foster innovation and create sustainable livelihoods at scale. As India charts this next phase of development, it must identify and leverage strategic sectors and assets capable of contributing meaningfully to long-term national prosperity.

Among these, gold occupies a unique position. Beyond its cultural significance and role as a store of wealth, gold supports millions of livelihoods across the jewellery value chain, underpins a globally competitive manufacturing and export ecosystem, serves as a critical component of financial markets and is emerging as an important input into advanced industrial applications. As economies become increasingly technology-driven and focused on resilience, gold's role is expanding from a traditional consumption and investment asset to a strategic resource capable of supporting growth, innovation and competitiveness.

Why now?

Global shifts are creating a timely window to reimagine gold's role in India's growth story. India's Viksit Bharat 2047 ambition coincides with major changes in geopolitics, trade, technology and supply chains, prompting nations to strengthen domestic capabilities, build resilient supply chains and create greater value within their own economies. Given the decade-long timelines associated with development of mines, refining, recycling, manufacturing and skilling capabilities, the runway to 2047 makes this the moment to act.

As the world's largest gold consumer, India's import dependence exposes the economy to global price volatility, supply disruptions and foreign exchange outflows. A stronger domestic gold ecosystem, is therefore, closely aligned with the objectives of Atmanirbhar Bharat and Make in India, supporting manufacturing competitiveness, innovation, resilient

supply chains and domestic value creation. In the context of the West Asia crisis, in May 2026, the Honourable Prime Minister Shri. Narendra Modi urged citizens to defer gold purchases for one year to help conserve India's foreign exchange reserves. Building on this, strengthening domestic gold supply through mining, recycling and financialisation presents an opportunity to unlock greater value from India's existing gold ecosystem while enhancing economic resilience, meeting consumer preferences and improving long-term competitiveness.

Gold's strategic role is widening in line with India's Viksit Bharat priorities. Beyond its established role as a reserve asset and store of value, gold is increasingly relevant to electronics, semiconductors, aerospace, healthcare and other advanced technologies, extending its contribution well beyond traditional applications. As countries place greater emphasis on strategic resources, resilient supply chains and long-term economic security, gold is becoming an increasingly important enabler of advanced manufacturing and future industries.

India is well placed to capture this opportunity. Large household gold holdings, a globally recognised jewellery industry, manufacturing capabilities and deepening financial markets provide a strong foundation to create value across mining, refining, recycling, manufacturing, exports, financialisation and emerging industrial applications.

The emergence of Gen Z

Realising this opportunity, however, will require the gold ecosystem to evolve in step with changing market dynamics and consumer expectations. Among the most significant of these shifts is the emergence of Gen Z as the most influential consumer cohort in India's growing economy. Digitally native, trend-driven and highly influential in household purchasing decisions, Gen Z is redefining how products are designed, marketed and experienced.

US\$2tn

in Gen Z-driven spending is projected to amount to nearly every second rupee spent in India's economy by 2035



For the gold industry, this presents a significant opportunity. Gen Z consumers are moving beyond traditional notions of ownership and value, placing greater emphasis on convenience, personalisation, liquidity, seamless digital experiences and responsible sourcing. Their purchasing journeys blend online discovery with offline engagement, while their investment preferences expand beyond conventional physical formats.

Meeting these evolving expectations will require the gold ecosystem to move beyond a predominantly consumption-driven model towards a future-ready ecosystem. Such a transformation will be essential not only to remain relevant to the next generation of consumers, but also to unlock gold's broader economic potential. To achieve this, the report identifies a set of five strategic pillars that strengthen the gold value chain. These focus on mining, exports, financialisation, jewellery consumption and design and unlocking gold's potential as a strategic asset and mineral for economic growth.

Transforming gold into a strategic national asset

Five pillars for accelerating growth across India's gold ecosystem

1. Promoting "Mine in India"

Historically, India's gold demand has been immense, yet domestic production remains limited despite significant geological potential. India possesses approximately 6.88 lakh per sq. km of Obvious Geological Potential (OGP), of which only around 30% has been explored. This suggests that the country's currently identified gold resource base may represent only a fraction of its broader mineral potential. Unlocking this untapped opportunity can strengthen supply resilience, support economic development and reduce import dependence over the long term.

50% (presently 30%)
of India's Obvious Geological Potential (OGP)
targeted to be explored by FY2030

Recent auctions of gold mining blocks demonstrate the government's commitment to reserve assets and stores of value, gold is resilient and long-term growth will unlock this potential. Building on this momentum will require targeted reforms that encourage private explorers to convert discoveries into production. Streamlined clearances, enhanced incentives,

dedicated financing and adoption of advanced technologies such as AI-enabled exploration and automation can help accelerate mine development and output. Equally important is developing a future-ready workforce by positioning mining as an innovative, technology-driven and sustainable career pathway.

Amid persistent geopolitical tensions and concerns over external vulnerabilities, the importance of strengthening domestic gold supply channels has come into sharper focus. Ongoing policy efforts and public statements that highlight India's dependence on imported bullion underscore the strategic need to expand domestic sources of gold through mining and recycling.

2. Making India "Jeweller to the World"

Exports are another critical lever for strengthening 'Brand India' in global markets. While India is already among the world's largest exporters of gold jewellery, substantial potential remains to strengthen its position in international markets. The experience of leading jewellery-exporting nations demonstrates that export leadership is built not only on production volumes, but also on strengths in branding, design, manufacturing scale, refining and global market connectivity. India's opportunity lies in building these capabilities at scale while leveraging its deep-rooted expertise in jewellery craftsmanship, design and manufacturing.

Achieving this ambition requires a targeted strategy focused on identifying and prioritising high-potential export markets across North America, Europe, the Middle East and emerging regions where demand for jewellery continues to grow. Understanding evolving consumer preferences, design trends, quality expectations and distribution channels within these markets will be critical to building sustainable competitive advantage.

Complementing this market-led approach, India must continue strengthening manufacturing competitiveness, design capabilities, branding, trade facilitation and supply chain efficiency. Together, these interventions can elevate the "Made in India" value proposition and establish India as the preferred global hub for jewellery design, manufacturing and exports.

3. Enabling greater financialisation of gold

Evolving consumer preferences are also poised to catalyse gold's financialisation in India – replicating the transformation seen in advanced economies. India's household gold holdings represent one of the country's most significant yet underutilised economic resources.



31,000+t

estimated stock of India's gold holdings as of 2025, valued at ₹314.9 lakh crore (US\$3.4tn)

Mobilising even a small share of these holdings could unlock significant economic value by deepening financial markets, enhancing liquidity and strengthening capital formation. While the Gold Monetisation Scheme (GMS) laid the foundation for bringing household gold into the formal economy, the next phase of financialisation must be driven by an integrated ecosystem that connects GMS, recycling networks, Electronic Gold Receipts (EGRs), digital gold, bullion banking and gold-backed financial products. By enabling seamless movement of gold across physical and financial markets, such interoperability can enhance liquidity and transform dormant household holdings into a productive economic asset, accelerate participation across the value chain and position gold as a dynamic engine of India's growth and prosperity.

4. Reimagining gold jewellery for the modern consumer

Moreover, India's gold jewellery market is at an inflection point. While tradition and trust continue to influence purchase behaviour, structural shifts – driven by rising consumer aspirations, digital adoption and regulatory reforms – are creating new opportunities to expand demand, deepen engagement and build a more resilient ecosystem. Consumers today expect convenience and personalisation in equal measure, pushing the industry to innovate beyond its traditional strengths. At the same time, the government's hallmarking push, the rise of organised retail and the evolving role of gold as a lifestyle product can redefine the contours of the market, with implications across a value chain that supports substantial value.

~₹4.5 lakh cr

(~US\$49 bn) Value of India's gold jewellery demand in 2025

5. Unlocking gold's potential as a strategic national asset and mineral

Lastly, gold's contribution to India's economy extends beyond its traditional role in jewellery, investment and reserves. As India advances towards its Viksit Bharat ambitions, demand for advanced materials to enable next-generation industries is expected to grow significantly. Gold is already a critical input across semiconductors, electronics, biotechnology, aerospace, diagnostics and artificial intelligence, where

its unique properties support high-performance and precision applications.

US\$750bn

Projected size of India's semiconductor ecosystem by 2047, creating significant demand for advanced materials such as gold across strategic industries

In recognition of this evolving role, countries are increasingly adopting differentiated approaches to gold. While financial centres have strengthened bullion ecosystems to enhance their competitiveness as global trading and refining hubs, the United States has recognised gold's strategic importance within its critical minerals framework which supports advanced manufacturing, technology and economic security.

For India, harnessing gold's broader strategic role can unlock value across the entire ecosystem. A more integrated policy approach could strengthen resource security, expand domestic mining and refining capabilities, increase investment across the value chain, support innovation and advanced manufacturing, enhance supply chain resilience and increase participation in high-value global value chains. Moving beyond a consumption-centric view of gold and integrating it more fully into India's financial strategies will allow gold to become a stronger enabler of economic resilience, competitiveness and long-term prosperity.

A new vision for gold

These pillars should not be viewed as standalone initiatives; but as becoming increasingly interconnected. Investments in domestic mining and refining can strengthen trust and transparency across the gold value chain, supporting both consumer confidence in jewellery purchase and greater participation in financial gold products. As the jewellery sector becomes more competitive, innovative and trusted, it can enhance India's position in global export markets while increasing domestic value addition. At the same time, deeper financialisation can improve market efficiency, mobilise idle gold and reduce reliance on imports, strengthening the resilience of the broader ecosystem. Greater recognition of gold's role as a strategic asset and mineral can further reinforce the case for developing domestic supply chains, creating a pathway that supports mining, manufacturing, exports and investment demand alike. Collectively, these interconnected pillars create a virtual cycle, reinforcing each other to generate sustainable economic value.





Indian gold industry in 2047: vision and milestones that define success

Gold's contribution to India extends well beyond the sector itself. By 2047, a stronger, more integrated gold ecosystem could contribute meaningfully to national priorities, from manufacturing and exports to financial resilience, innovation and economic growth. The boxed ambition statement sets out this long-term vision, while the bullets that follow illustrate what success could look like in achieving it.

**1**

India expands responsible domestic gold mining

10–15% of India's annual gold demand met through domestic mining , strengthening resource security and reducing reliance on imported gold.

- 50%+ of India's OGP explored, with multiple world-class mines operational
- Faster, digital mine approvals unlock higher exploration investment
- 1,000–1,500 direct jobs per mine with each job supporting 6–10x induced employment

**2**

India becomes the leading jewellery export hub

#1 jewellery exporter globally by 2047 vs current 5th largest¹⁶, leveraging India's manufacturing strengths, design capabilities and growing global presence

- Jewellery emerges as one of India's largest value-added export industries, driving manufacturing, employment and global competitiveness.
- Expanded global market share, anchored in quality, compliance and a stronger “Made in India” brand positioning

**3**

India's gold stock fuels national capital

10–15% of household gold to be mobilised through an integrated bullion banking ecosystem, unlocking dormant assets to support investment and growth

- Gold-backed savings, investment and financial products become mainstream, including for pension funds and insurers
- India builds globally competitive bullion banking, trading and financial infrastructure

**4**

India leads the future of jewellery retail

2 in every 3 young Indians participates in the gold jewellery ecosystem, while driving greater value capture through design and innovation

- Universal hallmarking, traceability and stronger consumer protection become industry standards
- Indian omnichannel retail gold global benchmarks in design, trust and customer experience

**5**

Gold powers India's strategic and industrial ascent

A driver of economic resilience, advancing high-value manufacturing, innovation and strategic industries

- Gold-enabled technologies support India's ambitions in semiconductors, electronics, biotechnology, aerospace and other strategic sectors
- India emerges as a leading regional bullion, innovation and advanced manufacturing hub for gold



Swarnim Udaan: the North Star for India's gold revolution

For decades, India's gold narrative has largely been shaped by concerns around imports and external dependence. Yet this perspective captures only a fraction of gold's true potential. Swarnim Udaan 2047 presents a different vision – one that recognises gold not merely as a consumption good, but as a strategic national asset that can mobilise household wealth, strengthen domestic supply chains, accelerate industrial innovation, deepen financialisation and contribute meaningfully to India's growth ambitions.

Achieving this vision will require a coordinated policy and institutional framework that strengthens the domestic gold ecosystem, aligns stakeholders and supports effective implementation. Key priorities include reforms to enhance financialisation, improve market infrastructure, expand recycling and encourage responsible mining, alongside a structured assessment of the merits of recognising gold as a strategic mineral and strategic asset. Such an assessment can help strengthen gold's role in supporting India's economic resilience, emerging technology ambitions and long-term industrial competitiveness. Building on the institutional approach proposed in NITI Aayog's 2019 report, Transforming India's Gold Industry, this report recommends establishing

National Gold Board

as the apex platform for coordination across government, regulators, industry, financial institutions, academia and technology leaders

The Board will drive policy alignment and enable coordinated action across the gold value chain. Complementing this effort, a dedicated Gold Innovation Centre will drive research

Gold Innovation Centre

will drive research, capability building, technology adoption, digitalisation, sustainability and market development

The aim is to support industry transformation and ensure the sector remains responsive to evolving consumer aspirations and global market dynamics.

Together, these policy reforms, institutional mechanisms and industry-led initiatives can provide the strategic

direction, institutional alignment and innovation ecosystem required to unlock the full economic potential of gold. Swarnim Udaan 2047 is not merely a vision for sectoral reform; it is a roadmap for transforming gold from a fragmented market into a cornerstone of national prosperity. By turning tradition into innovation, strengthening the domestic gold ecosystem and unlocking value across the entire value chain, India can position gold as a catalyst for growth, shared prosperity and its broader Viksit Bharat 2047 aspirations.

Swarnim Udaan is the ascent of India's Sone ki Chidiya (Golden Bird), not merely to reclaim its historic stature as a land of gold, but to advance it into a modern, formal, innovative and globally influential gold economy.





Contents

Swarnim Udaan 2047: the North Star

1. Viksit Bharat 2047 mission and introduction to Swarnim Udaan	11
2. Driving forces of the future	15
3. Pillar 1: Promoting “Mine in India”	23
4. Pillar 2: Making India “Jeweller to the World”	33
5. Pillar 3: Enabling greater financialisation of gold	44
6. Pillar 4: Reimagining gold jewellery for the modern consumer	59
7. Pillar 5: Unlocking gold’s potential as a strategic national asset and mineral	66
8. The way ahead	75
9. Implementation roadmap	82
Annexes	87
References	90
Contributors	102
About, Notice to Reader and Disclosures	103

Chapter 1

Viksit Bharat 2047 mission and
introduction to Swarnim Udaan



India @2047: the Viksit Bharat Imperative

The Government of India, in collaboration with the National Institution for Transforming India (NITI) Aayog, has launched the Viksit Bharat Mission, a strategic, multi-decade roadmap aimed at transforming India into a US\$30tn economy by 2047.¹

“Viksit Bharat 2047 envisions transforming India into a developed, inclusive and self-reliant nation by its centenary year of independence, driven by sustainable growth, innovation and social equity.”

Central to this agenda are a set of ambitious economic milestones that define India's long-term growth trajectory:

US\$30tn

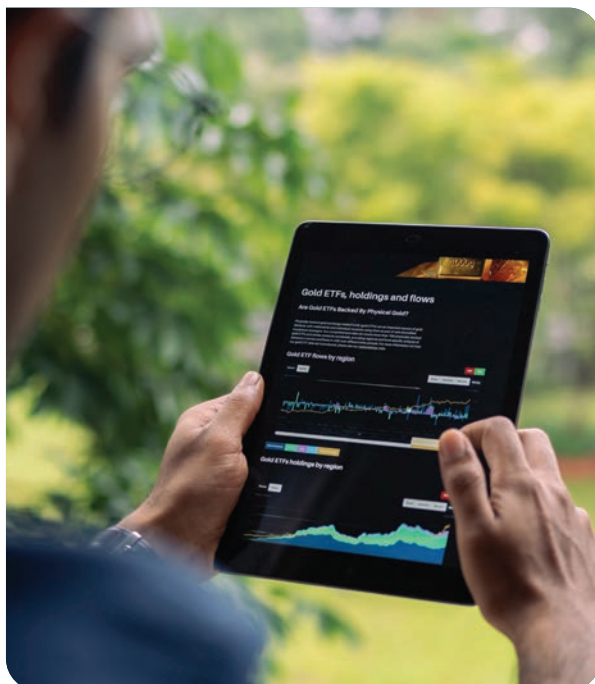
India's GDP ambition for 2047²

US\$18–20k

per capita income at ~8x current levels³

25%

of GDP from manufacturing, up from 17% today⁴

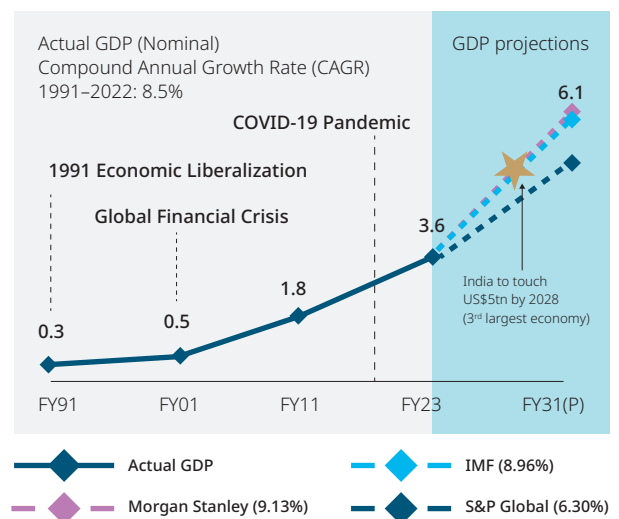


India's Economic Growth Trajectory: Past Performance and Future Potential

India's economic transformation since the early 1990s has positioned it among the world's fastest-growing major economies. From a Gross Domestic Product (GDP) of ~US\$0.3tn in FY1991, the economy has expanded over fourteen-fold to an estimated US\$3.6tn in 2025^{5*}, according to the International Monetary Fund (IMF). This remarkable growth reflects the cumulative impact of structural reforms, demographic dividends, entrepreneurial dynamism and increased global integration. The IMF projects India's GDP will reach US\$5.5tn by 2028⁶, making it the world's third-largest economy globally.

Looking ahead, India's growth outlook remains highly optimistic. Leading global financial institutions have projected sustained high growth for the country, with projections presented in Chart 1.^{7, 8} These projections, driven by India's rising prominence in global manufacturing, rapid digitisation, structural reforms and strong capital investments, indicate that India is well-positioned to continue its ascent as a global economic powerhouse.

Chart 1: India's Gross Domestic Product (GDP), US\$tn



Source: HSBC, United Nations Population prospects, World Bank, IMF, Morgan Stanley, S&P Global, IEA Reports, PIB

Note: *USD equivalents are based on the latest available exchange rate of USD 1 = INR 91.5



Role of gold in Viksit Bharat

Gold is not merely a cultural asset, but a strategic economic lever deeply embedded in India's economy, with significant potential to accelerate the nation's Viksit Bharat ambitions (illustrated below).

ECONOMIC GROWTH

1.3%contribution of gold to India's GDP (2022)⁹

CRAFT-LED MANUFACTURING BASE

3 lakhgems and jewellery entities in India; 55% of jewellery is handmade¹⁰

INFRASTRUCTURE DEVELOPMENT

10 SEZsfor Gems & Jewellery in India; 3 jewellery park initiatives underway across Mumbai, Bengaluru and Raipur^{11*}

SKILLING ECOSYSTEM

5 Mnpeople employed in gems & jewellery manufacturing¹²

FINANCIAL RESILIENCE

31,000+testimated stock of India's gold holdings, valued at ₹314.9 lakh crore (US\$3.4tn)^{13**^}

GLOBAL LEADERSHIP AMBITION

5thLargest exporter of gold jewellery globally – India (by value)¹⁴

Policy Momentum

Area	Initiative	Strategic objective
Consumer trust	Mandatory hallmarking (2021)	Improve purity assurance and authenticity
Trading infrastructure	India International Bullion Exchange (IIBX) at GIFT IFSC (2022)	Enhance price transparency and global integration
Domestic mining	24 gold mining blocks allocated since 2022 ¹⁵	Accelerate domestic exploration and resource security

Areas for continued reform

Despite strong policy momentum, several areas of the gold ecosystem are currently underdeveloped but present significant opportunities to support India's Viksit Bharat ambitions. While the India Gold Coin scheme offered a trusted, BIS-hallmarked sovereign product, adoption was limited by weak distribution, low consumer awareness and pricing competition from established jewellery and private bullion channels. Likewise, the Gold Monetisation Scheme has mobilised only a small share of gold stock due to sentimental attachment and limited incentives, while Electronic Gold Receipts have seen slow uptake mainly due to GST-related ambiguities. Addressing these gaps, alongside the expansion of domestic mining, can strengthen economic growth and resource security, while a deeper bullion banking ecosystem can support financial sector formalisation and infrastructure development. Scaling jewellery exports and manufacturing capabilities can further reinforce India's position as a global manufacturing hub, alongside the creation of opportunities for artisans and the broader skilling ecosystem. Unlocking these areas can help accelerate gold's contribution to growth, competitiveness and global leadership.

Swarnim Udaan: a North Star

India's next phase of gold sector transformation must move beyond incremental reforms toward building an innovation-led and globally competitive ecosystem.

A transition from:

- Mine to market
- Local craftsmanship to global leadership
- Dormant to productive capital
- Tradition to technology
- External constraint to strategic resource

Note: *With projects under implementation in Mumbai and Raipur

**31,000+ tonnes represents the WGC's estimate of India's total gold stock as of end-2025. The estimate includes jewellery, bars, coins, RBI holdings and ETF holdings. ^USD equivalents are based on the latest available exchange rate of USD 1 = INR 91.5



Together, these shifts can unlock gold's full potential as a driver of inclusive growth, innovation and economic resilience under the Viksit Bharat 2047 vision. Through this report, the World Gold Council and Monitor Deloitte seek to define a strategic "North Star" for India's gold ecosystem – aligning policy, industry and institutional priorities to position gold as a pillar of national prosperity. This report therefore outlines ambitions across key pillars to unlock the sector's full potential.

Swarnim Udaan 2047: The North Star



1. Promoting "Mine in India"

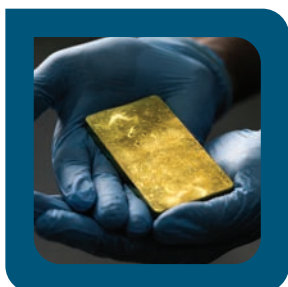
10–15% of India's annual gold demand met through domestic mining , strengthening resource security and reducing reliance on imported gold.

ADVANCES VIKSIT BHARAT PI LLARS: economic growth, global manufacturing hub, skilling ecosystem, technology partnerships, transparent governance

2. Making India a "Jeweller to the World"

#1 jewellery exporter globally by 2047 vs current 5th largest¹⁶, leveraging India's manufacturing strengths, design capabilities and growing global presence

ADVANCES VIKSIT BHARAT PI LLARS: economic growth, global leadership, global manufacturing hub, skilling ecosystem, cultural heritage & values



3. Enabling greater financialisation of gold

10–15% of household gold to be mobilised through an integrated bullion banking ecosystem, unlocking dormant assets to support credit creation, investment and economic growth

ADVANCES VIKSIT BHARAT PI LLARS: economic growth, social equity, transparent governance, global leadership, technology partnerships

4. Reimagining gold jewellery for the modern consumer

2 in every 3 young Indians participates in the gold jewellery ecosystem, while driving greater value capture through design and innovation

ADVANCES VIKSIT BHARAT PI LLARS: economic growth, skilling ecosystem, transparent governance, cultural heritage & values, technology partnerships



5. Unlocking gold's potential as a strategic national asset and mineral

A driver of economic resilience, advancing high-value manufacturing, innovation and strategic industries

ADVANCES VIKSIT BHARAT PI LLARS: global manufacturing hub, economic growth, technology partnerships, transparent governance, technology partnerships

Powered across the value chain by

National Gold Board

Driving alignment, accountability and execution

Gold Innovation Centre

Catalysing innovation across value chain from mine to product

Chapter 2

Driving Forces for the Future





Global forces shaping the future

As India accelerates toward its Viksit Bharat 2047 ambitions, the gold industry must navigate a rapidly evolving global landscape shaped by geopolitical shifts, technological disruption, changing consumer behaviour, economic realignments and environmental pressures. At the heart of this transformation are key driving forces that influence industry trends, shape strategic responses and create emerging opportunities and risks across the value chain. For example, evolving consumer preferences are increasingly shifting toward personalised experiences and differentiated offerings – reflecting consumer expectations of more tailored interactions.

These forces can either accelerate or constrain change, with implications that extend across industries, economies and societies. These interconnected forces are best understood through the STEEP (social, technological, economic, environmental and political) framework, as specified below (Figure 1).

The framework highlights how evolving demographics, digital technologies, financial transformations and geopolitical developments are collectively redefining how gold is produced, traded and consumed globally. For instance, advances in AI and digital technologies are accelerating customisation and reducing design-to-market cycles across consumer industries, while the consumer expectation of responsible sourcing and circular economy principles are increasingly influencing purchasing and sourcing decisions. India's gold industry, will need to become more future-ready, globally aligned and responsive to emerging market expectations and risks if it is to remain competitive.

Figure 1: Driving forces of the future across STEEP framework





How driving forces shape gold's role in the Indian economy – currently and in the future

The future rarely unfolds in straight lines. Some forces accelerate rapidly, others evolve steadily, while some move in cycles. The Longitudinal Emergence Statecraft (LeNS) framework captures this by mapping drivers of change as exponential, linear or cyclical and linking them to future outcomes. It distinguishes between probable futures – already emerging and likely to scale – and possible futures, which may materialise with shifts in technology, regulation, investment and consumer behaviour. Applied to gold, this lens moves beyond short-term forecasting to show how technology, regulation, investment trends and consumer preference could reshape its role in the economy.

Several of these forces are already reshaping the ecosystem, globally. Rapid advancement of AI, robotics and blockchain technology is accelerating formalisation and digitisation of gold markets, while practices such as hallmarking continue to grow steadily, building consumer trust (Figure 2). At the same time, cyclical shifts in regulation, investor sentiment and global trade create both probable and possible futures.

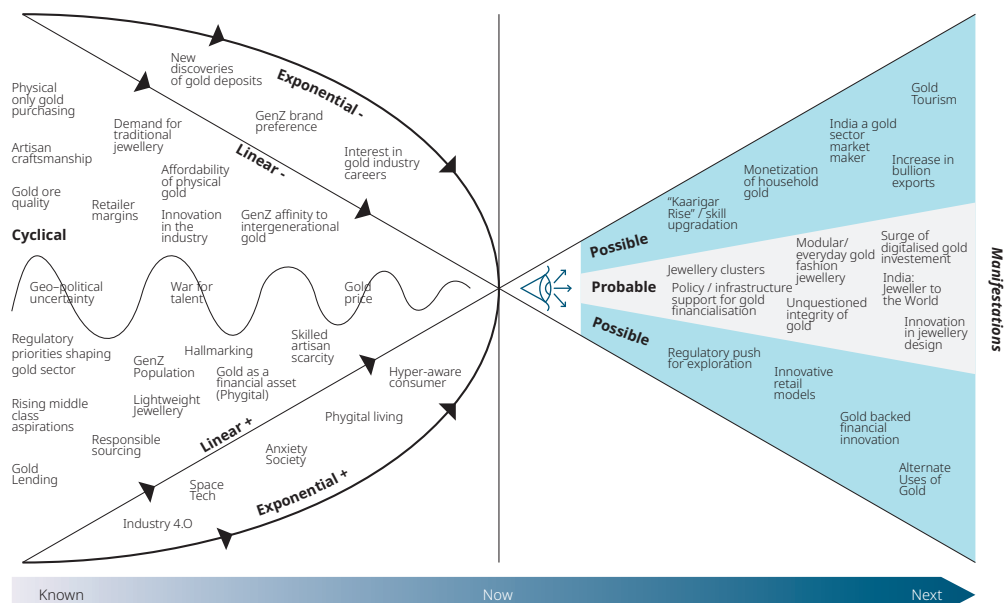
For example, rising investor interest in alternative assets, growing digital engagement and advancements in blockchain technology are already accelerating the emergence of tokenised gold assets and new gold-backed financial products, contributing to the financialisation and formalisation of gold ownership. These shifts reflect how evolving consumer and investment behaviours are reshaping the ways gold is accessed, experienced and owned.

Gen Z represents one of the clearest manifestations of these broader shifts. As the first truly digital-native cohort, Gen Z is reshaping how gold is discovered, purchased and consumed – driving demand for phygital experiences that blend physical ownership with digital engagement, alongside omnichannel retail, contemporary jewellery design, transparency, personalisation and digitally enabled ownership models that combine tradition with convenience.

What this means for Swarnim Udaan 2047:

The North Star will be shaped not by a single trajectory, but by multiple emerging futures. Capturing this opportunity requires acting early on probable shifts while creating the conditions for possible ones to scale – through consumer relevance, digital enablement, formalisation and ecosystem readiness.

Figure 2: LEnS Framework





Is Gen Z rewriting the global consumption playbook?

Gen Z is poised to become the largest generation ever. By 2030, Gen Z will make up 23.2% of the world's population, which equates to 1.6 bn people spending an estimated US\$12mn.¹

~2bn

projected peak global lifetime population, positioning Gen Z as the only generation to reach this milestone²

Gen Z is not another generation of buyers – it is the force redefining global consumption. Broadly defined as those born between 1997 and 2012, Gen Z sits between Millennials and Gen Alpha, but unlike any generation before it, this cohort is reshaping markets at scale. As they enter the workforce, build affluence and assert their cultural dominance, Gen Z is rewriting what it means to spend, influence and consume – driving a revolution that no business can afford to ignore. Gen Z is forcing businesses to abandon old playbooks and reinvent themselves for an era defined by authenticity, sustainability and constant connectivity. Consumers within this generation are also moving from big-ticket splurges to affordable

indulgences that offer a sense of reward without breaking the budget.

Rising living costs, personal debt and social media-fuelled micro-trends are pushing people toward premium snacks, limited-edition beauty products and nostalgic collectibles such as Pop Mart's Labubu dolls, Funko figures and London's Rubber Duck Stores. Over the next decade, their per-capita spending is set to grow at twice the pace of previous generations, propelling them to become the largest, most prosperous and most influential consumer cohort in history. This is not an incremental shift in demand – it is a decisive reordering of global consumption.

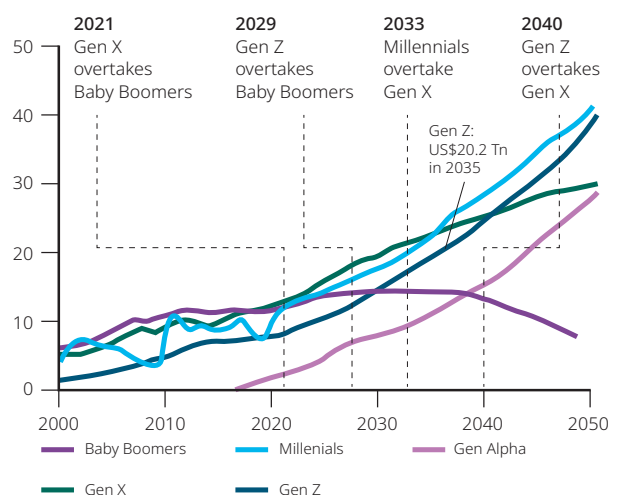
US\$20tn

In projected global Gen Z spending by 2035, making it the world's most powerful consumer cohort³

As the first truly digital-native generation, Gen Z is highly connected and global in outlook, having never known life without instant access to information. Spanning a wide range of life stages from students to early-career professionals and young families, this cohort is shaping demand patterns across categories and markets. Gen Z is reaching decisive tipping points in global consumption, marking a generational realignment of spending power. As this generation enters peak earning years it will shape global demand patterns and become the driver of long-term market growth (Chart 1).



Chart 1: Global consumption by generation, US\$tn

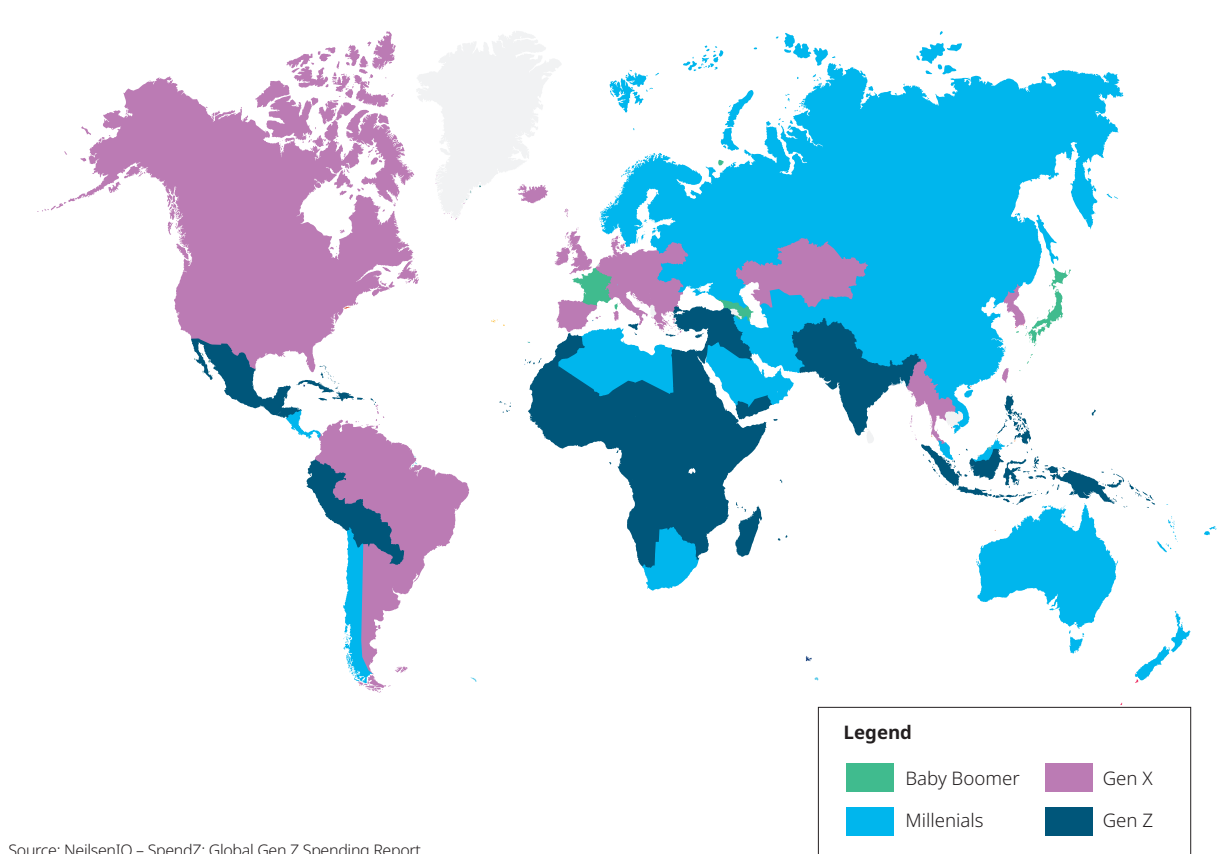


Source: NeilsenIQ – SpendZ: Global Gen Z Spending Report



Gen Z is set to dominate consumption across much of Asia, Africa and parts of Latin America in 2030. India stands out as a critical growth engine (Chart 2). In 2025, a Gen Z population in India of over 380 mn⁴ outnumber the entire population of the US, an indication that the market in India will be shaped more by young buyers than in any other major economy. This reflects both India's youthful demographic profile and its rapidly expanding economy.

Figure 3: Projected leading consumer spending class in 2030



Source: NielsenIQ – SpendZ: Global Gen Z Spending Report

Gen Z is India's most powerful consumer

Gen Z is projected to comprise ~27% of India's population (~410mn people) by 2030*. Gen Z is already a powerful force in India's consumer economy, driving ~US\$925bn in spending today.⁵

US\$2tn

Projected Gen Z-driven spending by 2035, expected to account for every second rupee spent in India⁶

Importantly, only a fraction of this, about 27%, is currently direct spending. By 2035, however, as this generation enters its peak earning and spending years, its direct spending is expected to increase to

US\$1.8tn, representing 93% of their total spending, with the remaining 7% reflecting spending that they influence indirectly.⁷

Gen Z is not only spending its own money but also strongly influencing household and peer purchases across categories like fashion, beauty, technology and food. In India, this large and influential cohort already drives nearly half of all lifestyle purchases and shapes preferences across age groups. Highly visual and always connected, they rely on creators and peers rather than traditional advertising, with shopping becoming a seamless "phygital" journey – from social discovery to real-time sharing and hybrid online-offline buying. Curious and experimental, they quickly adopt new brands aligned with trends, expecting instant access to reviews and social proof. With short attention spans and high expectations, they demand immersive, fast-evolving content – making sustained innovation, fresh engagement and authentic creator-led interactions essential for brands.

*Estimated as 27% of India's projected 2030 population (1.52 bn, UN World Population Prospects 2024): <https://economictimes.indiatimes.com/news/economy/indicators/gen-z-to-drive-usd-1-3-tn-spending-in-india-by-2030-report/articleshow/129589357.cms>; <https://population.un.org/wpp/>



What will shape how the next generation lives and consumes?

Tomorrow's consumers will not just buy differently – they will live differently. Habits, expectations and values are increasingly shaped in real time by powerful social, cultural and technological forces. Rather than fixed routines or traditional brand loyalty, consumption is becoming part of a constantly evolving lifestyle. The following shifts are expected to define how the next generation will live, shop and engage with brands.

1. Hyper-aware consumers: Future shoppers will expect radical transparency around sourcing, ingredients, labour practices and environmental impact. Financial literacy and social awareness will make them more selective about where their money goes. Advertising alone will not persuade them; brands will need to prove credibility and back up claims with verifiable information.

2. Value as an identity: Products and services will increasingly reflect personal identity, values and self-expression beyond just price or function. Singlehood may increasingly emerge as a deliberate lifestyle choice among younger urban consumers, shaping preferences around independence, flexible living and individual expression. Consumers are expected to favour brands that reinforce who they are and what they stand for.

3. Phygital living: The boundary between physical and digital experiences is expected to blur further across shopping, entertainment and services. Consumers may increasingly move seamlessly between online and offline worlds, expecting convenience, personalisation and frictionless interactions at every touchpoint.

4. Life on autopilot: AI is expected to quietly shape many everyday consumer decisions by anticipating needs, curating options and automating purchases in real time. As digital assistants become more embedded in daily life, consumers may rely less on active decision-making and more on AI-enabled convenience, personalisation and optimised experiences.

5. Anxiety society: Rising uncertainty, economic pressure and digital overload are expected to increase demand for reassurance, trust and emotional security. Consumers may increasingly gravitate toward brands, platforms and communities that offer transparency, simplicity and a greater sense of control in everyday life. Meeting emotional needs will be as important as meeting functional ones.

Together, these shifts are not isolated fads but signals of a deeper transformation. These dynamics are converging to create the defining traits of tomorrow's buyers that together will reshape how people live, shop and connect with brands. The next generation of consumers is moving from fixed habits to fluid identities, from marketing claims to proof and from passive purchasing to active self-expression. The following four traits capture this emerging orientation:

1

From Stability to Fluidity: Prosperity is defined by freedom and adaptability rather than permanence, with people valuing access, choice, and diverse experiences over long-term ownership, fixed roles, or static identities.

2

Desiring Proof over Promise: Loyalty and trust depend on verifiable evidence of impact rather than traditional marketing claims, with people expecting transparency and authenticity before committing time, attention, or money to any product or service.

3

From Consumption to self-expression: Purchases become a medium of personal storytelling, allowing individuals to project identity, values, and aspirations beyond function or price, turning everyday buying into an act of self-expression.

4

Integrated Phygital Living: Digital and physical worlds are experienced as one continuous environment, where interactions, services, and experiences move seamlessly between screens and real life without friction or interruption.



What does this mean for gold?

As gold's dual identity as adornment and investment shifts, so too do the expectations of the next generation of buyers. Gen Z is rewriting the rules of prosperity, loyalty and ownership – moving from stability to fluidity, from promises to proof, from consumption to self-expression and from offline to “phygital” living. These evolving behaviours are not passing trends but structural changes that will define the future marketplace. They signal an urgent need for the gold industry to reimagine how value is created, communicated and experienced.

As consumer preference shifts toward flexibility, liquidity, identity expression and digitally enabled ownership models, gold consumption patterns also evolve. This is reflected in the growing interest in both traditional jewellery and emerging investment formats, including digital gold and financial products like Exchange-Traded Funds (ETFs) (Chart 3). While jewellery demand has moderated globally, India has remained comparatively resilient, supported by continued cultural affinity and increasing preference for lightweight and artistry-led formats among younger consumers.

–4% CAGR

Jewellery demand in India from 2019 to 2025, remains comparatively resilient compared to China's –9% decline⁸

Investment-oriented gold products are rising rapidly, driven by growing adoption of both digital gold platforms and ETFs, particularly among younger and first-time investors. Digital gold enables fractional, low-ticket investments through mobile platforms, while ETFs provide a regulated and liquid avenue for portfolio allocation. According to data from Association of Mutual Funds in India (AMFI), the country's net inflows into gold ETFs jumped from ~₹460 crore (~US\$50.3mn)* in 2022 to over ₹43,000 crore (~US\$4.7bn)* in 2025, reflecting a growing preference for investment-linked gold products over physical holdings.⁹

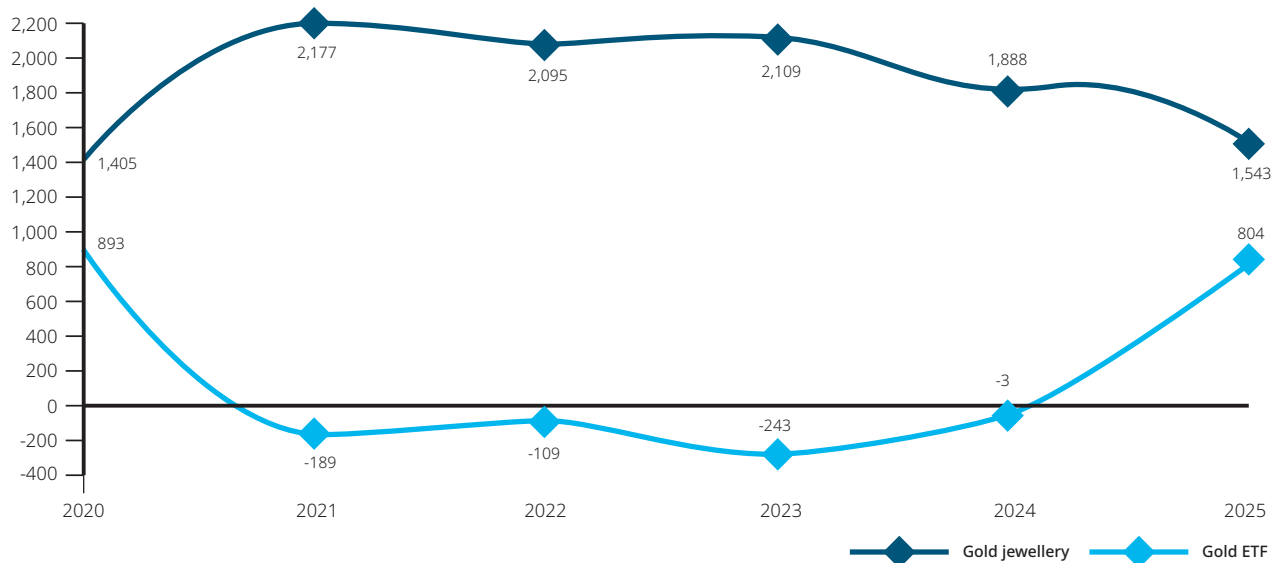
~9x growth

in India's gold ETF assets under management from 2020 to 2025¹⁰

Together, these trends signal a dual re-orientation of gold – from a purely adornment-led purchase toward a hybrid lifestyle, investment and identity asset – reshaping consumption and investment dynamics across key markets.

As the gold market evolves, it enters a period of experimentation and redefinition. Consumers are increasingly reassessing what ownership, value and participation mean – creating expectations that extend beyond traditional purchase and possession. This creates new space for innovation in how gold is designed, presented, accessed and experienced, challenging long-held assumptions around permanence, trust, identity and physical versus digital value. The provocations outlined below explore how this future could look.

Chart 2: Global gold jewellery demand and ETF demand, 2020–25, tonnes



Source: Metals Focus, WGC: Gold Demand Trends: Q2 2025;
WGC: Gold ETFs, holdings and flows

Note: *USD equivalents are based on the latest available exchange rate of USD 1 = INR 91.5



1. If stability no longer defines prosperity for Gen Z – who thrive on fluidity across jobs, geographies and trends – how might gold take on new forms to reflect these new measures of value?

PORSCHE

- Members can swap Porsche models monthly instead of owning a single car
- Prioritises access, flexibility and variety over long-term possession
- Reflects Gen Z's preference for fluid luxury experiences over static ownership¹¹

2. If future consumers demand constant proof and radical transparency, how might gold reimagine its role in a world where trust must always be earned and never assumed?

tracr

- Tracr is a blockchain-based platform that tracks a diamond's journey end-to-end
- Combines digital and physical proof of authenticity and ethical sourcing
- Reinforces transparency and trust as core components of luxury value¹²

3. If future consumers expect daily interactions to flow seamlessly between physical and digital realms, how might the role of gold be reimaged in this phygital world?

Qstay

- Enables users to book and live in luxury stays through a virtual platform
- Uses tokenisation to create fractional or digital ownership experiences
- Blends digital engagement with real-world assets in a "phygital" model¹³

4. If consumption becomes an expression of identity, how might gold matter when value means as much as money?

THE NORTH FACE GUCCI

- Blends luxury fashion with outdoor culture and sustainability themes
- Uses TikTok-style storytelling and authentic creator-led communication
- Helps Gen Z consumers express hybrid identities: adventurous, stylish, eco-aware¹⁴

Gold's enduring allure is no longer enough to guarantee relevance. To win over consumers of the future, gold must reconfigure – rethinking design, services, engagement, positioning and partnerships – to evolve from possession to participation, permanence to fluidity and tradition to transformation. This reconfiguration cannot wait: the industry must act now to drive near-term shifts and shape a future direction for gold across the entire value chain – from mining and exports to investment, jewellery and strategic classification. These shifts must translate into coordinated action priorities across each pillar of the Swarnim Udaan 2047 North Star to unlock gold's full economic and cultural potential.

The following chapters outline how each pillar of the gold value chain can respond to emerging opportunities and challenges to build a more innovative, competitive and future-ready gold sector. For each pillar, we first examine the opportunity and strategic context, assess the current state and key challenges and then propose targeted interventions to accelerate progress. Early, coordinated action across businesses, policymakers and ecosystem stakeholders will determine not only the next decade of gold consumption and production, but also gold's cultural and economic role for generations to come.

Chapter 3

Promoting “Mine in India”

Mine to market





Pillar 1: Promoting “Mine in India”

Overview

India's gold sector remains highly dependent on imports, with domestic mining accounting for only around 2% of supply despite the presence of significant underexplored gold reserves across several states.¹ Recent reforms have unlocked new blocks and attracted greater investor interest, but operationalisation continues to be delayed. Together, these developments signal a strategic push toward building a more resilient and diversified domestic gold supply base.

Challenges

- Large parts of India's prospective gold-bearing regions remain underexplored
- Existing geological data is fragmented and not sufficiently investor-ready
- Lengthy and unpredictable approval processes delay operationalisation
- Current framework presents an opportunity to strengthen policy support, investment prioritisation and approvals through strategic mineral recognition
- India's share in global exploration spend remains significantly lower than other countries
- Absence of a strong junior mining ecosystem limits early-stage exploration

Opportunity

~10–15%
of India's annual gold
demand met through
domestic mining in 2047

India's domestic gold mining potential can be unlocked through:

Shaping strong government intent to promote “Mine in India”

- Recognise gold as a strategic mineral to accelerate domestic resource development
- Form a national gold mining task force across government, industry and investors
- Create investor-ready geological data repositories
- Strengthen exploration incentives for early-stage mining

Streamline licenses and approvals to accelerate mine operationalisation

- Integrate key environmental and land clearances within exploration licenses
- Extend exploration validity with phased land surrender
- Implement time-bound approvals through digital single window systems

Attract targeted investment and technology for sustained production

- Promote adoption of advanced mining technology and workforce capability development
- Enable global partnerships for technical expertise and capital access
- Elevate India's global visibility for responsible and long-term mining investment

ADVANCES VIKSIT BHARAT PRIORITIES

Implementing these recommendations can strengthen **economic growth**, support **infrastructure development** through new mining projects, enhance **technology partnerships** via advanced exploration and mining technologies, improve **transparent governance** through streamlined approvals and reinforce **global leadership** by reducing import dependence and building a globally competitive gold mining sector.



Can India unlock the full potential of its domestic gold resources?

Heavy dependence, modest supply

India's gold supply remains heavily import-dependent despite significant geological potential, with recycling contributing 12% and mining just 2% of supply in 2025.^{1^} The country has only three operational gold mines – all in Karnataka – with the state-owned Hutti Gold Mine accounting for 99% of total output;^{2^} while the other two private mines remain minor contributors. Revival efforts for the historic Kolar Gold Fields (KGF) are underway.

86%

of India's gold supply met through imports in 2025³

Despite accounting for only a marginal share of its gold demand through domestic production, India possesses a vast geological resource base for gold, much of which remains underexplored. The country hosts five major Precambrian cratons⁴ – Dharwar, Singhbhum, Bastar, Aravalli and Bundelkhand – comparable to some of the world's richest gold-bearing regions in Australia, Canada, China and South America. However, as of 2020, nearly 57% of India's Precambrian formations remained unexplored,⁵ –underscoring the significant untapped potential for future gold discoveries. Beyond these known geological belts, India possesses approximately 6.88 lakh per sq. km of Obvious Geological Potential (OGP).⁶ Yet exploration activity remains concentrated at the reconnaissance stage, suggesting that the country's identified gold resource base may represent only a fraction of its mineral potential.

4x larger

Precambrian area than Australia,⁷ yet India produces just ~18.1t of gold annually (including by-product production), with only ~1.6t from dedicated gold mines⁸ vs. ~290T from Australia⁹

30%

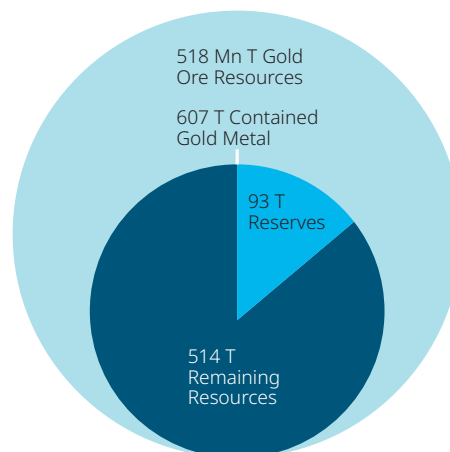
of India's OGP has been explored,¹⁰ with the remainder requiring further assessment to determine viability

This untapped potential is also reflected in India's identified gold resource base. According to the Indian Bureau of Mines, the country possesses 518mn tonnes (MT) of gold ore resources (the gold-bearing rock identified through exploration), containing an estimated 607t of gold metal. Of this, approximately 93t fall within the reserves category and 514t fall within the remaining resources category¹¹ – representing identified gold deposits that require further exploration, evaluation, reserve conversion and mine development before they can contribute to domestic production (Figure 1). This highlights a significant opportunity to strengthen domestic gold production and reduce import dependence over the long term.

15%

of India's identified gold metal has been classified as reserves, representing deposits that are proven and economically mineable under current conditions¹²

Figure 1: India's gold resource base



Source: Government of India, Ministry of Mines, 2022

Despite possessing substantial geological potential, India's domestic gold production remains modest due to slow conversion of resources into mineable reserves. Consequently, the country remains heavily dependent on imports to meet demand. This dependence has gained greater significance amid recent geopolitical tensions and external-sector pressures, which have highlighted the economic risks associated with large gold imports. In May 2026, gold import duties were raised from 6% to 15% to curb imports and ease external-sector pressure on the rupee.¹³ This policy shift reinforces the strategic importance of expanding domestic gold supply through accelerated exploration and mine development.

Note: ^Figures are sourced from the World Gold Council's Gold Demand Trends and exclude gold exchanged for gold



Overview of recent gold mining licenses granted by the Government of India

Over the past few years, the Government of India has markedly accelerated the auctioning and allocation of gold blocks.

24 licenses

issued over the past decade (18 composite licenses and 6 mining leases) across 8 states, covering a total of 14,632 hectares¹⁴

These auctions have brought participation from 20 different bidders,¹⁵ ranging from public sector undertakings to private players, underscoring the growing investor appetite for India's gold mining sector. Collectively, these allocated blocks represent an estimated 145.6MT of gold-bearing ore containing about 270.5t of gold metal.¹⁶

Recent gold block allocations have been distributed across multiple states, reflecting broad-based investor participation and geographic diversification (Figure 2). This momentum is now being translated into production with India's first large-scale private gold mine since Independence, the Jonnagiri gold project in Andhra Pradesh, commenced production in 2026. Developed by Geomysore Services with support from Deccan Gold Mines and Thriveni Earthmovers, the project has attracted over ₹400 crore in investment and is expected to produce up to 1t of gold annually.¹⁷ While modest relative to India's annual imports, the project represents an important proof point for

greater private-sector participation in domestic gold production and highlights potential for reducing import dependence through a combination of mining, recycling and monetisation.

Strategic imperative: promoting “Mine in India”

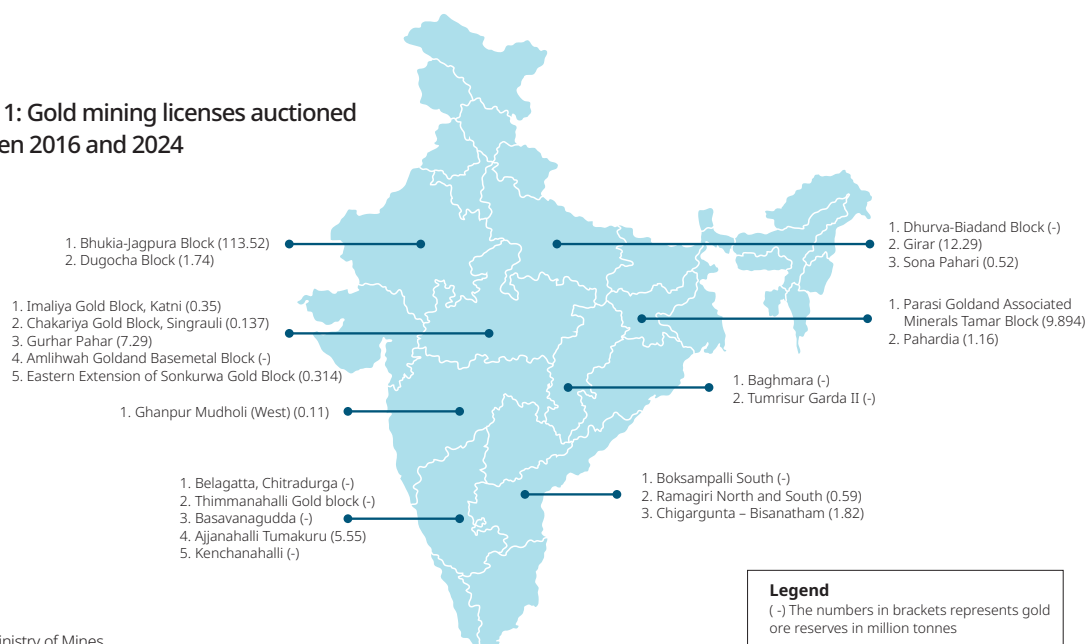
With India's gold demand remaining structurally high, the strategic need to boost domestic mining is pressing. Import dependence exposes the economy to price volatility and supply-chain disruptions, highlighting the urgency of unlocking India's geological potential. Recognising this opportunity, the Ministry of Mines has set a target to increase exploration coverage of India's Obvious Geological Potential (OGP) from around 30% today to 50% by FY2030.¹⁸

Building on this momentum, India should pursue a longer-term ambition under Viksit Bharat 2047 to meet 10–15% of its annual gold demand from domestic mining, from the current 1.6t.¹⁹

Unlocking India's gold potential will require:

- **Shaping a bold government intent to “Mine in India”;** transforming auctions into operational mines and intent into impact
- **Cutting through the maze of licenses and clearances** to fast-track gold mining approvals, thereby turning policy into production
- **Attracting targeted investment** in domestic and overseas gold exploration and accelerating technology adoption in mining through AI, real-time data systems and global R&D partnerships

Figure 1: Gold mining licenses auctioned between 2016 and 2024



Source: Ministry of Mines



Shaping a bold government intent

Gold reserves are underutilised amid a weak exploration framework

India's gold exploration remains largely limited to surface reconnaissance, leaving over 95% of mineral wealth unextracted²⁰ India remains underrepresented in global exploration, compared to Australia and Canada, which spent AU\$4.27 bn²¹ and US\$4.2 bn²² respectively in 2023 on systematic drilling, geophysics and pre-competitive data to de-risk targets. In India, under-utilised public funds such as National Mineral Exploration Trust (NMET), fragmented approvals and patchy geoscience coverage increase technical risk and extend timelines, discouraging private investment.

<1%

global exploration spend in India²³ (vs ~55% in Canada; ~58% in Australia)²⁴

The licensing framework also weakens incentives. Exploration success does not ensure mining rights, as licences and leases are auctioned separately – making early-stage investment risky with uncertain returns. This misalignment has stalled projects and caused disputes, as seen in Rajasthan's Bhukia-Jagpura block,²⁵ where an Australian explorer's (Panthera Resources) survey led to international arbitration after reallocation. In contrast, countries like Australia, Canada and South Africa grant explorers preferential rights to convert licences into mining leases upon meeting technical criteria.

Public sector participation via Mineral Exploration and Consultancy Limited (MECL) has also been limited. Since 1972, MECL has identified only 85t of gold resources,²⁶ with no new reserves since FY 2019–20, despite strong output in other minerals such as coal (148,245MT), bauxite (1,321MT), iron ore (3,909MT), lignite (42,399MT) and copper (927MT)²⁷. Although drilling for non-ferrous minerals increased in FY 2023–24, gold outcomes remained minimal, reflecting under-prioritisation and weak execution. In addition, relatively high mining auction charges and associated costs reduce project competitiveness and investment attractiveness compared with leading mining jurisdictions. Without stronger mandates, dedicated resources, targeted incentives and a more competitive cost structure, India risks widening the gap between potential and actual gold discoveries.

Strategic interventions for driving exploration towards production

Within this context, to convert India's gold potential into operational mines, a structured approach combining policy support, technical modernisation and risk-aligned incentives is needed to boost exploration.

1.i. Recognise gold as a strategic mineral to accelerate domestic resource development:

Formally designating gold as a “strategic mineral” under Section 1(D) of the Mines and Minerals (Development and Regulation) Act (MMDR), 1957, alongside the 24 minerals identified under the National Critical Mineral Mission,²⁸ merits consideration given gold's expanding role across resource security, advanced manufacturing and economic resilience. Such recognition could enable faster approvals, centralised auctions, overseas resource access where appropriate and targeted fiscal support, while signalling gold's strategic importance to investors. While the detailed case for strategic mineral classification is presented in Chapter 7, such recognition could elevate gold as a national priority within India's mineral security and resource development agenda. It could establish a common framework for Centre-State coordination, enabling stronger alignment on exploration priorities, auctioning of mineral blocks, approvals, infrastructure development and investment facilitation, thereby supporting the objectives of the National Critical Mineral Mission and accelerating the development of India's domestic gold mining ecosystem.

1.ii. Form a national gold mining task force:

India should establish a dedicated national gold mining task force to coordinate central and state government agencies, industry stakeholders and investors under a unified mandate. This task force would serve as a single-point coordination body to streamline approvals, resolve inter-agency bottlenecks and monitor projects, ensuring that exploration success rapidly transitions into production.

1.iii. Create investor-ready geological data repositories:

India has made progress with the National Geoscience Data Repository (NGDR), a centralised platform integrating geological, geophysical and exploration data to improve transparency and access. The next step is to evolve NGDR into a comprehensive mining-information platform supporting end-to-end decision-making across the exploration-to-production lifecycle through stronger standards, better analytics and broader dataset integration. Advanced mining economies demonstrate how robust public geoscience



systems can catalyse exploration (Spotlight 2). India can build on these lessons by strengthening data systems, expanding high-quality datasets in key mineral belts and ensuring all stakeholders operate on a shared, reliable evidence base.

Spotlight 2: Global best practices on geoscience platforms

Strengthened exploration through integrated geoscience systems by:

- Developing Nova Scotia's digital platform with drill hole, mineral, report and property data²⁹
- Enabling discovery and project evaluation through centralised information
- Providing open, high-resolution datasets through Australian geoscience agencies³⁰
- Applying predictive mineral-system modelling to reduce exploration risk

Spotlight 3: Australia's junior explorer incentives³³

Strengthened early-stage exploration through tax incentives and co-funding support by:

- Introducing the Junior Minerals Exploration Incentive (JMEI), allowing eligible junior miners to convert exploration expenses into shareholder tax credits
- Generating AU\$6.38 in capital raised and AU\$2.41 in exploration spend per dollar of JMEI credit³⁴
- Co-funding exploration through programs such as the Northern Territory's Geophysics and Drilling Collaboration (GDC) to address geoscientific gaps and support companies such as Prodigy Gold
- Reducing risk and financing barriers to advance discoveries toward commercial development

1.iv. Strengthen exploration incentives for early-stage mining:

To encourage junior explorers, the Mineral (Auction) Amendment Rules, 2024 have lowered entry barriers and granted successful exploration licence (EL) holders a defined share of future Mining Lease (ML) auction premiums.

₹25 Cr

Reduced minimum net worth required to bid for an exploration licence³¹

However, since this benefit depends on successful ML auctions, early-stage geological risk remains largely unaddressed. Given India's untapped exploration potential, stronger upfront incentives are needed. India can draw on global and domestic models – for instance, Australia's Junior Minerals Exploration Incentive (JMEI) offers tax credits to reduce early-stage exploration costs (Spotlight 3). Domestically, NMET allocations (₹10 crore per state in the North-East)³¹ could be expanded into a dedicated annual fund to systematically support early-stage exploration.

Junior explorers are specialised companies that focus on high-risk, early-stage mineral exploration. They play a critical role in discovering new deposits and de-risking projects, creating a pipeline of opportunities for future mine development.³²

1.v. Benchmark mining auction charges against global standards:

Review and benchmark mining auction charges and associated costs against leading international mining jurisdictions, with the objective of streamlining the overall cost structure and improving the competitiveness of domestic gold mining projects while preserving transparent and competitive auctions.

Cutting through the maze of licenses and clearances

Procedural hurdles are slowing gold mining progress in India

India's gold mining sector continues to face significant delays due to fragmented approvals, procedural inefficiencies and information gaps. Although platforms like PARIVESH were launched as digital single-window solutions, critical permissions for land, water, labour and lease agreements still require engagement with multiple agencies, resulting in extended timelines. Environmental and forest clearances remain a chronic bottleneck, particularly in ecologically sensitive and Schedule V tribal areas. Projects such as Rungta Mines' Parasi gold block in Jharkhand and R.K. Transport Corporation's Basavanagudda gold mine in Karnataka remain stalled due to pending environmental and forest



clearances. Weak coordination between central authorities, which issue tenders and state departments, which grant approvals, creates regulatory impediments that exacerbate delays.

Tender documents often omit key details about land ownership, forest boundaries, or ecological zones, forcing repeated rounds of follow-up after licenses are awarded. Even after securing a Composite Licence (CL) for a gold block in Karnataka, R.K. Transport Corporation discovered much of the block lay inside the Chinkara Wildlife Sanctuary and eco-sensitive zones – information not disclosed in the tender – forcing multiple rounds to state departments. In contrast, jurisdictions like Australia implement statutory approval timelines, use spatially enabled tenement systems and maintain transparent, trackable portals, providing real-time visibility and significantly reducing project lead times.

Regulatory timelines under current frameworks also misalign with the realities of gold exploration. The EL, introduced through the August 2023 MMDR Act amendment, mandates relinquishing 75% of the licensed area within three years, leaving only 25% for continued exploration.³⁵ While suitable for shallow or bulk commodities, this timeframe is incompatible with the 10–12-year horizons required for deep-seated gold deposits, which necessitate multiple drilling campaigns, geochemical and geophysical surveys, resource modelling, feasibility studies and environmental evaluations. Compressed timelines risk forcing premature abandonment of promising blocks, discouraging serious investment and slowing the conversion of exploration into production.

“ Even after winning a gold block, areas initially considered open for mining can later be reclassified as wildlife, forest, or eco-sensitive zones and new governments may attempt to renegotiate boundaries, creating delays and uncertainty. ”
– COO, Mining Company

Accelerating gold mining approvals through regulatory modernisation

Within this context, India's gold sector requires reforms that streamline approvals, reduce procedural uncertainty and align regulatory timelines with the realities of deep-seated exploration and mining. A few key measures can help transform policy intent into actionable production outcomes.

1.vi. Integrate key environmental and land clearances within exploration licenses:

Bundle pre-approved environmental and regulatory clearances into ELs, eliminating sequential post-licensing approvals that delay project execution. Clearances bundled at the licensing stage should cover baseline environmental permissions, preliminary forest diversion approvals and compliance with statutory land and water regulations, while project-specific operational approvals remain post-discovery.

1.vii. Extend exploration validity with phased land surrender:

Extend EL tenure from the current five years plus a two-year extension³⁶ to a minimum of 10 years, with optional three. additional one-year performance-based extensions. Longer durations allow completion of multi-phase drilling, geophysical surveys, feasibility studies and environmental assessments without premature land relinquishment. Complement this with a phased land surrender approach to replace the current requirement of relinquishing 75% of the licensed area by Year 3, requiring surrender of only 15% annually from Year 4, up to a maximum of 60% or until a mining decision is finalised. This staggered model enables systematic assessment of geological potential and maintains the principle of returning non-prospective ground while incentivising long-term exploration.

1.viii. Implement time-bound approvals through digital single window systems:

Adapting frameworks like the Single Window Clearance System (SWCS) for coal (Spotlight 4), linked with the National Single Window System and PARIVESH 2.0, can enable real-time data exchange, automated alerts and seamless tracking across agencies. In parallel, mandate time-bound mining and exploration approvals across environmental, forest, land, water, labour and mining plan approvals through parallel processing across central and state agencies. Integration with a Single Window Clearance System tailored for gold, combined with dedicated support teams, would ensure real-time tracking, accountability and rapid query resolution. Covering both exploration licenses and mining leases, this approach aligns with global best practices. Australia's digitised, spatially enabled approval system has helped reduce lead times, increase investor confidence and accelerate gold production (Spotlight 5).

**Spotlight 4: India’s streamlined approvals for critical minerals**

Accelerated mining approvals through integrated digital systems by:

- Launched SWCS in 2021, consolidating approvals for mining plans, leases, environment and forest clearances
- Integrated with National Single Window System (NSWS) and Parivesh 2.0 for real-time tracking and parallel processing
- Reduced mining plan approvals to ~30 days from 90 days through risk-tiered pathways³⁷
- Fast-tracking approvals and centralised auctions for 24 strategic minerals to support private investment and exploration

Spotlight 5: Australia’s digital-first mining approvals³⁸

Accelerated exploration and mining approvals through digital integration by:

- Centralising approvals in Western Australia across tenements, Programme of Work (PoW), environmental and water permits
- Enabling parallel processing, automated checks and risk-based fast-tracking to reduce delays
- Processing 80% of PoW applications within 15 business days and mining proposals within 30 days³⁹
- Investing US\$12mn in Queensland’s real-time tracking portal to improve transparency and investor confidence⁴⁰

Attracting targeted investment

Modernisation and capital deficits are holding back gold exploration

India has considerable geological gold potential, with scope to enhance investment and technology adoption in line with global practices. The NMET was established to accelerate mineral exploration in India; although it funds baseline surveys, regional exploration and strategic initiatives, gold has received

limited focus. Of the 714 projects sanctioned, worth around ₹3,536 crore (~US\$386mn)*, only 16 projects have targeted gold.⁴¹ The total sanctioned cost for all gold projects is just about ₹40 crore (~US\$4.4mn)*⁴² – barely 1% of NMET’s total exploration funding – highlighting structural under-allocation despite India’s geological potential. This under-allocation of resources for gold exploration continues to restrict the systematic surveys, drilling campaigns and data generation necessary to increase gold exploration in the country.

₹5,504 Cr

(~US\$602mn)* mobilised by NMET to accelerate mineral exploration in India since inception (up to 31 March 2024)⁴³

Compounding the funding gap, India lacks a robust digital infrastructure for license approvals. Fragmented portals and unreliable submission systems create delays and force physical submissions, increasing administrative burdens. Applicants lack visibility into application status and bottlenecks, as the absence of a centralised digital system limits transparency, real-time tracking and bidder confidence, discouraging participation. Without a digital foundation, adoption of advanced tools such as AI-driven analytics, geospatial modelling and real-time data systems – critical for modern mineral exploration – remain constrained.

Additionally, India’s overseas gold acquisition efforts lag behind proactive strategies in minerals like lithium, cobalt and copper. While initiatives like KABIL (a Joint Venture of National Aluminium Company Limited (NALCO), Hindustan Copper Ltd. and MECL) have secured assets abroad, similar investments in gold exploration and mining rights are limited. In contrast, Chinese firms have actively acquired gold assets across Africa, central Asia and Latin America to strengthen supply. Strengthening overseas partnerships, targeting offshore blocks and integrating global R&D can help India secure resources, access advanced technologies, improve geological knowledge and build a globally competitive gold ecosystem.

Catalysing investment, skill and technology in gold exploration

Within this context, attracting sustained investment and accelerating technology adoption are critical to unlocking India’s gold potential. These are key imperatives to drive this change:

Note: *USD equivalents are based on the latest available exchange rate of USD 1 = INR 91.5



1.ix. Elevate India’s global visibility for responsible and long-term mining investment:

Alongside this, elevate global visibility of India’s sustainable mining agenda to position the country as a credible destination for responsible mining. Building on participation at major forums such as Mining Indaba 2023 (Cape Town) and the Prospectors & Developers Association of Canada, India should sustain and deepen international engagement through high-level delegations, investment outreach and consistent presence. In partnership

with organisations like Invest India, these efforts can be leveraged to proactively attract strategic investors, facilitate international partnerships and channel capital into India’s gold and critical minerals sector. **In parallel, a flagship domestic platform such as a Global India Mining & Critical Minerals Summit could serve as an international forum** that showcases resource potential and recent reforms. A coordinated global strategy would help attract capital, technology and partnerships while positioning India as a strategic supplier of responsibly produced minerals.

Spotlight 6: Innovations in mining technology and adoption by prominent companies⁴⁴

Resolute’s gold mine in Mali uses autonomous equipment to reduce costs by 15%, with 30% long-term savings expected with full automation⁴⁵

Squadrone deployed Unmanned Aerial Vehicle enabled drones at Gujarat Mineral Development Corporation’s (GMDC) Ambaji site to enable high-precision mapping of mineral deposits up to 800m deep⁴⁶

Vedanta uses AI-powered drones at its Jamkhani mine for real-time monitoring, improving safety, operational efficiency and remote surveillance⁴⁷

Brake Horsepower (BHP) deployed AI-driven predictive maintenance to track equipment health in real time, cutting unplanned downtime and significantly reducing repair costs⁴⁸

Barrick reduced accidents by 98% by deploying AI-based fatigue detection technology that monitors microsleep events and delivers real-time alerts to operators⁴⁹

Sesa Goa implemented Ore Tracking System (OTS) with Radio-Frequency Identification (RFID) technology to automate ore tracking, eliminating manual errors and preventing pilferage⁵⁰

1.x. Strengthen long-term gold supply through strategic investment and partnerships:

Increase NMET50 funding allocation with a gold-specific focus by creating a dedicated “Gold Exploration Opportunity Fund” to significantly expand resources for gold-specific surveys, baseline studies and early-stage drilling. The fund could finance advanced techniques such as 3D geophysical mapping, AI-driven target modeling and innovative geochemical assays, while supporting public-private partnerships to de-risk investments. Ring-fencing funds for gold would provide partial cost-sharing or exploration grants to qualified explorers, accelerating discovery and enhancing investor confidence. **In parallel, enable co-investment for strategic overseas gold acquisition by formally integrating gold into India’s overseas mineral acquisition framework.** A co-investment model pairing private miners with Public Sector Undertakings (PSU) would leverage public sector reach and financing while harnessing private sector agility and technical

expertise. This approach can secure long-term overseas gold supply, reduce reliance on volatile international markets and accelerate knowledge transfer and operational efficiency, strengthening national gold reserves.

1.xi. Promote adoption of advanced mining technology and workforce development:

Leverage technology to attract young talent and enhance productivity by repositioning mining as a modern, tech-driven, high-skill sector. The use of AI-enabled drones, digital ore tracking, predictive maintenance and real-time data systems can improve safety, efficiency and resource optimisation. Leading mining companies are already adopting such technologies (Spotlight 6). Showcasing these advancements can attract talent and sustain innovation, ensuring the sector grows with strong human and technological capabilities. India can further draw on targeted outreach,



career-awareness tools and perception-building initiatives to position mining as innovative and future-focused. **Complementing such campaigns with dedicated skilling programs** – ranging from tech-focused vocational courses to industry-led apprenticeships and on-the-job training in digital mine operations – can equip young professionals with the capabilities needed for modern mining.

Conclusion

India's gold sector holds vast geological potential and the opportunity to emerge as a globally significant producer. Realising this potential requires a sustained focus on operational efficiency, strategic alignment and investor confidence. By fostering innovation, accelerating the adoption of advanced technologies, and strengthening institutional coordination, India can transform its gold mining sector into a high-value, resilient industry that generates employment while supporting artisanal and small-scale mining. Success in this sector will enhance domestic resource security, reduce import dependence, strengthen economic resilience, and position India as a competitive player in the global gold market.



Chapter 4

Making India “Jeweller to the World”

Local craftsmanship to global leadership





Pillar 2: Making India “Jeweller to the World”

Overview

India's gold jewellery sector is a major export driver, contributing nearly 6% of India's merchandise trade in FY2026.¹ Gold and precious metal jewellery accounts for ~47% of gems and jewellery exports in FY2026,² with India ranking as the world's fifth largest exporter by value.³ However, exports remain concentrated across a few markets and heavily reliant on Indian diaspora demand, while fragmented manufacturing, limited design innovation and low penetration in high-value markets continue to constrain global competitiveness. Addressing these gaps through manufacturing modernisation, artisan-led branding and trade-enabled expansion can significantly strengthen India's global “Brand India” proposition and build one of India's largest value-added export industries.

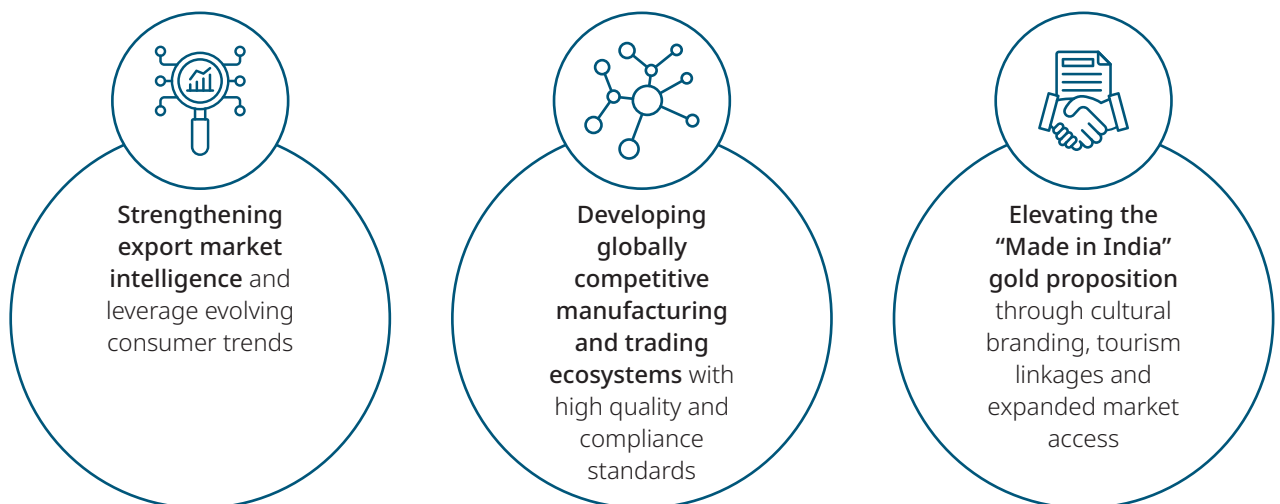
Challenges

- *Export concentration across a limited set of markets increases exposure to tariff risks
- Continued reliance on Indian diaspora demand constrains international market penetration
- Fragmented manufacturing systems limits export competitiveness
- Low levels of design innovation limit differentiation
- Limited Karigar skill upgradation restricts the sector's ability to meet evolving design requirements
- Underleveraged artisanal heritage weakens global brand positioning

Opportunity

#1
jewellery exporter globally
by 2047, up from current
fifth position⁴

Pathways to making India “Jeweller to the World” and achieving global export leadership:



ADVANCES VIKSIT BHARAT PRIORITIES

Implementing these recommendations can strengthen global leadership by positioning India as the world's preferred jewellery sourcing destination, drive economic growth through higher exports and value addition, create a globally competitive manufacturing ecosystem that supports India's manufacturing ambitions, foster a stronger skilling ecosystem for artisans and designers and celebrate cultural heritage & values by taking Indian craftsmanship to global markets.



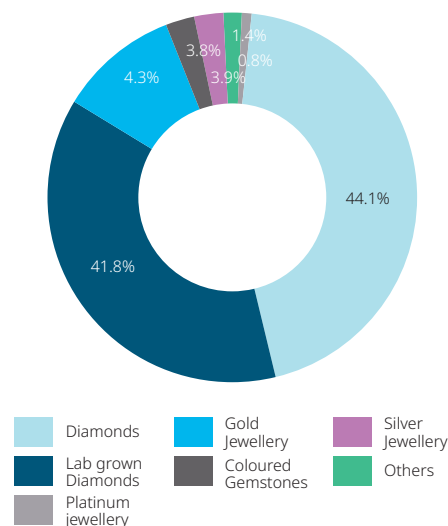
India's underpenetrated export potential

India's export growth is increasingly being powered by gems and jewellery

India's merchandise exports have witnessed sustained growth over the past decade, reflecting the country's expanding global trade footprint. Total merchandise exports increased from US\$314 bn in FY2014 to US\$437 bn in FY2024, registering a growth of nearly 39% (CAGR of 3% per annum).⁵ Within this broader export landscape, the gems and jewellery sector has emerged as a cornerstone of India's trade performance, playing a strategic role in driving export momentum. It is India's third-largest export commodity, with gold and precious metal jewellery contributing to almost 47% of gems and jewellery exports⁶ in FY2026, underscoring its strategic importance to India's export basket (Chart 1).

6%
of India's merchandise exports come from the gems and jewellery sector (FY26)⁷

Chart 1: Segmented share in total gems and jewellery export, March 2025



Source: Gem and Jewellery Export Promotion Council (GJEPC)

India's gold jewellery exports are gaining global traction, despite concentrated market dependence

India is currently the fifth largest exporter of gold jewellery by value⁸, with gold exports from India increasingly gaining traction across key international markets.

Globally, the leading exporters of gold jewellery by value include Italy, France, Switzerland and China (Table 1)⁹. Each has built a distinct competitive advantage within the global jewellery value chain. France and Italy demonstrate how branding, design-led innovation and product differentiation drive premiumisation and command higher value in global markets. Switzerland has established itself as a global refining and trading hub, while China has leveraged manufacturing scale and efficiency to strengthen its export position. In contrast, India's jewellery exports have historically been driven largely by diaspora demand. However, Indian gold jewellery export volumes have remained resilient in recent years, reaching 132t in 2024,¹⁰ reflecting a strong foundation for future expansion. At the same time, the growing global presence of Indian jewellery brands suggests that India's export competitiveness is increasingly being driven not only by diaspora demand, but also by stronger brand recognition and positioning in international luxury markets.

5

Indian jewellery and watch companies ranked among the Global Top 100 luxury goods companies¹¹

Table 1: Leading gold jewellery exporters, 2024*

Rank	Country	Export value in US\$mnn (% share of global export)
1	Italy	14,871 (12%)
2	France	14,469 (12%)
3	Switzerland	13,294 (11%)
4	China	11,009 (9%)
5	India	10,966 (9%)
6	United States	10,575 (9%)
7	Hong Kong	9,725 (8%)
8	Turkey	9,018 (7%)

Note: *HSN Code 711319 entails articles of jewellery and parts thereof, of precious metal other than silver, whether or not plated or clad with precious metal;

Source: International Trade Center calculations based on UN COMTRADE and ITC statistics, Trademap (HSN code 711319)

However, India's gold jewellery exports remain heavily concentrated, with approximately 83% of export value destined for just five markets. The UAE (43%) and the USA (21%) collectively account for almost three



quarters of all shipments, followed by Hong Kong (11%), Singapore (4%) and the UK (4%)¹². As India seeks to become the world’s leading jewellery exporter, it must build a stronger global positioning anchored in design, craftsmanship, manufacturing precision, branding and export competitiveness.

Global gold jewellery demand remains concentrated across a few import markets

Global gold jewellery demand is concentrated across a limited set of high-value import markets, many of which serve as major luxury consumption centres and international trading hubs. Together, these markets account for nearly 70% of global gold jewellery imports¹³, making them strategically important for India’s export expansion ambitions.

Table 2: Leading gold jewellery importers, 2024*

Rank	Country	Import value in US\$ mn (% share of global export)
1	Hong Kong	17,549 (19%)
2	United States	12,781 (14%)
3	Switzerland	8,943 (9%)
4	France	8,271 (9%)
5	Turkey	6,524 (7%)
6	Singapore	4,487 (5%)
7	China	3,583 (4%)
8	Japan	3,089 (3%)

Note: *HSN Code 711319 entails articles of jewellery and parts thereof, of precious metals other than silver, whether or not plated or clad with precious metal;

Source: International Trade Center calculations based on World Integrated Trade Solution, World Bank Data (HSN code 711319). Accessed on 19 June 2026

However, import volumes alone do not always reflect underlying consumer demand and should not be used in isolation to prioritise export markets. Several key importers – such as Singapore, Hong Kong and Switzerland – primarily serve as refining and trading hubs. Excluding these highlights stronger end-demand markets like the USA, France, China and Japan where imports are more closely tied to domestic consumption. This also creates an opportunity for India to position itself not only as a global jewellery exporter but as a regional refining and trading hub for these high-value markets.

Strengthening India’s path to becoming “Jeweller to the World”

As one of the world’s largest gold consumers with a deep artisanal heritage, India is well positioned to emerge as a global leader in gold jewellery exports. Realising the ambition of becoming the world’s largest jewellery exporter by 2047, from its current position as the fifth-largest exporter¹⁴ will require:

- **Strengthening understanding of export markets** to drive informed strategies and capture emerging consumer trends
- **Developing a globally competitive gold-manufacturing ecosystem** that meets the highest standards of quality, while driving higher value addition to unlock growth and profitability
- **Elevating the “Made in India” gold proposition** through showcases, exhibitions, strategic trade agreements and connecting jewellery traditions with tourism and culture

Strengthening export market intelligence

Structural and market-facing constraints are limiting global reach

India’s exports have historically catered to the South Asian diaspora, with designs tied to traditional preferences. This has built a stable base in markets like the USA (26% of imports), France (19%), the UK (14%) and Saudi Arabia (22%),¹⁵ but constrain the country’s reach to broader global consumers. For example, European markets favor lightweight, machine-made and contemporary designs – segments led by Turkey, Thailand and China. Without diversification, India risks losing share in fast-growing markets. Limited, up-to-date market intelligence on consumer preferences, competition and export insurance further hinders manufacturers’ ability to align products and expand into new geographies.

Note: ^Key destinations for Italy’s gold exports, providing a useful reference for potential markets India could explore for penetration. *Countries highlighted are among the top 10 global gold jewellery importers (2024), representing priority markets for India’s export expansion.



“Today, much of India’s jewellery exports cater primarily to the diaspora. To truly scale, we must evolve beyond this—local market preferences need to drive our design thinking.”

–Industry expert, Prominent Trade Body

Shifting from a comfort zone to a global consumer focus

India can strengthen competitiveness in the jewellery market through aligning with evolving consumer trends and re-positioning its craftsmanship on the global stage. Key interventions include:

2.i. Target high-potential markets with a multi-pronged approach:

Exporters should prioritise markets based on demand and cultural fit. **Priority 1:** High-value Middle Eastern markets (Saudi Arabia,[^] UAE,[^] Oman and Qatar[^]) – these markets collectively represent significant jewellery import demand and strong cultural alignment with 21K–22K products, offering India an opportunity to capture unmet import demand through targeted product positioning. **Priority 2:** underpenetrated Southeast Asia (Indonesia,[^] Thailand,[^] Philippines[^] and Singapore*) with cultural alignment but limited exposure. **Priority 3:** Western markets (USA,^{^*} Canada[^] and Europe including the UK[^] and Germany[^]) with lightweight, design-led, sustainably sourced jewellery. This phased strategy enables stronger relationships and visibility and a more tailored approaches.

2.ii. Align designs with local preferences in global markets:

Expansion requires deeper insight into consumer behaviour, pricing and trends. A periodic “Global Jewellery Trends” report can further guide exporters on design shifts, carat preferences and competition.

Design localisation can drive market access: Turkish players increased penetration in the Middle East’s 21K gold segment through localised collections.¹⁶ A similar approach could help India expand export share.

2.iii. Build a distinctive “Brand India” for jewellery:

Despite its strengths, India lacks a globally recognised jewellery identity like Swarovski. While Italy is known for luxury craftsmanship and Thailand and Dubai for strong global positioning as jewellery hubs, India has yet to translate its scale and heritage into a distinct

international brand. A targeted branding effort is needed to position “India Jewellery” as a mark of authenticity, craftsmanship and design excellence across global markets.

Developing a globally competitive manufacturing ecosystem

Low technology adoption and labour practices limit manufacturing competitiveness

India’s gold jewellery manufacturing sector faces structural inefficiencies that limit global competitiveness. Despite a strong artisanal base, fragmented manufacturing and limited scale constrain productivity and innovation, with only 15–20% of units operating at organised scale¹⁷ and ~55% of production still driven by handmade processes.¹⁸ While craftsmanship remains a core strength, many units continue to rely on outdated tools, reducing precision, throughput and design scalability. Industry estimates indicate ~58% of enterprises require upgrades to meet average standards, while over 97% need investment to reach higher sophistication levels – rising to 99% in rural areas¹⁹

Wastage in handmade production averages 2–3%, compared with less than 0.5% under global best practices.²⁰ Limited technology adoption and formal karigar support and along the poor access to market insights further restrict scalable innovation. Without wider adoption of computer-aided design (CAD) tools, alloy optimisation and modern machinery, Indian manufacturers risk falling behind more technology-driven ecosystems such as China, Turkey and Thailand.

Equally critical is the informal labour ecosystem. India’s five million plus workers in the jewellery ecosystem²¹ remain the backbone of the industry but largely operate in informal setups that limit stability and fair value creation. Many work long hours in cramped, poorly ventilated conditions, affecting health and productivity. Production is controlled by head karigars and intermediaries who link large jewellers with craftsmen, leaving most artisans on piece work with limited pricing power and ownership. This constrains earnings, discourages skill upgradation and weakens knowledge transfer – fuelling a growing war for talent and declining interest among younger generations in gold manufacturing careers. Without reforms to formalise employment, expand social protections and reward skill, India risks underutilising its artisanal base and eroding craftsmanship.

Note: [^]Key destinations for Italy’s gold exports, providing a useful reference for potential markets India could explore for penetration. *Countries highlighted are among the top 10 global gold jewellery importers (2024), representing priority markets for India’s export expansion.



“Without innovation, we will hit a ceiling. Italy, Turkey, even China have integrated R&D, alloys, casting techniques and process efficiencies to raise their game. India’s manufacturing needs a similar shift — better technology, lower wastage, and design-led manufacturing are needed to match global expectations.”

—Industry expert, Prominent Trade Body

Working capital constraints limit export competitiveness

India’s gold jewellery export sector faces a structural financing challenge that is distinct from most manufacturing industries. Gold is both the primary raw material and the largest cost component in jewellery production, often accounting for over 80–90% of product value.²² As a result, exporters must finance substantial inventories of gold throughout procurement, manufacturing, shipping and distribution. This burden is compounded by long export receivable cycles, with overseas payments often taking ~125 days to be realised.²³ Together, these factors create a prolonged cash–conversion cycle that significantly increases working capital requirements and financing costs.

Recognising financing constraints faced by exporters, the Government launched the Export Promotion Mission in January 2026, providing a 2.75% interest subvention for eligible MSME manufacturer exporters.²⁴ Industry stakeholders have highlighted opportunities to enhance export competitiveness through continued improvements in operational efficiency, export financing mechanisms and working capital management. More efficient credit cycles, timely release of bonds and improved working capital utilisation could strengthen liquidity and accelerate order execution, supporting exporters, particularly smaller firms – in expansion of their global presence.

Empowering artisans (karigar rise) and upgrading infrastructure to drive global excellence

Within this context, to translate India’s artisanal strengths into a globally competitive base, structural modernisation and skill empowerment are essential. Key imperatives include:

2.iv. Launch a dedicated gold jewellery manufacturing technology fund:

Reliance on artisanal processes, India should establish a Gold Jewellery Technology Upgradation Fund to support investment in advanced machinery, CAD and computer-aided manufacturing (CAM) systems

and precision casting tools. A precedent exists in the textile sector through the Technology Upgradation Fund Scheme (TUFS) (Spotlight 1). The proposed fund should offer subsidised loans, tax incentives and shared-access to technology hubs. This would make, modern tools accessible to micro, small and medium enterprises (MSMEs) and karigar-led enterprises, while preserving craftsmanship.

Spotlight 1: Technology Upgradation Fund Scheme (TUFS) – textiles²⁵

Launched in 1999, TUFS has played a pivotal role in modernising the Indian textile sector by:

- Enabling manufacturers to enhance efficiency, adopt new technologies and remain globally competitive
- Facilitating the introduction of state-of-the-art machinery to improve product quality and reduce production costs
- Providing financial assistance for purchasing advanced machinery
- Promoting innovation through the adoption of green technologies, particularly in dyeing, printing and waste management

2.v. Position Indian jewellery clusters as globally competitive export hubs:

To make Indian jewellery clusters globally competitive, they must evolve into modern parks with common facilities, hallmarking centres, design studios and export-oriented logistics. The Government has initiated this through projects like India Jewellery Park Mumbai (IJPM) and other emerging centres designed to strengthen infrastructure and global linkages. **Skill and technology integration should complement these investments.** Partnering with the Gem and Jewellery Skill Council of India (GJSCI) under the National Skill Development Corporation (NSDC) can expand programs that combine traditional karigar skills with CAD/CAM, lightweight manufacturing and global design. Hupari in Kolhapur demonstrates how artisanal strengths can be sustained through modern techniques and wage-plus-profit-sharing models (Spotlight 2). **Strengthening domestic refining and developing integrated jewellery-refining clusters** can further improve input quality, reduce turnaround times, enhance traceability and capture greater value across the gold value chain.

**Spotlight 2: Kolhapur – a legacy of craftsmanship and profit-sharing²⁶**

Hupari (Kolhapur) has sustained its position in India's silver ornament landscape by:

- Retaining its identity as a skilled silverwork hub despite employment decline caused by industrial regulations
- Combining traditional craftsmanship with technological evolution
- Following a wage-cum-profit-sharing model that defines artisan participation in production
- Reducing artisan risk by supplying pure silver and specific ornament orders through shroffs

Spotlight 3: Italian Designs, Turkish Hands - A Cross-Border Gold Collaboration

Turkey has strategically strengthened its jewellery ecosystem by:

- Pursuing international partnerships to enhance artisan skills, integrate global standards, and boost exports
- Signing an MoU in 2023 between the Turkish Jewellery Exporters' Association (TJEA), CIBJO, and VICENZAORO²⁷ to introduce certified programs on ethical sourcing, sustainability, and global standards
- Learning Italian design techniques and improving competitiveness with Italy in terms of labour costs²⁸

2.vi. Create global training pathways for Indian artisans:

Millions of skilled artisans lack exposure to evolving global design trends, sustainability standards and modern production practices, limiting their ability to capture premium export value. **Industry associations should establish global training partnerships through international apprenticeships, certified programs and expert collaborations** to strengthen design, ethical sourcing and modern production capabilities. Turkey's collaboration with Italy demonstrates how such partnerships can enhance capabilities, embed global standards and boost exports (Spotlight 3). Similar initiatives can help India build a globally competitive workforce that combines traditional craftsmanship with modern expertise. **Skilling can be further institutionalised through certified reskilling programs and targeted campaigns** such as “Karigar Connect,” “Gold Hands of India,” or “Karigar Rise” to build a strong pipeline of globally competitive talent.

2.vii. Strengthen export financing and working capital support:

Strengthening operational processes and working capital support can help improve export competitiveness across the jewellery sector. While gold metal loans are available, there is scope to simplify export financing through timely and streamlined processes for bond cancellation. In addition, pre- and post-shipment export credit could be reviewed in line with evolving geopolitical and global trade conditions, and the implementation of the passbook system could be strengthened. Targeted working capital support, including soft loans and appropriate incentives for micro and home-grown jewellery exporters, could broaden export participation while supporting additional foreign exchange earnings. Collectively, these measures have the potential to improve liquidity, reduce administrative delays, enhance order fulfilment capacity, and strengthen India's competitiveness in global jewellery markets.





“Made in India” proposition

Expanding trade agreements and untapped tourism linkages

India's gold jewellery exports have gained significant momentum through recent trade agreements, but remain concentrated across a few markets, exposing the sector to tariff shocks and external risks. The India–UAE Comprehensive Economic Partnership Agreement (CEPA) has significantly boosted jewellery exports to the UAE, strengthening market access and driving strong growth across both plain gold and studded jewellery segments (Spotlight 4). Similarly, the India–Australia Economic Cooperation and Trade Agreement (ECTA) has enabled a 37% increase in plain gold jewellery exports in FY2024 through zero-duty access.²⁹ More recently, agreements with the UK and EU, alongside emerging opportunities with New Zealand, are expected to further strengthen export competitiveness and diversify market access. Industry estimates suggest India's gems and jewellery exports to the UK could grow from ~US\$941mn to US\$2.5bn.³⁰ Despite these gains, exports remain heavily reliant on a limited number of destinations, leaving the sector vulnerable to tariff changes, regulatory shifts, and demand-side fluctuations – recent US tariff proposals highlight this fragility. An expansion of trade partnerships, a deeper integration with emerging markets and investment in brand-building will be critical to diversifying risk and sustaining long-term growth. India's gold jewellery sector draws strength from centuries of craftsmanship, temple traditions, and cultural symbolism, yet this heritage remains underleveraged as a driver of global branding and tourism. At the same time, jewellery tourism remains a major untapped opportunity. Nearly 60% of India's tourism is spiritual or religious,³¹ yet pilgrim and international visitor flows are rarely connected to jewellery heritage experiences. Unlike Dubai and Thailand, which have transformed gold markets into tourism attractions through organized bazaars, festivals, and strategic promotion, India lacks structured platforms to link temple jewellery traditions and karigar clusters with tourism circuits. Fragmented jewellery hubs, limited global visibility, and the absence of marquee showcases continue to constrain India's potential to position itself as the “jeweller to the world.”

Spotlight 4: India–UAE Comprehensive Economic Partnership Agreement (CEPA)³²

Signed in February 2022 and implemented from May 2022, CEPA strengthened India–UAE gem and jewellery trade by:

- Eliminating the 5% customs duty on most gem and jewellery lines in the UAE
- Introducing a phased Tariff Rate Quota (TRQ), allowing Indian importers to source up to 200t of gold annually at concessional rates
- Establishing strict Rules of Origin to ensure benefits accrue to manufacturers
- Increasing bilateral gem and jewellery trade from US\$20.88bn in FY22 to US\$28.15bn in FY24
- Driving a 127.62% rise in plain gold jewellery exports to the UAE to US\$4.24 bn
- Expanding the UAE's share in India's gem and jewellery exports from 13% to 25%, making it India's second-largest export market

“Our strength is handmade artistry, yet we never told that story. The world should see India not as a cheaper base, but as a creative powerhouse capable of exceptional handmade jewellery.”

–Industry expert, Prominent Trade Body

“Our jewellery today is more seen in Dubai's souks than in international design showcases. That must change. Global positioning cannot come from trading hubs alone — it needs brand building, institutional support, and active participation in global fairs and exhibitions to tell India's story.”

–Industry expert, Prominent Trade Body

Expanding trade agreements and untapped tourism linkages

Within this context, to fully capitalise on India's rich heritage and artisanal strengths, the sector must move beyond transactional exports toward globally resonant branding. Key actions include:



2.viii. Partner with temples and establish gold museums to spotlight heritage:

India's temples and gold heritage institutions can serve as powerful branding assets for Indian jewellery exports. By creating curated exhibitions, heritage tours and temple-inspired jewellery collections, India can build a distinctive global identity around craftsmanship, authenticity and cultural value. This can help exporters differentiate Indian jewellery in international markets, command premium pricing and strengthen demand for heritage-inspired products. Dedicated gold museums can further showcase regional craftsmanship traditions, creating stronger global recognition for Indian jewellery brands and exporters.

2.ix. Position gold jewellery as a cultural magnet through tourism campaigns and annual showcases:

Integrating jewellery into flagship campaigns like “Incredible India” through “gold seasons” – featuring jewellery weeks, craft festivals and cultural trails – can replicate the appeal of Dubai’s Shopping Festival and Thailand’s Jewellery and Gem Fair. These events could include live karigar demonstrations, interactive design workshops and curated craft-cluster exhibitions to deepen engagement. Renowned designer Sabyasachi Mukherjee’s global success offers a strong parallel here (Spotlight 5). Annual showcases in destinations such as Agra, Jaipur and Udaipur could provide curated access to regional craftsmanship and opportunities to purchase certified jewellery directly from makers. Combined with heritage tourism, these initiatives can boost artisan visibility and offer premium platforms for exporters and deliver an authentic experience of gold as both art and living tradition. By strengthening international awareness of Indian craftsmanship and creating direct touchpoints with foreign consumers, buyers and retailers, such initiatives can generate export demand, support premium pricing and help Indian jewellery brands expand their presence in global markets. International experience also demonstrates the value of creating integrated destinations that combine jewellery retail, bullion trading, tourism and global branding under a single ecosystem (Spotlight 6).

Spotlight 5: Sabyasachi– weaving global stories with Indian soul³³

Sabyasachi has built visibility for Indian heritage through storytelling-driven collaborations by:

- Retaining signature Indian elements while appealing to global audiences
- Blending Indian craftsmanship with international luxury fashion through East-West design integration
- Showcasing Indian aesthetics globally through partnerships such as Louboutin and H&M
- Bringing Indian craftsmanship into international retail and fashion ecosystems across cities such as London, Hong Kong, New York and Paris

Spotlight 6: Dubai Gold District – building an integrated gold trading and jewellery hub³⁴

Dubai strengthened its position as a global gold and jewellery hub through the launch of its Dubai Gold District in 2026, by:

- Creating a unified destination that integrates bullion trading, jewellery retail, wholesale trade and investment within a single ecosystem
- Bringing together 1,000+ retailers, global jewellery brands, traders and investors to improve market access and industry connectivity
- Developing destination-led attractions, including the world’s first “gold street”, to combine tourism, branding and commerce
- Supporting the broader Economic Agenda by strengthening Dubai’s role as a leading international centre for gold commerce. New York and Paris



2.x. Establish gold experience centres in global fashion capitals:

India should set up gold experience centres in leading hubs such as Paris, Milan and New York. These spaces would combine heritage, innovation and luxury through curated collections, designer collaborations, live karigar demonstrations and immersive storytelling that traces Indian jewellery's journey from artisanal roots to contemporary design. Beyond exhibitions, they could host trade events and fashion partnerships to connect exporters with global retailers and consumers, repositioning Indian jewellery from wedding-focused to luxury.

2.xi. Launch India Gold Fashion Week as a global showcase:

A flagship annual event can unify fragmented branding and place India on the global style map. India Gold Fashion Week, across cities such as Mumbai, New York, Paris, Milan, and Dubai, could feature runway shows, curated exhibitions, design competitions, and B2B trade fairs. Similar to Italy's Vicenza Oro (Spotlight 7), which blends a cultural showcase with commercial success, this platform can attract global buyers, strengthen soft power, and position India as a global tastemaker. As part of the initiative, an annual showcase of India's finest gold jewellery designs could celebrate excellence in craftsmanship, with winning pieces exhibited at prominent cultural and tourism destinations across the country. Showcasing the story behind each creation, along with the artisan and craft tradition, would further strengthen the global appeal of Indian jewellery. Collaborations with designers such as Sabyasachi Mukherjee, Ritu Kumar, and Manish Malhotra can further elevate visibility, building a strong designer ecosystem that offers high-value, heritage-inspired yet contemporary jewellery to global luxury consumers.

“ Designer culture has evolved from weddings to jewellery, seamlessly matching pieces with couture. By promoting Indian jewellery through collaborations with top Indian designers globally, we can create flagship boutiques and showcase India's unique craftsmanship on the world stage. ”

–Industry expert, Prominent Trade Body

Spotlight 7: Italian gold jewellery

Italy has strengthened global leadership in jewellery by³⁵

- Leveraging Vicenza Oro as a global platform connecting artisans with international buyers and trend influencers
- Organising ecosystem initiatives through the Italian Exhibition Group (IEG), including T.Gold (machinery), Startups and Carats (emerging brands), and the Jewellery Technology Forum (industry dialogue)
- Running international campaigns such as “Extraordinary Italian Jewellery” through the Italian Trade Agency (ITA)
- Promoting Italian design, strengthening business linkage, and building brand recognition in key markets such as the US

2.xii. Strengthen international market access through trade and investment partnerships:

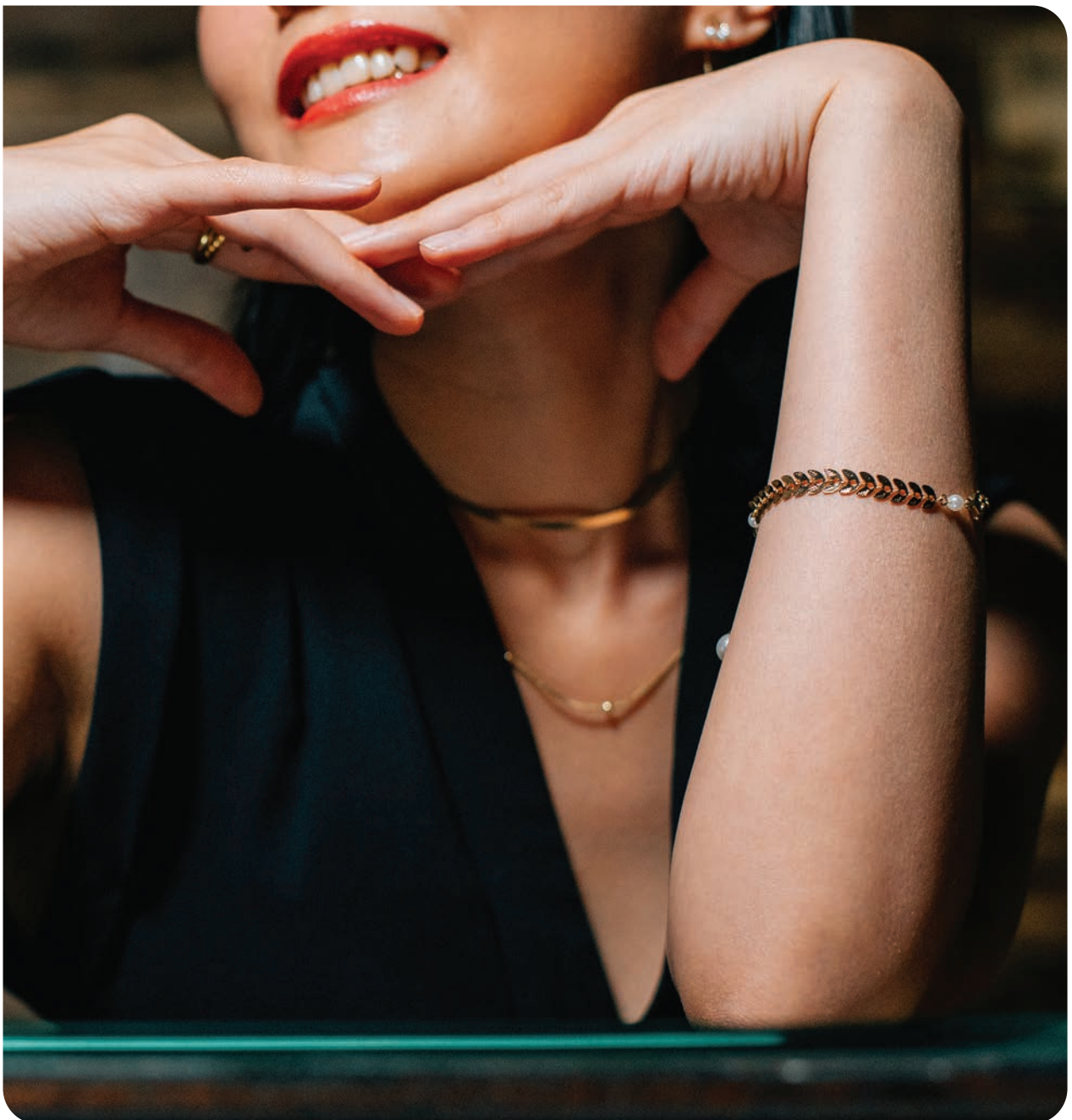
To safeguard long-term growth, **India must proactively engage in ongoing and future FTAs and strategic economic partnerships, ensuring that the jewellery sector is effectively represented within these broader negotiations.** Advocating for reduced tariff barriers, streamlined customs procedures, rules-of-origin frameworks and improved market access, can enhance the competitiveness of India's jewellery exports. By securing preferential access in key destinations, India can diversify its export base, strengthen resilience against demand shocks, and reinforce its position as a global leader in both heritage and contemporary jewellery. At the same time, the design of FTAs should carefully consider their implications for the domestic refining ecosystem, balancing improved access to imported bullion with measures that preserve the competitiveness and long-term growth of India's refining industry. In parallel, trade and economic partnerships should be leveraged to strengthen India's role as a global refining and value-addition hub. **Permitting exports of refined 24-karat bullion bars and coins under an import-export duty passbook or equivalent duty neutralisation mechanism** would enable refiners to competitively export bullion when international market conditions are favourable, provided those exports adhere to internationally recognised standards such as LBMA Good Delivery specifications. This would improve refinery utilisation, deepen integration with global bullion markets and allow India to capture greater value across the gold value chain. **Beyond trade access, broader economic partnerships**



and bilateral investment frameworks can also support the overseas expansion of Indian jewellery brands. In several high-potential markets, ownership restrictions, and complex regulatory frameworks create additional costs and present operational constraints for Indian firms. Through targeted economic diplomacy, India can seek provisions that facilitate the establishment of retail operations, wholly owned subsidiaries, and commercial entities abroad, while enabling strategic partnerships where appropriate. Together, these measures would strengthen the global presence of Indian jewellery brands and enhance the sector’s long-term export competitiveness.

Conclusion

India’s gold jewellery sector is entering a new era of opportunity. What has historically been a story of craftsmanship meeting domestic demand can, by 2047, become a case study in how a nation converts heritage into global leadership. Success will be driven by better market intelligence, a globally competitive manufacturing ecosystem, and a powerful “Made in India” proposition. With sustained focus, India can redefine its identity from the world’s largest consumer of gold to the world’s most trusted, admired, and innovative jeweller – cementing “Jeweller to the World” as a core pillar of Viksit Bharat 2047.



Chapter 5

Enabling Greater Financialization of Gold

Dormant to productive capital





Pillar 3: Enabling greater financialisation of gold

Overview

India is estimated to hold over ~31,000+t of gold stock valued at ₹314.9 lakh crore (US\$3.4tn),^{1*}[^] making it the largest private repository of gold globally. However, a significant share of these holdings remains concentrated in the form of jewellery, coins and bars, limiting the integration of this gold into the formal financial system and their productive use within the economy. Recent developments, including the Gold Monetisation Scheme (GMS), Electronic Gold Receipts (EGRs), digital gold products and the establishment of a market infrastructure such as the India International Bullion Exchange (IIBX), reflect efforts to transform gold from a predominantly physical store of value into a financial asset that can be traded, mobilised and integrated into financial markets. While these developments signal progress towards a more formalised gold ecosystem, persistent structural, regulatory and market-development challenges continue to constrain the growth of a transparent, liquid and globally competitive gold market in India.

Challenges

- Low gold monetisation keeps household and temple gold outside of the formal financial system
- Limited participation from pension funds and insurers
- Goods and Service Tax (GST) ambiguity is slowing EGR adoption
- Fragmented recycling ecosystem reduces mobilisation efficiency
- Limited channelisation through IIBX constrains transparency and price discovery

Opportunity

~10–15%
gold stock mobilised
into the formal financial
ecosystem

Unlocking greater gold monetisation and market formalisation through:

- Mobilising dormant gold stock through a revamped monetisation and recycling infrastructure
- Advancing gold financialisation through greater retail participation, supported by favourable tax and regulatory reforms
- Positioning India as a major gold trading hub
- Reimagining bullion banking as a key enabler for gold financialisation

ADVANCES VIKSIT BHARAT PRIORITIES

Implementing these recommendations can drive economic growth by mobilising idle household gold into productive economic activity, strengthen transparent governance through a more formal, trusted and digitally enabled gold ecosystem, reinforce global leadership by developing India as a regional bullion trading and financial hub, support technology partnerships through digital financial infrastructure and innovation and enhance social equity by expanding access to formal, secure gold investment and savings channels.

Note: *31,000+ tonnes represents the WGC's estimate of India's total gold stock as of end-2025. The estimate includes jewellery, bars, coins, RBI holdings and ETF holdings. ^USD equivalents are based on the latest available exchange rate of USD 1 = INR 91.5



Mobilizing Household Gold

Where we stand today

India holds one of the world's largest household gold holdings, with at least 20,000t held by households and the rest largely by temples. About 6,000t are held in the form of bars and coins.²

31,000+t

Estimated gold stock in India (~14% of global above-ground stock), valued at ₹314.9 lakh crore (US\$3.4tn)^{3#*}

₹3.1 lakh cr

(~US\$34bn)* in annual import substitution potential through monetising just 1% of gold stock[^]

~₹36,000 cr

(~US\$3.9bn)* in economic activity through jewellery sector's direct, indirect and induced effects**

Introduced in 2015, the Gold Monetisation Scheme (GMS) aimed to bring household gold into the financial system by enabling individuals and institutions to deposit gold with banks and earn interest. However, uptake has remained limited. As of FY24, only 37.8 t⁴ have been mobilised, just 0.12 –0.13% of gold stock, with only 5,193 depositors since inception of the scheme.⁵

Consumer surveys show scheme awareness remains limited:

- Only ~54% of respondents surveyed as part of the study were aware of GMS⁶

Low participation reflects both structural and behavioural barriers. Operationally, the scheme relied on a fragmented network of Collection and Purity Testing Centres (CPTCs), with only ~49 centres operational across India,⁷ mostly in major cities. Although BIS allows jewellers to act as collection points, it requires significant investment, deterring adoption. As deposits cannot typically be made through regular bank branches or trusted jewellers, consumers are required to navigate manual, time-intensive processes (often taking 2-3 weeks) with limited transparency or tracking in purity assessment. At the same time, downstream utilisation pathways for mobilised gold have remained narrow, largely centred around auctions, liquidation, and India gold coin channels, with limited integration into broader

recycling and financialisation ecosystems. These operational frictions and trust deficits have kept GMS uptake significantly below its potential.

Enabling the next phase of household gold mobilisation

Under the earlier GMS framework, participation required navigating a fragmented collection infrastructure, along with manual onboarding processes and limited visibility into purity assessment and utilisation pathways. These frictions reduced trust and accessibility, contributing to low participation despite significant household gold holdings.

Recognising these challenges, the Government of India's 2021 Office Memorandum outlined a reform roadmap (illustrated in the policy intent of Figure 1, page 49) to strengthen the Gold Monetisation Scheme through digitalisation, a centralised platform and nationwide awareness initiatives. Complementing this, the RBI operationalised the reforms through regulatory changes, creating a strong policy foundation for scaling gold mobilisation. Together, these reforms represented a significant step towards improving the accessibility, transparency and overall effectiveness of the gold mobilisation ecosystem.

■ Ministry of Finance has approved amendments to Gold Monetisation scheme via its Office Memorandum No. 1/21/2020-FT dated 9th February, 2021 which aim, to make the scheme simple, attractive and successful.

The key amendments to the revamped gold deposit scheme include increasing the number of branches of Public Sector Banks in all towns to be designated as GMS service branches, dematerialisation of MTGD and LTGD deposit certificates to make them tradeable and mortgageable, jewellers/refiners to be engaged as Gold Mobilisation Agents and CPTCs, interest payment in STBD denominated and to be paid in INR terms, reducing the minimum deposit under R-GDS to 10 grams of gold, permitting banks to buy standard locally refined/sourced gold from refineries and gold spot exchanges, allowing interbank lending of IGDS/LBMA standard bullion, development of GMS Digital Platform and use of MLTGD gold under GMS for bullion leasing under GML.

Many of the above mentioned amendments to the revamped gold deposit scheme have already been notified by RBI by amending the GMS Master Direction No.DBR.IBD. No.45/23.67.003/2015-16 dated October 22, 2015 on 5th April, 2021.⁸ ■

Note: *USD equivalents are based on the latest available exchange rate of USD 1 = INR 91.5; ^ The import substitution potential was estimated assuming monetization of 1% of India's estimated gold stock of ~31,000+ tonnes, equivalent to ~310 tonnes of gold. The corresponding value unlocked was calculated using average domestic gold prices prevailing in Q1 2026; **Monitor Deloitte Analysis: Using economic modelling, gold stock of ~31,000+ tonnes, equivalent to ~310 tonnes of gold. The corresponding value unlocked was calculated using average domestic gold prices prevailing in Q1 2026; the jewellery sector's total economic contribution.



While several measures have since been introduced, subsequent changes to the scheme structure, together with the partial implementation of key reform measures, have altered certain elements of the framework envisaged under the original reform intent. These developments have, in turn, affected the relevance and appeal of the scheme for some stakeholders, limiting its ability to fully realise the objectives envisioned under the reform roadmap.

International experience suggests that successful gold mobilisation models combine strong banking participation and transparent customer journeys. Turkey's household gold mobilisation programme (Spotlight 1) demonstrates how jeweller-bank partnerships can mobilise household gold.

Spotlight 1: Turkey's Household Gold Mobilisation Scheme⁹

Started in 2011–12 to mobilise “under-the-pillow” household gold, the scheme was supported by incentives for banks through:

- Accrediting refiners and ~290 jewellers across 66 cities as collection and valuation partners
- Converting deposited jewellery and coins into standardised 995-purity gold bars
- It collected ~110 tonnes of gold by 2021 through assaying and integrated banking networks

The 2021 reforms created a strong foundation for expanding gold mobilization. The opportunity for GMS 2.0 is therefore not a new policy architecture, but focused implementation of this policy intent, supported by targeted policy clarifications and a central execution mechanism to coordinate agencies, track progress and drive delivery. It seeks to operationalise key ecosystem enablers by expanding collection networks, aligning incentives across banks, jewellers and consumers, digitising customer journeys and integrating mobilised gold more closely with the bullion ecosystem.

Specifically, the March 2025 withdrawal of fresh Medium and Long-Term Government Deposits (MTGD/LTGD)¹⁰ marked an important transition from a Government-led scheme towards a bank-led Gold Monetisation Scheme. With Government-led longer-tenure deposits discontinued, Short-Term Bank Deposits (STBDs) currently remain the only available GMS product. While STBDs ensure continued access to the scheme, they typically offer returns of around 0.5–

0.6% and are provided at the discretion of banks, limiting the availability of longer-tenure gold savings options for depositors. Under the previous framework, MTGD/LTGD deposits were managed on behalf of the Government, with mobilised gold auctioned for productive market use while the Government assumed redemption obligations linked to prevailing gold prices. Building on this transition, GMS 2.0 presents an opportunity to introduce bank-issued, FD-like gold deposits with tenures of up to 10–15 years, supported by mandatory availability across participating banks. Market-aligned returns of approximately 2–3%, alongside aligned stakeholder incentives and clear tax reporting guidance, would strengthen depositor confidence and improve participation.

Technology-enabled recycling models further demonstrate how convenience and transparency can accelerate participation. China's Smart Gold ATM model (Spotlight 2) illustrates how automated processing and faster settlement can reduce customer friction.

Spotlight 2: China's Smart Gold ATM kiosk for recycling¹¹

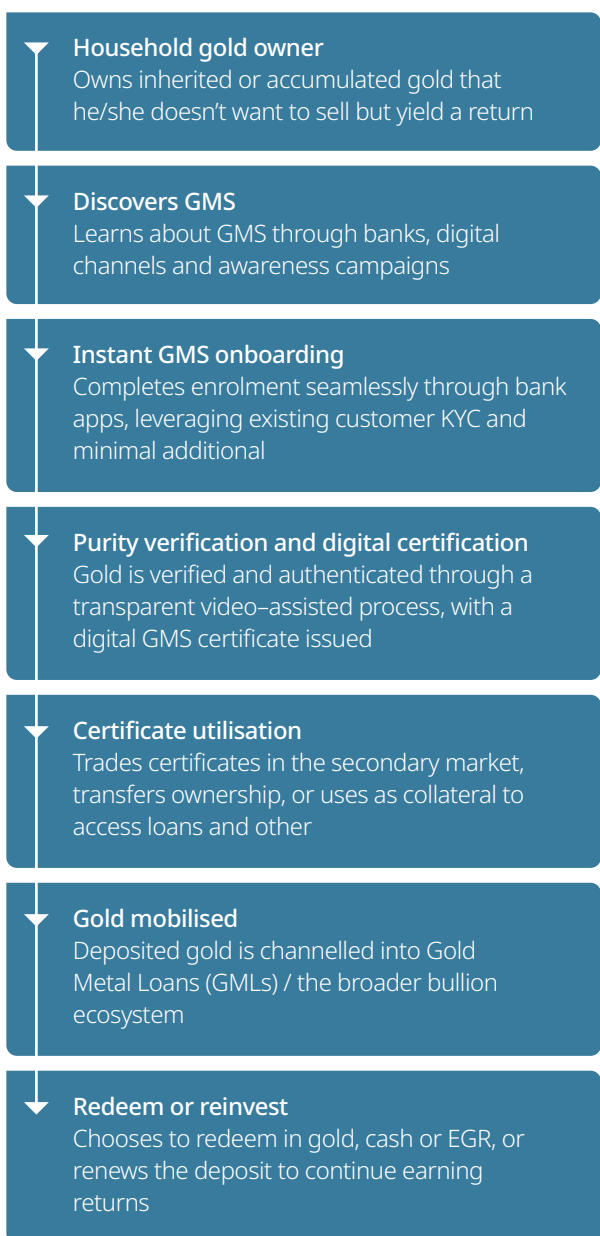
China launched a Smart Gold ATM kiosk (April 2025) to streamline gold recycling through:

- Automated testing, valuation and melting within approximately 30 minutes
- Multiple redemption options: instant cash payout, purchase of jewellery, or conversion into bullion and coins
- Potential integration with the Indian gold ecosystem through Gold Monetisation Scheme (GMS) deposits or conversion into Electronic Gold Receipts (EGRs)

Future-state gold mobilisation journey

Under the proposed model, mobilisation shifts to a trusted “phygital” experience combining physical networks with digital convenience. Customers initiate the process through their bank or a digital interface, complete streamlined onboarding and deposit jewellery through nearby empanelled jewellers or collection partners. Gold is authenticated through standardised assessment, digitally reflected in customer accounts and integrated into the formal financial system, enabling productive uses such as GMLs.

contribution is estimated by applying FY2025 multipliers derived from OECD (2022) and MOSPI data. Making charges are used as a proxy for domestic value-added / cost of jewellery manufactured, and Type II GVA multipliers are applied to capture direct output, indirect linkages with sectors such as chemicals, logistics and machinery, and induced effects arising from wage-driven household consumption across the value chain. # 30,500 tonnes represents the rounded average of WGC's internal estimate of India's total gold stock (~30,700–32,000 tonnes) as of end-2025, excluding the RBI's 880 tonnes of official gold reserves. The estimate includes jewellery, bars, coins and ETF holdings



Strategic interventions to enhance domestic gold mobilisation

3.i. Revamp GMS through a bank driven, tech enabled and recycling focus approach:

Building on the Government's 2021 reform vision, GMS 2.0 should focus on strengthening implementation through the following reforms:

- **Preserve a bank-led, all-tenure GMS framework** by introducing FD-like GMS deposits, including a 10–15-year tenure following the discontinuation of MTGD/LTGD
- **Strengthen participation economics** through attractive depositor returns, viable intermediary incentives, and greater tax and reporting certainty
- **Expand the collection ecosystem** by

operationalising GMCTA eligibility norms and onboarding banks, jewellers and refiners at scale

- **Digitise the customer journey** through existing bank applications, enabling instant enrolment using existing KYC, digital certificates within 24 hours of purity testing, and seamless deposit tracking and management
- **Link mobilisation to market use by aligning GMS with GML demand**, domestic recycling and bullion banking reforms would create a rolling domestic recycled-gold liquidity pool that repeatedly channels mobilised gold into jeweller financing, reduces reliance on fresh imports and, over time, integrates with domestic mine production
- **Strengthen programme governance through a dedicated Central Monitoring Unit** and Mission Secretariat to drive implementation, monitor performance and coordinate stakeholders

Broadening participation in gold investment channels

Restricted institutional participation

Current Pension Fund Regulatory and Development Authority (PFRDA) and Insurance Regulatory and Development Authority of India (IRDAI) regulations limit direct gold exposure, restricting access to a globally recognised diversification and long-term asset. However, reform momentum is building. Several life insurers have sought IRDAI approval to allocate 3–5% of ULIP assets to gold ETFs, citing stronger performance – over 30% returns in the past year, versus 5–8% from liquid debt funds, Nifty indices, and bank deposits.¹³ Similarly, the pension sector is advocating greater flexibility, urging PFRDA to allow gold ETFs and alternative assets. PFRDA is also preparing to expand the National Pension System (NPS) investment universe to include commodities such as gold and silver and unlisted firms via Alternative Investment Fund (AIFs). This aligns with the G.N. Bajpai Committee's earlier proposal to permit up to 1% NPS allocation to gold ETFs.¹⁴

₹15.5 lakh cr
(US\$169bn)* in assets managed by India's pension sector¹⁵

Expanding retail and institutional participation would broaden the investor base, deepen financialisation, improve liquidity and enhance long-term portfolio stability, aligning India with global best practices while leveraging its position as a leading gold-consuming market.

Note: *USD equivalents are based on the latest available exchange rate of USD 1 = INR 91.5



Figure 1: Proposed Gold Monetization Model

Policy Intent	Implementation status	GMS 2.0 proposed Interventions
Bank participation		
- Mandate bank participation across cities; enable participation from private banks - Build staff capability via targeted training	- Participation enabled, but activation varies across institutions - Withdrawal of MT/LTGD variants limited banks to short-tenure deposits	- Introduce branch-level mobilisation KPIs for PSBs and refresh training - Incentivise broader private-bank participation - Consider enabling flexible tenure structures (incl. longer-duration deposits), aligned with depositor preferences
Collection network and infrastructure		
- BIS-certified jewellers envisaged as GMCTAs/CPTCs - Handling fee up to 1.5% permitted - Minimum deposit reduced to 10g	- GMCTA expansion stalled; eligibility criteria unpublished - CPTC network remains ~49 centres nationally 10g minimum operational	- Operationalise GMCTA eligibility conditions - Scale eligible jeweller/refiner participation through structured onboarding, expanding the network to thousands of touchpoints - Gold ATMs for rapid deposit processing - GMS collection days at bank branches - Household
Governance and coordination		
Multi-agency implementation (DEA, RBI, IBA, BIS)	- Action plan and roles distributed across stakeholders - Monitoring exists; with scope for enhanced coordination and visibility	- Establish a Central Monitoring Unit (CMU) to drive implementation and success - Introduce milestone tracking, KPI dashboards and periodic reporting - Facilitate structured inter-agency coordination
Digital platform & certificates		
- SBI to build central portal and mobile app - MTGD/LTGD certificates to be dematerialised and tradable - Loan access against deposits	- Platform defined; integrated ecosystem not yet visible - Certificates remain nontradable in practice due to withdrawal of MTGD/LTGD; lending utilisation evolving	- Launch GMS platform with onboarding, tracking and grievance redressal - Enable tradeability, transferability and collateralisation of certificates - Integrate GMS with EGR ecosystem - Credit facility against GMS certificates - Video-enabled purity testing
Yield, tenure and depositor incentives		
- STBD (1-3 yrs), MTGD (5-7 yrs), LTGD (12-15 yrs) available - Competitive interest rates	- Only STGD (1-3 yrs) offered with low returns (~0.5-0.6%) - Depositor incentives remain modest	- Depositor incentives remain modest - Allow FD like GMS deposits of upto 10-15 years, offering attractive yields of ~2-3% - Enable household deposits up to 1-2 kg with tax comfort under CBDT framework¹² - Consider tax incentives on interest; capital-gains protection
End use & market integration		
- Mobilised gold used for GML and India Gold Coin - GML expanded to all jewellers; 1kg gold repayment enabled - IBX sourcing and inter-bank lending permitted	- GML, IIBX, inter-bank lending operational but underused - Bullion market integration and liquidity still developing	- Scale mobilisation to support GMS linked GML - Active inter-bank lending and IIBX use - Enable recycling-focused GML - Build on bullion-banking framework
Awareness & demand activation		
- GMS to be integrated into financial literacy programmes - Embed GMS in financial-literacy programmes - Organise stakeholder training	Policy intent set; sustained campaign visibility limited	- Execute annual media plan and financial literacy integration - Publish bank/jeweller/CPTC training targets
		Implemented Partially implemented Not implemented

Source: Ministry of Finance - Gold Monetisation Scheme Reforms, Reserve Bank of India - Master Direct ion on Gold Monetisation Scheme, India Brand Equity Foundat ion - Gold Monetisation Scheme Overview, Press Informat ion Bureau, State Bank of India - Revamped Gold Deposit Scheme (R-GDS), Bureau of Indian Standards



Gold ETFs: Expanding participation in formal gold investments

Investors are increasingly viewing gold ETFs as an important channel for gold investment. Despite strong growth in recent years, India's gold investment market remains heavily skewed toward physical ownership, with approximately 88% of investment demand concentrated in bars and coins. ETF penetration remains significantly below levels seen in developed markets: for example, in 2025, gold ETFs represented approximately 95% of investment demand in the US and Germany, 98% in the UK, and 90% in Canada. Even China, where physical gold continues to play a prominent role, recorded ETF penetration of around 25% in 2025.¹⁶

~12%

of India's gold investment demand is captured by ETFs (2025), up from average of 3% (2018-2020)¹⁷

The growing adoption of gold ETFs reflects increasing consumer participation in formal, transparent, physically backed and regulated gold investment products. By offering liquidity and market-linked price discovery without the need for physical storage, ETFs provide an efficient investment instrument for both retail and institutional investors. Rising participation highlights the significant scope to deepen financialisation and broaden the role of regulated gold investment products within savings portfolios.

EGR: Tax ambiguity hinders adoption

As India advances efforts to formalise and integrate gold into its financial system, one of the most significant milestones has been the creation of a spot gold exchange. Announced in the Union Budget 2021–22, SEBI introduced a framework for Electronic Gold Receipts (EGRs) and vault managers and EGR trading commenced on the Bombay Stock Exchange (BSE) in October 2022.¹⁸ EGRs allow investors to hold and trade gold in demat form backed by physical gold in SEBI-accredited vaults. Investors can convert physical gold to EGRs, trade them, and reconvert them via empaneled vault managers. With better price discovery, quality assurance and integration into financial markets, EGRs can drive gold financialisation.

However, GST ambiguity limits adoption. While no capital gains tax applies when gold is converted to EGRs, GST treatment remains unclear – both on conversion and on the 3% GST already paid on the underlying gold. Industry stresses this should not become an extra cost, as it would discourage participation. There is also no clarity at redemption on who (depositor, buyer, vault manager, or intermediary)

must handle GST. As a first-of-its-kind product where physical gold converts into a “security”, EGRs lack GST precedent¹⁹ and create uncertainty around input tax credit. Resolving these issues through clear guidance, along with awareness and seamless retail access, is key to scaling adoption.

Digital gold: Enhancing oversight in a growing retail segment

Digital gold has emerged as a significant innovation in India's gold ecosystem, combining the country's long-standing affinity for physical gold with a rapidly evolving digital payments landscape. By enabling consumers to purchase, accumulate and redeem fractional quantities of physical gold through smartphones, UPI-enabled payment systems and digital platforms, gold ownership has become more accessible than ever before. With minimum investment amounts as low as ₹1–100, 24x7 accessibility and no demat account requirements,²⁰ digital gold has expanded access to gold ownership beyond traditional investors, particularly to young, mobile-first consumers who seek convenient, low-ticket and goal-based savings solutions.

₹14,550 cr

(US\$1.6bn)* of digital gold bought in 2025²¹

The segment has witnessed rapid mass adoption in line with India's expanding digital economy. In 2024, it accounted for about 5% of the ₹1.5 lakh crore invested in gold²², a sharp rise from ₹5,000 crore (US\$546mn)* in 2021.²³ Industry estimates suggest that over 12 crore Indians have invested in digital gold, with nearly 1.5 crore new investors joining between November 2024 and April 2025 alone.²⁴ Small-ticket investing and seamless payments have made digital gold attractive to new-age investors. Beyond one-time purchases, platforms now offer digital gold SIPs, while gold is increasingly being embedded into everyday financial products, including credit card rewards in 24kt gold,²⁵ reflecting its growing role within mainstream consumer finance.

The emergence of digital gold represents an important opportunity to deepen financial inclusion, encourage disciplined micro-savings and support the formalisation and digitisation of retail gold purchases. At the same time, the product has evolved beyond simple gold digital purchases, into a space where some providers act as intermediaries, allowing customers to lend their gold to earn returns on their digital gold holding in gold grams.²⁶

While consumers often view digital gold as a form of regulated gold ownership or as a savings or



lending product, it does not sit neatly within existing securities, commodity derivatives, banking, payments or deposit regulatory frameworks. SEBI has clarified that digital gold is neither a regulated security nor a recognised commodity derivative and, accordingly, SEBI-regulated intermediaries do not facilitate the distribution of unregulated digital gold products²⁷. It appears that digital gold lending also sits outside of the RBI's oversight and regulation for peer-to-peer lending. Consequently, important aspects such as customer title, custody arrangements, digital gold lending, audit visibility, product and risk disclosures, redemption rights and treatment in the event of provider insolvency continue to depend largely on contractual arrangements rather than a dedicated product-specific regulatory framework.

According to a Monitor Deloitte survey, 62% of consumers mistakenly perceive digital gold as a regulated product, while 78% report medium/high trust in the product ²⁸

India's digital gold ecosystem is distinctive globally because it combines mass retail participation, low-ticket investment, app-led distribution and emerging gold leasing features without a direct comparable at this scale of retail adoption. This creates an opportunity to establish a fit-for-purpose regulatory framework that both preserves innovation and strengthens confidence.

Strategic interventions to unlock India's gold financial potential

3.ii. Expand institutional access to gold:

To deepen financialisation and broaden the investor base, India should build on recent regulatory reforms by progressively expanding the permissible allocation of pension funds to regulated gold instruments. Currently, Government sector pension schemes may invest up to 1% of AUM in gold ETFs, while non-Government sector schemes may gain exposure through the broader 5% alternative investment bucket that includes gold ETFs, silver ETFs, REITs and eligible AIFs.²⁹ Over time, dedicated allocations of around 1–3% in regulated gold instruments such as gold ETFs and Electronic Gold Receipts (EGRs) and an extension of a similar framework to insurance funds would channel long-term savings into transparent products and strengthen market liquidity. Globally, China's pilot programme permits participating insurers to allocate assets to gold (Spotlight 3), while the Swiss pension fund PUBLICA, maintains an allocation of approximately 3%.³⁰ Even modest allocations in India could diversify portfolios, create a stable institutional investor base and support a shift towards regulated gold investment products.



Note: *USD equivalents are based on the latest available exchange rate of USD 1 = INR 91.5

**Spotlight 3: China's pilot program for insurance fund investment**

Permitting investments across spot gold, swaps, delivery, and gold leasing products by:

- Allowing ten major insurers to allocate up to 1% of assets into gold investments³¹
- Potentially mobilising ~200 bn yuan (~US\$27.4 bn)** into gold markets³²
- Enabling institutions including Industrial and Commercial Bank of China (ICBC) and China Pacific Life to execute initial transactions on the Exchange in March 2025.

3.iii. Enhance retail appeal and fungibility in gold financialisation:

Retail demand remains concentrated in physical bars and coins, highlighting the scope to **advance financialisation of gold through greater adoption of regulated gold investment products**. Investor education through **multilingual awareness campaigns can promote regulated gold investment products, dispel misconceptions, and encourage adoption**, drawing lessons from initiatives such as *Mutual Funds Sahi Hai* (Spotlight 4). Industry participants should also **improve ETF penetration through stronger promotion, wider distribution, and simplified onboarding processes**. Additionally, enabling **gold ETF redemption into certified bars, coins, or jewellery through BIS-accredited jewellers** would create a stronger link between financial investments and culturally relevant forms of ownership. Such a mechanism would enhance the fungibility and liquidity of gold across different forms of ownership and investment.

Spotlight 4: "Mutual funds Sahi Hai"³³

Launched by AMFI in 2017 to expand retail participation in mutual funds by:

- Using storytelling, multilingual multimedia outreach simplifies investing concepts
- Promoting SIPs and addressing investor apprehensions to improve trust
- Attracted approximately five million new investors³⁴ within the first year of the campaign and contributed to the growth of mutual fund AUM to ₹66.93 lakh crore (US\$732 bn) by 2024³⁵

3.iv. Accelerate EGR adoption:

EGRs can become a mainstream, trusted trading instrument with clear, investor-friendly policies.

Definitive GST and input-credit rules are critical.

Conversion from physical gold to EGRs should be tax-exempt, redemption liability must be clarified, and input credits should be seamless.

Clear assignment of GST responsibility at redemption is essential to avoid ambiguity. Equally important is linking EGRs with the convenience and reach of digital gold. **Positioning EGRs as the regulated backend for digital-gold offerings. Enabling the conversion of GMS-mobilised gold into EGRs and allowing digital-gold players to deposit vaulted gold or EGRs into GMS would unify currently siloed gold pools.** This would enhance usability, liquidity and price discovery, making EGRs a backbone for both retail and institutional participation. Simplified digital onboarding would further drive adoption.

3.v. Establish a regulatory framework for digital gold:

Digital gold has become a highly accessible savings avenue, expanding gold ownership through low-ticket, app-based investing without requiring a demat account. India has led global adoption, especially among young, mobile-first consumers. By enabling financial inclusion, encouraging disciplined micro-savings and supporting the formalisation of retail gold investment, plays an important role in of India's evolving financial ecosystem. The key regulatory question is not whether digital gold should grow, but the **safeguards under which it should scale**. As products increasingly combine gold ownership, savings and sometimes leasing or yield generation, current regulatory gaps create customer risks, with legal, custody and failure protections largely based on contractual arrangements. While some providers follow good practices, the lack of uniform standards incurs risks around physical backing, asset segregation and the entry of undercapitalised operators. **Regulatory oversight is therefore both necessary and timely.** International experience demonstrates that innovation and consumer protection can coexist. Notably, Indonesia represents the strongest comparison for India, demonstrating that digital physical gold innovation can be encouraged while being brought within a commodity-market regulatory perimeter (Spotlight 5). **A clear framework should define the minimum standards for offering digital gold to retail consumers.** Given that digital gold represents access to physical gold, the framework should include, among others, the following principles:

Note: *USD equivalents are based on the latest available exchange rate of USD 1 = INR 91.5



- 1:1 physical backing
- Fit and proper criteria for players
- Ring-fenced custody of customer assets
- Independent audits and attestation
- Clear title and disclosures for ownership
- Protocols and safeguards for gold leasing
- Transparent redemption and buy-back
- Cybersecurity
- Provider insolvency proof mechanism
- Effective grievance redressal mechanism

A well-designed framework would strengthen consumer protection, improve transparency, support responsible market participants. **The objective should therefore be risk-proportionate oversight**, establishing safeguards that are commensurate with the risks posed by digital gold while preserving innovation and maintaining accessibility, rather than unnecessarily restricting product development. Such a framework **should be developed collaboratively with regulators, industry participants, financial institutions and consumers** to ensure practical, enforceable safeguards while enabling the responsible and orderly growth of India's digital gold ecosystem.

Spotlight 5: Indonesia's digital gold framework³⁶

A dedicated regulatory framework was established under Indonesia's Commodity Futures Trading Regulatory Agency for retail digital gold, integrated within the commodity-market structure by:

- Permitting participation only by licensed digital gold traders and approved ecosystem players
- Mandating exchange, clearing and depository infrastructure for independent transaction recording, clearing oversight and custody
- Requiring 100% (1:1) physical backing, approved storage and reconciliation of customer holdings
- Establishing standards for custody, governance, grievance redressal and fit-and-proper licensing. transactions on the Exchange in March 2025

Gold recycling: strengthening domestic gold circulation

India's recycling ecosystem remains large but predominantly underutilized

India's gold refining and recycling ecosystem has expanded significantly over the past decade, with refining capacity increasing by ~1,500t between 2013 and 2021.³⁷ Today, the country has ~1,800t of formal refining capacity, supplemented by an additional 300–500t operating through informal networks.³⁸

~₹94,000 Cr

estimated size of India's gold recycling ecosystem in 2025*

Recycling already contributes ~12% of India's annual gold availability³⁹ and the country accounts for ~8% of global scrap supply⁴⁰, making it the world's fourth-largest recycling market. Recycling activity is influenced by both gold prices and macroeconomic conditions, with higher prices and periods of economic stress encouraging households to monetise idle gold. Econometric analysis indicates that a 1% increase in the gold price is associated with an approximate 0.6% increase in recycling volumes.⁴⁰ At the same time, greater trust in organised retail, changing consumer preference and jeweller-led exchange programmes are encouraging recycling of household gold,⁴¹ supporting greater value retention and reduced import dependence.

Despite these favourable trends, only ~93t of gold is currently recycled annually⁴², highlighting substantial untapped potential across the collection, recycling, refining and circulation value chain. Capacity utilisation remains constrained by limited recyclable feedstock and structural barriers to imported doré, including duty-related distortions and operational challenges. International experience demonstrates that refining competitiveness depends not only on capacity but also on trusted standards and ecosystem integration. Switzerland, despite negligible domestic mine production, has become the world's leading refining hub through LBMA Good Delivery-accredited refineries, robust assaying and traceability systems, OECD-aligned responsible sourcing and integrated refining, fabrication, vaulting and logistics capabilities.⁴³ These institutions enable Swiss refiners to process both mined dore and recycled gold to internationally accepted standards, illustrating how trusted quality infrastructure can transform refining

Note: *Recycling industry size was estimated by multiplying India's gold recycling volumes in 2025 by the domestic gold price during the year; ⁴⁰India's share of global recycled gold supply was calculated by dividing India's recycled gold volumes in 2025 by total global recycled gold supply in 2025; ** USD equivalents have been calculated are based on the latest available exchange rate of 1 USD = CNY 7.30; ***USD equivalents are based on the latest available exchange rate of USD 1 = INR 91.5



into a high-value export industry. Unlocking India's recycling potential would improve domestic gold circulation, increase utilisation of existing refining capacity and strengthen advanced metals-processing capabilities in support of the country's broader industrial transformation.

GST frictions and low household gold circulation

Because consumers are unable to recover the 3% GST paid at the time of jewellery purchase when selling or recycling old gold,⁴⁴ there is little incentive to participate in recycling ecosystems. Large volumes of household gold continue to remain idle or locked within other channels, limiting circulation into monetised ecosystems.

Strategic interventions to unlock India's gold financial potential

3.vi. Strengthen India's refining competitiveness:

India should leverage its significant refining capacity by strengthening the competitiveness of its refining ecosystem. As an immediate priority, **the treatment of doré and refined bullion imports should be reviewed to ensure incentives remain aligned with domestic value addition, while sourcing, documentation and import processes for doré should be streamlined** to improve feedstock availability and refinery utilisation. Building on this foundation, **India should strengthen internationally recognised refining capabilities it could support more domestic refiners in obtaining Good Delivery accreditation, expand independent assaying and referee infrastructure and embed end-to-end traceability and OECD-aligned responsible sourcing across the refining value chain.** Switzerland demonstrates that global refining leadership is built not on capacity alone. Developing similar capabilities in India would increase domestic value addition, improve refinery utilisation, strengthen export competitiveness and position India as a trusted regional refining hub while supporting broader advanced manufacturing ambitions.

3.vii. Integrate monetization ecosystems with downstream gold circulation:

Gold monetisation ecosystem should be developed as an integrated value chain rather than a set of discrete initiatives, with **seamless linkages across GMS, EGRs, India Good Delivery Standards (IGDS), refiners, jewellers, bullion exchanges and downstream markets.** IGDS-certified bullion should serve as the common standard enabling seamless movement of mobilised gold across the channels mentioned above. Embedding certified recycled gold across trading, collateral, Gold Metal Loan (GML) repayments and jeweller procurement frameworks would improve liquidity, transparency, price discovery, working capital efficiency and formal participation across the value chain (Figure 2).

India Good Delivery Standards (IGDS): BIS standard for exchange-eligible refined gold bars

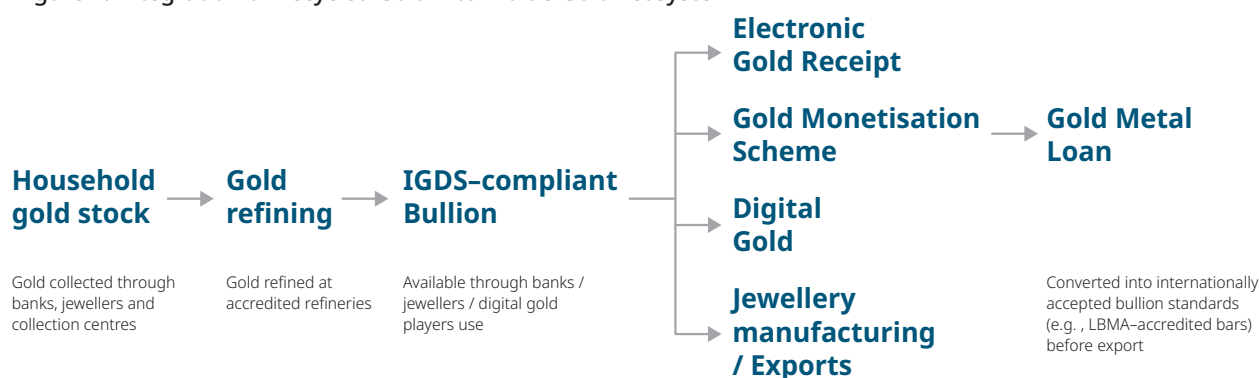
Qualification criteria:

- Purity: ≥99.5% (995 fineness)
- Weight: 1 kg bar (no negative tolerance)
- Traceability: Refiner ID, serial number and year of manufacture marked on bar⁴⁵
- Purity certificate issued by BIS-authorized refinery using approved refining processes (aqua regia/electrolytic) with in-house testing capability and NABL/LBMA-accredited laboratory compliance⁴⁶

3.viii. Encourage consumer recycling through targeted incentives:

To boost consumer participation frictions that limit recycling must be addressed. **Rationalising GST on old jewellery transactions, along with clearer tax and compliance frameworks,** can strengthen incentives for both consumers and jewellers. **At the same time, greater awareness can build trust.** Enabling seamless, digital recycling journeys through jewellers,

Figure 2: Integration of Recycled Gold into India's Gold Ecosystem





refiners and monetisation platforms can further encourage household gold to re-enter productive use. Over time, stronger formal participation will enhance transparency, deepen formalisation and support a more sustainable circular gold economy. International experience, such as that of Singapore demonstrates how targeted tax reforms, combined with the right market infrastructure, can encourage greater participation in precious metals channels and support ecosystem development (Spotlight 6).

Spotlight 6: Singapore's precious metals ecosystem

Positioned Singapore as a regional precious metals and refining hub by:

- Removing GST on Investment Precious Metals (IPM) in 2012 to improve competitiveness⁴⁷
- Supporting trusted market participation through internationally accredited refining and storage infrastructure
- Establishing Singapore as a regional distribution hub serving Asia-Pacific precious metals demand

Positioning India as a trading hub

Current operations: streamlining trade and enhancing transparency

Leading global gold hubs have emerged through deliberate strategic intent, supported by critical market infrastructure that enables them to capture value well beyond physical flows. By deepening price discovery, liquidity, vaulting, financing and settlement capabilities, these hubs have strengthened their role in the global gold eco system and enhanced broader economic competitiveness. London established itself as the world's leading institutional bullion market through deep market infrastructure and institutional participation,⁴⁸ while Dubai leveraged its strategic location and trade ecosystem to become a major physical bullion trading hub.⁴⁹ More recently, Asian financial centres such as Hong Kong and Singapore have announced targeted initiatives to further strengthen their position as regional gold trading/financial hubs, recognising bullion trading as a strategic opportunity to enhance financial market competitiveness (Spotlight 7). To realise this opportunity an evaluation of a broader set of policy and market enablers is required, including import-

export regulations, market infrastructure and the overall ease of bullion trade.

Spotlight 7: Hong Kong and Singapore's push to become gold trading/financial hubs

Hong Kong⁵⁰

- Prioritising gold trading as a strategic initiative to strengthen Hong Kong's position as an international financial centre and gateway for global bullion flows into Mainland China
- Expanding bullion market infrastructure through new international vaulting, storage and settlement capabilities
- Developing a dedicated gold market ecosystem with participation from leading international and Chinese financial institutions to enhance market liquidity

Singapore⁵¹

- Establishing an OTC gold clearing system by end-2026, with six founding clearing banks, to strengthen trading, settlement and liquidity in the bullion market
- Launching central bank gold vaulting services and expanding trusted storage infrastructure to attract sovereign and institutional bullion holdings
- Strengthening the broader bullion ecosystem through enhanced capital market products, bullion financing and exploration of physically deliverable gold futures

As the world's largest consumer of gold, with 31,000+t of gold stock,^{52*} India possesses the underlying physical demand, liquidity potential and market depth required to support a globally competitive bullion ecosystem. Yet despite these structural advantages, India's role has largely remained that of a price taker rather than a regional centre for bullion trading and price discovery, limiting its ability to capture greater value across the bullion and jewellery value chain.

Recognising this opportunity, India established the India International Bullion Exchange (IIBX) in GIFT City in July 2022 as the country's first international bullion exchange. By introducing an exchange-based model for bullion imports, IIBX enabled qualified jewellers and bullion dealers to directly source bullion from international suppliers, this expanded

Note: *31,000+ tonnes represents the WGC's estimate of India's total gold stock as of end-2025. The estimate includes jewellery, bars, coins, RBI holdings and ETF holdings.
^USD equivalents are based on the latest available exchange rate of USD 1 = INR 91.5



market access, improved transparent price discovery through exchange trading, standardising settlement and strengthened risk management. During its initial years, the exchange recorded encouraging growth, with physical gold traded increasing from 411kg in FY 2022–23 to 7.9t in FY 2023–24 and over 93t in FY 2024–25.⁵³ Membership expanded to 153 qualified jewellers and 33 international suppliers by end-2024,⁵⁴ four operational vaults with capacity exceeding 450t became operational⁵⁵, Chennai–deliverable contracts were introduced and Indian banks were permitted to participate as Special Category Clients (SCCs), led by HDFC Bank and subsequently ICICI Bank and SBI.⁵⁶ Collectively, these developments established the institutional foundations for a more transparent and efficient bullion trading ecosystem.

However, following this initial progress, market activity has remained below its long-term potential and broader adoption has been constrained. Foreign entities cannot trade directly without joining IIBX or routing through Indian members, limiting international participation. Gold futures have also witnessed limited traction owing to restricted domestic institutional participation and competition from the Multi Commodity Exchange of India Limited (MCX). Going forward, the full potential of India's bullion market will depend not only on exchange infrastructure, but also on the wider policy and market ecosystem governing imports, exports, logistics, financing and market participation.

India's bullion market is therefore at an inflection point where policy, market infrastructure and trade flows could be better aligned to create a transparent, efficient and globally competitive precious metals ecosystem. IIBX, anchored in GIFT IFSC and supported by India's leading market infrastructure institutions, provides an important institutional platform to centralise bullion imports, strengthen price discovery, enhance settlement discipline and improve integration across imports, refining, vaulting, manufacturing and exports. Realising this broader opportunity, however, will require an evaluation of complementary market and policy enablers beyond the exchange itself, including the import and export framework, trade arrangements, doré and refined bullion flows, GMLs, vaulting infrastructure and participation across domestic and international market participants. Together, these ecosystem reforms can strengthen India's position as a trusted global hub for bullion trading, value addition and jewellery exports.

Strategic interventions to position India as a global gold trading hub

3.ix. Consider developing India as a globally competitive bullion trading hub:

India should adopt a coordinated strategy to position domestic demitself as a leading regional bullion trading hub, leveraging its unparalleled and substantial household gold holdings. Various avenues could be evaluated, including **channelising official gold imports through exchange-based platform(s)**, to deepen market liquidity, enhancement of transparent price discovery and broadening of institutional participation. Drawing on international models such as Singapore and Hong Kong, India could further strengthen its bullion ecosystem through **expanded vaulting and logistics infrastructure, internationally competitive clearing and settlement mechanisms and greater participation from domestic and global financial institutions**. Simultaneously, **GIFT City could be positioned as a storage and trading hub for Asian central bank gold**, leveraging its international framework. Drawing from models like the Shanghai Gold Exchange (Spotlight 8) and Commodity Exchange, Inc. (COMEX), India can deepen global participation and liquidity. An expansion of vaults and delivery centres in key hubs would improve logistics and enable physical delivery against futures – supporting liquidity and India's emergence as a leading gold gateway.

Spotlight 8: Shanghai Gold Exchange

Established in 2002 under the People's Bank of China to unify China's fragmented gold market through a centralised platform:

- Serving ~11,500 corporate clients and 9.8mn retail customers by 2017, with average daily trading volumes of ~221t⁵⁷
- Introduced the RMB-denominated Shanghai Gold Benchmark Price to improve transparency
- Launched the International Board in the Shanghai Free Trade Zone in 2014 to enable foreign participation in RMB-settled contracts

Reimagining bullion banking in India

Bullion banking is a vital enabler for gold financialisation, acting as the bridge between physical and financial markets. In mature economies, it forms the backbone of a well-functioning ecosystem by facilitating the purchase, sale, financing and trading



of standardised bullion while offering critical services such as custody, consignment sales, trading, hedging and risk management. Leading global bullion banks – including JP Morgan, HSBC, UBS and ICBC – operate with wide mandates across trading, custody, lending, market making and savings products, thereby supporting refiners, jewellers, traders and investors alike. For India, developing a more mature bullion banking ecosystem could strengthen gold monetisation, deepen integration across the gold value chain and expand formal participation by enabling more efficient and accessible channels for gold ownership and transactions. As consumer preferences evolve toward convenience, liquidity and digital access over traditional physical holding, bullion banking could become an increasingly important enabler of India's future gold ecosystem.

This kind of ecosystem yields multiple benefits:

- Deeper bank participation in bullion trading through market making, liquidity provision and spot exchange participation
- Improved gold monetisation and recycling through strengthened assaying standards and bank-led collection ecosystems
- More efficient bullion market infrastructure through stronger clearing, custody and distribution networks
- Stronger global positioning for India's bullion market through integration with global bullion exchanges and trading networks

Despite these advantages, India's bullion banking ecosystem remains at a nascent stage (Table 1, page 58). Commercial banks currently limit themselves to bullion consignment sales, import facilitation, gold metal loans to jewellers and the sale of the government-minted "India Gold Coin." They remain constrained from undertaking several core activities common in advanced bullion markets – including proprietary bullion trading, physical custody and clearing services, distribution of bullion-linked investment products and market making functions – resulting in a significantly narrower role for banks across the bullion value chain. Expanding these capabilities could strengthen market infrastructure, improve monetisation and circulation of gold within the formal economy and support the gradual evolution of consumer participation toward more liquid, accessible and digitally enabled forms of gold ownership. This lack of institutional depth has left the market fragmented, with weak price discovery, limited hedging and risk management tools and under-utilised financial potential.

By contrast, bullion banks in advanced markets operate with far greater sophistication. In the UK and Switzerland, they support London Bullion Market

Association (LBMA) clearing, adding depth and stability to the global Over-the-Counter (OTC) gold market. In China, banks offer gold savings accounts, accumulation plans and structured products that attract retail participation while mobilising gold for industrial and trading use – making it a dynamic financial asset rather than a passive store of value.

India's divergence stems largely from RBI restrictions which, although aimed at stability, have prevented banks from becoming central to the gold ecosystem. Non-bank players and jewellers have attempted to fill this gap with gold savings and accumulation products, but these remain outside formal regulation, raising concerns around consumer protection, standardisation and integration. Without strong institutional anchors, innovation remains fragmented and informal.

However, the rapid growth of organised gold lending highlights significant latent potential. Total outstanding gold loans (banks and NBFCs) reached ₹18.6 lakh crore (~US\$203bn)^{58*} in FY2026, demonstrating that well-designed products delivered through trusted channels can scale rapidly. Unlocking bullion banking could replicate this success at scale, transforming gold into an active financial asset supporting broader economic growth.

Strategic interventions to position India as a global gold trading hub

3.x. Empowering banks to anchor gold's financial integration:

India has a strong opportunity to **transform its gold ecosystem by enabling banks to fully leverage bullion banking**. Banks can play a central role similar to ICBC's integrated platform in China (Spotlight 9), if regulatory constraints are eased to allow proprietary gold positions, participation in derivatives (futures, options, forwards) and other products. **Retail innovations such as gold savings accounts, UPI-linked micro-payments, accumulation plans and gold-backed credit can make gold a functional, everyday asset** while attracting new participants into the formal system. With seamless bank integration, gold can evolve from a static store of value into a more liquid and accessible financial asset.



Table 1: Comparative overview of role of banks in gold market: global vs India

Name	USA	UK	China	India	India' current state
Bullion banking Buy, sell, proprietary trading, market making, liquidity provision					In India, banks are not allowed to freely buy, sell or take positions in gold market
Custody, clearing & distribution services Custodial/ vaulting services distribution services					- Bullion distribution is limited to select RBI-authorized banks,^{59, 60} clearing remains infrastructure-led - However, Indian banks do not yet operate as full-scale bullion custodians or clearing participants
Customer Solutions Gold savings accounts Gold accumulation plans Gold bullion sales					- Only "India Gold Coin" sales are permitted in India - Indian banks are not allowed to offer these as deposit or investment products to retail customers
Financing Lending Borrowing Gold Metal Loans – jeweller Retail Gold Loans Bullion consignment sales, imports GMS					- Limited role for Indian banks – more as an "import" facilitation and financing agency - GMS operational through designated banks but remains modest in scale
Currently offered Not offered Partially offered					

Source: WGC report: The need for bullion banking in India

Spotlight 9: ICBC's bullion banking model

Developed into one of the world's leading bullion banks through an integrated platform spanning gold leasing, trading, financing and vaulting by:

- Offering hedging tools and derivatives for risk management
- Providing gold leasing to reduce working-capital needs
- Mobilizing household gold through retail and digital channels
- Supporting cross-border bullion flows through LBMA-linked networks
- Enhancing liquidity, price discovery and gold market access⁶¹

and reduce import dependence. Without these reforms, India continues to miss out on the potential benefits of a deep, integrated, and globally aligned bullion banking market – such as improved risk management, enhanced price discovery, higher institutional participation and the ability to develop gold as a dynamic asset class for both domestic and international trade. Implementing these measures would position India as a leader in bullion banking while maximising the economic and financial potential of its gold reserves.

Conclusion

India now stands at the threshold of transforming its centuries-old relationship with gold into a source of national economic strength. By shifting from fragmented, informal practices to a regulated, technology-enabled framework, the country could unlock the productive potential of one of the world's largest gold asset bases. To achieve this will require a coordinated ecosystem where banks, jewellers, exchanges, regulators and investors play complementary roles. Together, these strategic interventions can transform gold from a static store of value into a dynamic financial asset – supporting India's Viksit Bharat 2047 vision and setting a global benchmark for integrating heritage with innovation.

3.xi. Recognising gold as a Level 1 HQLA to strengthen gold mobilisation:

Recognising gold as a Level 1 High Quality Liquid Asset (HQLA) for statutory liquidity ratio (SLR) compliance would create strong incentives for banks to actively hold, deploy and trade gold. **Anchoring banks in the household gold mobilisation scheme would enable them to leverage their extensive branch networks** and brand trust to generate liquidity

Note: *USD equivalents are based on the latest available exchange rate of USD 1 = INR 91.5

Chapter 6

Reimagining gold jewellery for the modern consumer

Tradition to technology





Pillar 4: Reimagining gold jewellery for the modern consumer

Overview

India's gold jewellery sector is both an economic powerhouse and a deeply embedded consumer market, contributing ~1.3% to national GDP¹ and supporting ~five million livelihoods² across a vast ecosystem of karigars, manufacturers and retailers. Beyond its role as adornment, gold jewellery remains an important means of household savings and long-term wealth preservation, giving it a unique place in India's social and economic fabric. As one of the few universal consumer categories spanning generations, gold jewellery continues to symbolise celebration, security and aspiration. At the same time, evolving consumer preference, purchasing behaviour and retail expectations are reshaping the market, creating an opportunity to modernise products, strengthen trust and transparency and reimagine the consumer journey while preserving gold jewellery's enduring cultural, economic and financial relevance.

Challenges

- Demand remains concentrated around weddings and festive purchases
- Evolving Gen Z and millennial preferences are reshaping jewellery consumption
- Fragmented hallmarking penetration and sector formalisation affect buyer confidence
- Jewellery purchase journeys remain fragmented across channels
- Slow technology adoption limits innovation in consumer experience

Opportunity

~2 in 3
young Indians participate
in the gold jewellery
ecosystem

Anchored in resilient jewellery demand and gold's long-standing value preservation by:

Transforming gold into a lifestyle product

- Futuristic gold products
- Symbol of everyday celebration
- Aspirational, emotion-led lifestyle asset across fashion, travel and wellness

Preserving the integrity and trust in gold jewellery

- Universal hallmarking adoption
- Consumer awareness and transparency
- Globally aligned quality standards

Transforming gold retail journey

- Digital and immersive experiences
- Omni-channel and e-commerce partnerships
- Modular and customisable jewellery formats

ADVANCES VIKSIT BHARAT PRIORITIES

Implementing these recommendations can strengthen economic growth by expanding jewellery demand, retail formalisation and value addition, reinforce make in India by promoting innovative design, advanced manufacturing and globally competitive jewellery, foster technology partnerships through digital retail experiences, product innovation and omni-channel capabilities, enhance transparent governance by strengthening hallmarking, traceability and consumer protection and support social equity by sustaining artisan livelihoods and expanding employment opportunities.



India's gold jewellery sector stands at the intersection of legacy and changing consumer expectations

India's gold jewellery sector is one of the most dynamic pillars of the country's gold ecosystem, deeply embedded in its cultural, social and economic fabric. Gold jewellery purchases remain central to Indian households, symbolising wealth, security and celebration across generations. Beyond its cultural significance, the jewellery sector plays a critical economic role in India's economy, supporting five million+ livelihoods across manufacturing, retail and design.³

440+t

India's gold jewellery demand in 2025, reinforcing its position as one of the world's largest markets^{4**}

~₹4.5 lakh Cr

(~US\$49 bn) value of India's gold jewellery demand in 2025*^

As Gen Z and younger consumers gain purchasing influence, gold jewellery is evolving beyond ceremonial and investment-led consumption toward products that reflect lifestyle, individuality and self-expression. This shift is reshaping expectations around design, affordability, personalisation and everyday wearability. Brands are already responding to this transition through lightweight, lower-carat and contemporary jewellery collections positioned as aspirational yet accessible. For instance, CaratLane's 14K jewellery reportedly contributes ~35% of total revenue,⁵ while Mia by Tanishq positions its offerings as "jewellery for you, not the locker", emphasising and everyday styling.

Findings from primary consumer surveys reinforce the growing shift toward lifestyle-led and design-driven jewellery:⁶

- Gold jewellery purchase intent remains strong across generations
- **83%** of consumers cite price as the key purchase driver, boosting lightweight demand
- Online jewellery purchases are rising due to convenience
- **39%** of consumers cite authenticity concerns as a barrier

What will define the future role of gold in consumers' lives?

As younger consumers redefine value through identity, experience, convenience and digital engagement, gold jewellery will need to evolve beyond its traditional role as a ceremonial or investment-led purchase. **With nearly half of young Indians (49.5%) currently holding gold in some form,⁷ expanding participation to around two-thirds (67%) by 2047** will require the sector to remain relevant to changing consumer preferences. This, in turn, will necessitate reimagining how gold is designed, experienced, trusted and integrated into everyday life.

Reimagining gold for a new generation of consumers

- **Gold as a lifestyle product:** If consumption becomes an expression of identity and individuality, how might gold evolve from a ceremonial purchase into a meaningful lifestyle accessory for everyday life?
- **Gold as a trusted and transparent asset:** If future consumers demand radical transparency and constant proof of authenticity, how might gold reimagine trust in a world where credibility must continuously be earned rather than assumed?
- **Gold in a phygital consumer ecosystem:** If consumers increasingly move seamlessly between physical and digital ecosystems, how might the role of gold be reimagined within an emerging "phygital" retail experience?

Addressing these shifts will be critical to preserving gold's cultural relevance while making it aspirational, accessible and future-ready for Viksit Bharat 2047.

Transforming gold into a lifestyle product

Despite rising interest among younger consumers for lifestyle-led products, much of the market still caters to traditional, occasion-driven demand with limited innovation in functionality, wearability and experiential retail. As consumer preferences evolve toward products that combine emotional value with utility and individuality, there is an opportunity to reposition gold jewellery as an everyday choice rather than a purely ceremonial one.

Note: *₹4.5 lakh Cr derived as Gold jewellery demand (2025) * Price of gold 2025, ^USD equivalents are based on the latest available exchange rate of USD 1 = INR 91.5; **Figures are sourced from the World Gold Council's Gold Demand Trends and exclude gold exchanged for gold.



Within this context, the opportunity lies in reimagining products and experiences to resonate with younger, more lifestyle-driven buyers while sustaining traditional demand. This requires innovation that blends heritage with functionality.

Key actions to drive this change include:

4.i. Modernising gold jewellery through futuristic gold products:

Integrating functionality, personalisation and contemporary design into lightweight wearable formats can reposition gold from an occasional purchase into an everyday lifestyle product. Wellness-linked accessories, payment-enabled wearables and digitally connected jewellery can strengthen relevance among younger consumers seeking convenience, individuality and seamless digital experiences. Innovations like self-healing surfaces enhance long-term utility. The Ultrahuman Ring Air shows how health tracking can merge with style (Spotlight 1), while Talsam shows how jewellery can serve as an elegant personal safety companion.⁸ India's 7 Ring, the first RuPay-certified payment ring,⁹ highlights how jewellery can simultaneously serve as a functional lifestyle tool, aligning with the expectation for products that are meaningful, convenient and hyper-personalised.

Spotlight 1: Ultrahuman Ring Air – merging personalisation, health and everyday wearability¹⁰

Ultrahuman, an Indian health-tech startup, has emerged at the forefront with its smart ring by:

- Combining advanced health-tracking capabilities – including sleep monitoring, heart rate variability, body temperature and movement tracking – within a sleek, minimalist smart ring
- Delivering personalised health insights, recovery scores and tailored recommendations through integration with Ultrahuman's digital ecosystem

4.ii. Reposition gold as the modern symbol of everyday celebration:

Gold can build on its traditional significance in weddings and festivals to also become part of everyday milestones, personal achievements and daily self-expression. Positioning jewellery around work, gifting and modern routines can strengthen emotional relevance among younger consumers and reposition gold from an occasional purchase into a more consistent part of everyday life. Storytelling linked

to meaningful moments can further reinforce gold's emotional resonance and cultural relevance.

4.iii. Position gold as an aspirational lifestyle asset across fashion, travel and wellness:

As younger consumers increasingly prioritise experiences, wellness, travel and self-expression over traditional markers of material wealth, gold jewellery can evolve into a more aspirational and lifestyle-led asset. Collaborations with credible influencers and lifestyle brands can further build aspiration and authenticity, similar to how De Beers' "Diamonds Are Forever" campaign reshaped diamonds into a symbol of emotion, identity and enduring aspiration.

Preserving integrity and trust

Hallmarking coverage, accessibility and ecosystem sustainability

Hallmarking has become a critical factor in jewellery purchase in India, with high-income consumers identifying it as their most important purchase driver. Recognising its importance in strengthening consumer confidence, the Government of India has progressively expanded mandatory hallmarking coverage to 380 districts,¹¹ significantly improving quality assurance and transparency across the jewellery market. While this represents substantial progress, coverage still extends to only about half of India's districts,¹² leaving gaps in accessibility, particularly in smaller towns and rural markets. At the same time, the capped hallmarking fee of ₹35 per article has reduced commercial viability for many Assaying and Hallmarking Centres (AHCs)¹³, potentially constraining further expansion. Strengthening infrastructure, accessibility and operator economics can help build on the progress already achieved, reinforce consumer trust and support the continued growth and formalisation of the sector.

Ensuring consumer confidence through guaranteed gold purity and authenticity

Within this context, strengthening hallmarking is central to protecting consumer trust and positioning Indian jewellery as globally credible. With demand expanding beyond metros and exports gaining traction, the next phase of reform requires action to make hallmarking universal and internationally recognised.

Key actions to drive this change include:

Note: *USD equivalents are based on the latest available exchange rate of USD 1 = INR 91.5



4.iv. Build on hallmarking progress through wider accessibility and sustainable expansion:

India's hallmarking ecosystem has expanded steadily over recent years, strengthening quality assurance and consumer confidence across the gold jewellery market. The next phase should focus on extending these benefits more broadly by increasing the network of Assaying and Hallmarking Centres (AHCs), improving accessibility in underserved regions and reviewing fee structures to support long-term operational viability. Planning coverage based on geographic accessibility rather than administrative boundaries can help ensure that jewellers and consumers can access hallmarking services within a reasonable travel radius. As younger consumers increasingly prioritise trust, transparency and value retention, wider access and sustainable economics can support the continued expansion of hallmarking as a nationwide standard, reinforcing trust, transparency and market consistency.

A universal “1-km hallmarking ecosystem” can extend the benefits of hallmarking beyond purchase assurance, enabling consumers to verify, exchange, recycle and monetise gold with confidence, while providing greater comfort around pricing and value realisation at the point of exit.

4.v. Strengthen consumer protection, verification and traceability:

Customer confidence depends on simple, transparent and verifiable purity assurance systems. Increasing consumer awareness and visibility of the Bureau of Indian Standards (BIS) Hallmark Unique Identification (HUID) system (Spotlight 2) can help buyers independently verify the authenticity and provenance of their jewellery through digital verification tools. Strengthening HUID verification mechanisms, improving grievance redressal processes and enhancing traceability across the jewellery value chain can further reinforce trust and accountability. As the hallmarking ecosystem matures, voluntary transfer of HUID registration to the end consumer at the point of sale would create a verifiable ownership record, improve visibility throughout the product lifecycle and help identify duplicate or fraudulent hallmarking practices. Such a system could also support resale, exchange, recycling and gold-backed financing by providing consumers with a trusted digital record linked to their jewellery.

Spotlight 2: Hallmark Unique Identification (HUID), India

- Introduced by BIS in 2021, HUID assigns a unique 6-digit code to each hallmarked jewellery article¹⁴
- Enables consumers to verify purity and authenticity through the BIS CARE app
- Shifted hallmarking from a certification process to item-level authentication and traceability

4.vi. Align Indian hallmarking with global standards:

India should fast-track membership of the Vienna Convention on the Control of Precious Metal Articles to align its hallmarking with global standards. The Convention's Common Control Mark (CCM) enables jewellery certified in one member country to be accepted across others without retesting, reducing duplicate certification, lowering costs, easing cross-border trade and strengthening consumer trust through verifiable quality. Membership would enhance international acceptability and exports, and position India as a trusted global source of certified gold jewellery.

Redefining the gold retail journey

Enhancing personalisation and expanding market reach

Jewellery buying in India has traditionally been family-driven and occasion-led, with limited personalisation across shopping experiences. While this heritage builds trust and emotional value, it has also created relatively uniform retail journeys. As consumers increasingly seek experiences as well as products, in-store experience and personalised service now rank among the top three factors shaping brand preference.¹⁵

47%

of consumers already purchase jewellery online, highlighting growing openness toward digital shopping journeys.¹⁶



Innovations such as virtual try-ons, design customisation and transparent pricing are emerging as important drivers of trust and convenience, though limited availability continues to leave a personalisation gap, especially among those consumers who are hesitant to buy online.

At the same time, market reach is expanding. Local jewellers remain the preferred choice in Tier-2 and Tier-3 cities, while national chains dominate Tier-1 markets.¹⁷ The market share of organized retailers had increased to 35% by 2021.¹⁸ These retailers are increasingly targeting smaller cities where there is rising aspirational demand. Growing adoption of digital tools and hybrid shopping models are also encouraging urban consumers to engage with brands both online and offline.

Driving distinctive experiences and broadening access to gold jewellery

Creating a modern gold jewellery market will require coordinated actions that go beyond incremental upgrades. Embedding technology into retail experiences and combining online scale with offline trust, will allow the industry to deepen consumer engagement:

4.vii. Scale adoption of digital and immersive customer engagement tools:

India's jewellery industry has already started to integrate digital technologies into the retail journey using AI-powered customer assistance, virtual consultations, data-driven personalisation and immersive design experiences. The next phase should focus on accelerating adoption and implementation across the wider industry, particularly among regional and mid-sized players. As digital adoption deepens, the customer journey is expected to become increasingly personalised, immersive and seamlessly integrated across physical and digital touchpoints – from AI-enabled discovery and virtual consultations to AR/VR-assisted design visualisation, omnichannel purchasing and post-purchase engagement (Figure 1). Scaling these capabilities can enhance customer acquisition, strengthen retention and improve overall shopping experiences. Expanding adoption across Tier 2 and Tier 3 markets will be critical if the benefits of digital innovation are to reach a broader consumer base and support the next phase of jewellery demand growth.

4.viii. Accelerate omni-channel integration and market expansion:

Many jewellery retailers have already begun building omni-channel capabilities through integrated online and offline customer journeys, digital catalogues, e-commerce channels and marketplace partnerships. The priority now is to scale these

e-commerce channels and marketplace partnerships. The priority now is to scale these models more broadly across the industry and extend their reach into Tier 2 and Tier 3 markets. Strengthening omni-channel capabilities, including seamless online discovery, virtual consultations, in-store fulfilment and “Buy Online, Pickup In Store” experiences, can help improve accessibility, convenience and customer trust. At the same time, partnerships with e-commerce platforms and targeted digital offerings can expand access to lightweight and everyday jewellery products, helping attract new consumers while supporting deeper market penetration beyond major urban centres.

4.ix. Elevate jewellery value through multi-configurable modular designs:

Modern consumers, especially younger cohorts, seek versatility and novelty rather than one-off pieces. Modular jewellery collections can turn a single purchase into multiple looks, stretching both value and emotional longevity. Over time, customers can add or swap components to refresh their style without buying entirely new pieces, encouraging repeat engagement and sustained loyalty. Digital styling tools or AI-driven recommendations can further position gold as a dynamic lifestyle companion, offering hyper-personalized experiences and sustained engagement. This approach meets expectations for choice automation, emotional connection and adaptive products, ensuring jewellery resonates as both a functional and meaningful part of daily life.





Discover

Personalised jewellery discovery through social media, ai recommendations and digital platforms

Consult

AI-powered guidance and virtual consultations tailored to customer preferences and budgets

Visualise and customise

AR/VR-enabled try-ons and real-time design customisation to enhance purchase confidence

Experience

Seamless omni-channel engagement across online channels and physical stores

Verify and purchase

Transparent pricing, bis huid verification and trusted purchase assurance

Receive

Flexible fulfilment through home delivery, in-store pickup, or assisted purchase journeys

Exchange, resell & monetise

Easy access to trusted exchange, resale, recycling and gold monetisation services

Re-engage

Personalised after-sales support, loyalty programmes and lifecycle-based recommendations

Conclusion

India's jewellery sector stands at a point where heritage and modernity can converge to define the future of gold consumption. Its deep cultural roots give it resilience and credibility; while shifting lifestyles, rising digital participation and evolving design sensibilities – especially among younger consumers – are quietly reshaping expectations of what jewellery should represent. Many retailers have begun responding through modern formats, personalised services and refreshed design approaches, but the true opportunity lies in scaling these early steps into an industry-wide movement. As preferences move toward versatility, self-expression and experience-led engagement, jewellers who adapt thoughtfully will help nurture a generation that sees gold not only as a store of value but also as an extension of identity and everyday living. Sustaining this balance will be essential if jewellery is to remain central to India's social fabric.



Chapter 7

Unlocking gold's potential as a strategic national asset and mineral

Tradition to technology





Pillar 5: Unlocking gold's potential as a strategic national asset and mineral

Overview

Gold is increasingly being viewed by leading economies as a strategic economic resource extending beyond its traditional role. Financial centres such as Singapore and Hong Kong are strengthening their positions as global bullion trading hubs,¹ while countries are placing greater emphasis on gold's role in economic resilience, secure supply chains and long-term competitiveness. This complements the opportunities identified across earlier chapters to strengthen mining, refining, recycling, bullion markets, financialisation and jewellery exports. Gold is also emerging as an indispensable material for advanced manufacturing. Its unique physical and chemical properties make it critical for semiconductors, advanced electronics, AI infrastructure, diagnostics, biotechnology, aerospace, quantum technologies and other frontier industries. As India advances towards its Viksit Bharat ambitions, demand for high-performance materials such as gold is expected to rise. Yet, industrial gold demand in India remains modest at around 10t annually^{2^} reflecting constraints in research, commercialisation and industrial adoption.

This chapter explores how expanding industrial applications, strengthening domestic capabilities and recognition of gold's broader economic role can support innovation, manufacturing competitiveness and resource security. It presents the case for recognising gold as a strategic asset and strategic mineral to better align industrial policy with India's long-term economic resilience and advanced manufacturing ambitions.

Challenges

- Weak translation of gold research into commercial industrial applications
- Limited institutional and ecosystem support for advanced gold technologies slows innovation pipelines
- India's participation in global high-value manufacturing ecosystems is still evolving
- Gold is not formally recognised within India's strategic resource framework, limiting policy focus on its broader economic and resilience value

Opportunity

A driver of economic resilience, advancing high-value manufacturing, innovation and strategic industries

Expanding gold's strategic contribution to India's economic resilience through:

Enable industrial scale-up through targeted incentives, circularity and coordinated ecosystem development

Strengthen R&D, global innovation integration & commercialisation ecosystems for gold-enabled

Evaluate how gold is treated in external sector accounting to reflect its dual role as a financial asset

Position gold as a strategic asset and mineral for advanced manufacturing* and critical technologies

ADVANCES VIKSIT BHARAT PRIORITIES

Implementing these recommendations can strengthen economic growth by expanding high-value manufacturing and domestic value addition, reinforce Make in India by developing globally competitive advanced manufacturing ecosystems, accelerate technology partnerships through research and frontier technologies, enhance transparent governance through a coherent strategic framework for gold across industrial and financial policy and strengthen national resilience by improving security, reducing import dependence and supporting long-term economic stability.

Note: *Advanced manufacturing refers to the use of innovative technologies, automation, digital systems and high-precision production processes to manufacture sophisticated, high-value products more efficiently and competitively. ^Figures are sourced from the World Gold Council's Gold Demand Trends and exclude gold exchanged for gold.



Unlocking gold as a strategic asset for India's advanced manufacturing future

Gold as an industrial enabler for Viksit Bharat

India's Viksit Bharat ambitions are anchored in building globally competitive manufacturing and technology ecosystems through initiatives such as Make in India and the India Semiconductor Mission, which seek to establish India as a global hub for electronics manufacturing, semiconductor design and advanced technology development.³ Achieving these ambitions will increasingly depend on access to materials that enable reliability, precision, conductivity, durability and high-performance manufacturing.

Gold has the potential to play a far more strategic role in India's industrial future than is conventionally recognised. Beyond its traditional role as a financial and ornamental asset, gold is a critical enabling material across semiconductors, electronics, diagnostics, aerospace, healthcare, sensors and advanced digital infrastructure. Its unique properties, including high electrical conductivity, corrosion resistance, malleability and biocompatibility make it difficult to substitute in several high-reliability and mission-critical applications.

Spotlight 1: Gold in aerospace and space technologies⁴

Gold is widely used in satellites, spacecraft, avionics, astronaut visors and thermal shielding systems due to its unique physical and chemical properties. This is because:

- High infrared reflectivity helps shield spacecraft and astronaut equipment from extreme heat and radiation
- Corrosion resistance and conductivity enable reliable, low-resistance electrical connections in mission-critical aerospace systems
- Stability in vacuum environments allows it to reduce friction and wear in moving mechanical components where conventional lubricants fail

Importantly, enabling these applications extends beyond the availability of gold itself. It requires secure access to the entire industrial value chain – including mining, refining, recycling, fabrication and advanced materials processing – to ensure that manufacturers have reliable access to high-quality gold inputs. As countries increasingly prioritise supply-chain resilience and self-reliance, securing these capabilities has become an integral part of industrial strategy, particularly for materials that underpin frontier technologies.

Advanced electronics: gold underpinning high-performance manufacturing

Electronics account for significant global technology-related gold demand, with gold remaining indispensable across advanced consumer electronics, automotive systems and semiconductor applications due to its superior performance, conductivity and durability characteristics.

80% of technology gold demand comes from electronics⁴

Global industrial demand for gold is increasingly being driven by AI infrastructure, advanced computing and electronics. As countries strengthen supply-chain resilience and invest in strategic manufacturing capabilities, gold is increasingly emerging as a critical industrial material for frontier technologies and high-performance manufacturing. As India seeks to build globally competitive manufacturing capabilities, sectors such as the semiconductor industry are expected to drive future demand for high-performance materials, with gold playing a critical enabling role across electronic applications.

Semiconductors: gold as a critical enabler in advanced electronics

India's semiconductor ecosystem is rapidly evolving into a global hub, producing ~3,000 integrated circuits (ICs) annually,⁵ supported by a strong R&D talent base. Valued at US\$34 bn in 2023,⁶ the market is projected to reach US\$750 bn by 2047 at a CAGR of 14%,⁷ highlighting the scale of opportunity in advanced electronics. Policy support through the US\$10 bn Semicon India Program,⁸ approvals for five major fabrication and testing projects and international partnerships with the US and Singapore are accelerating this momentum. Gold can play a vital role in this growth. Unlike silver or aluminum, gold does not tarnish or oxidise, ensuring clean and reliable bonds in high-performance circuits. Its unmatched conductivity, thermal stability and resistance to electromigration make it indispensable



for interconnects, bonding wires, connectors and packaging in miniaturized chips. As demand from AI, Internet of Things (IoT) and data centres rises, gold's importance will deepen, ensuring signal integrity and long-term durability.

Gold underpins the reliability and performance of AI hardware across Graphics Processing Units (GPU), server boards and high-speed interconnects by providing the conductivity, corrosion resistance and thermal stability essential for dense computing environments. As generative AI, machine learning and large-scale analytics accelerate, demand for gold in precision components, chip packaging and data centre infrastructure is expected to rise. India's AI expansion will therefore not only strengthen digital capabilities but also drive sustained industrial demand for gold.

Spotlight 2: Gold in transmission networks and semiconductors⁹

Gold is used in bonding wires, connector plating, socket interfaces and circuit board coatings across transmission networks and semiconductor systems because of its highly reliable electrical and chemical properties. Key advantages include:

- Superior conductivity that supports consistent and high-speed signal transmission across advanced electronic systems
- Strong resistance to corrosion and oxidation, enabling durable and low-failure electrical connections over long operating periods
- High reliability under demanding operating conditions, making it difficult to replace in precision and mission-critical semiconductor applications

Biotechnology: Gold as a pillar of innovation

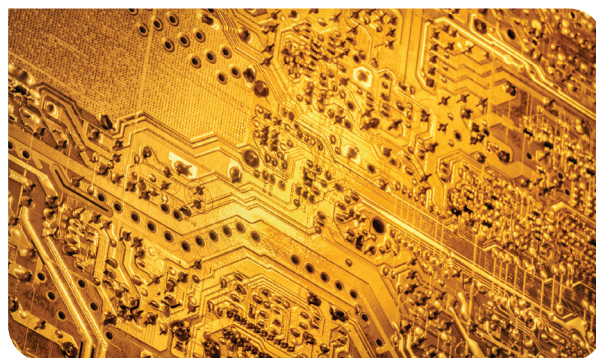
India's biotechnology sector has grown sixteen-fold, from US\$10 bn in 2014 to US\$166 bn in 2024¹⁰ and is projected to reach US\$300 bn by 2030.¹¹ Growth is driven by R&D investment, startup activity and policies such as BIO-E3A, which enable Bio-AI hubs, biofoundries and bio-enabler hubs. Advances in gene therapy, indigenous antibiotics, genome sequencing and Indian Space Research Organisation (ISRO) linked space biology are accelerating commercialisation. Gold is emerging as a strategic component in this ecosystem. Its nanoscale properties enable targeted drug delivery, antibody transport and improved imaging for early detection. In cancer

care, gold nanoparticles are used for precise tumor targeting and minimally invasive treatment. Gold also underpins rapid tests, biosensors and molecular assays, as seen during the COVID pandemic as well as supporting wearables, robotic surgery, dental applications and sequencing platforms through its conductivity and biocompatibility. As the bioeconomy scales to US\$300 bn,¹² industrial gold demand in biotech is set to rise, positioning it both as an enabler and a growth driver.

Quantum Technologies: Gold enabling the next computing frontier

India's quantum ecosystem is in an early but accelerating phase, driven by strategic R&D investments, infrastructure expansion and growing talent depth. The domestic quantum computing market, valued at US\$1 bn in 2024, is projected to grow sevenfold to US\$7 bn¹³ by 2032, signaling India's ambition to emerge as a global leader in next-generation computing. Government-led initiatives, including the Ministry of Electronics and Information Technology's (MeitY) superconducting quantum facility at C-DAC, drone-based quantum-secure communication trials and Quantum Experience centres, are strengthening national capabilities. Meanwhile, the RBI's identification of quantum risks to cryptographic systems highlights the strategic importance of the sector.

Gold plays a critical role in enabling quantum technologies, particularly in maintaining the ultra-cold, stable environments essential for qubit operations. Its thermal conductivity, resistance to oxidation and stability at cryogenic temperatures make it well-suited for wiring, connectors and cooling systems in quantum computers. By supporting system stability and efficiency, gold enables advances in quantum simulation, secure communications and AI-intensive workloads. Beyond quantum technologies, gold already plays a significant role in electronics, with 80% of industrial gold consumption driven by electronics.¹⁴ Moreover, around 34g of gold are required to produce 1,000 smartphones¹⁵





330mn+

smartphones manufactured in India annually,
potentially embedding ~11t of gold¹⁶

As India advances toward quantum readiness and scales electronics manufacturing, industrial demand for gold is expected to grow steadily, reinforcing its role as a key material enabler of future technologies.

The strategic case for gold in India's industrial transformation

For India, fully integrating gold into industrial, technology and innovation strategies presents a significant opportunity to accelerate advanced manufacturing and strengthen domestic innovation ecosystems. As the country advances its ambitions in semiconductors, advanced electronics, health-tech, aerospace and other frontier sectors, recognising gold as a strategic mineral can help unlock greater investment in research and high-value manufacturing.

Importantly, this opportunity exists even within an import-dependent framework. By directing a larger share of gold towards productive industrial applications, India can generate greater domestic value addition, strengthen manufacturing competitiveness and expand export potential. As initiatives such as Make in India and the India Semiconductor Mission gather momentum, gold is positioned to become an increasingly important input in India's next phase of industrial transformation. This opportunity is further reinforced by gold's alignment with the core characteristics of a strategic mineral (Spotlight 3).



Spotlight 3: Why gold qualifies as a strategic mineral

Gold meets all three criteria of a strategic mineral, strengthening its case for inclusion:

- **Macroeconomic significance:** Gold functions as both a mineral and a sovereign asset, serving as a store of value, reserve asset and hedge against inflation. India holds an estimated 31,000+t of gold stock valued at ₹314.9 lakh crore (US\$3.4tn)^{17**^} while the gold value chain contributes ~1.3% of GDP¹⁸ and supports ~5mn livelihoods¹⁹
- **Industrial indispensability:** Gold's unique physical and chemical properties make it difficult to substitute in critical technologies. It is essential for semiconductors, AI-enabling computing infrastructure, advanced electronics, aerospace, clean energy, healthcare and other strategic industries that underpin long-term technological competitiveness.
- **Supply vulnerability:** Demand far exceeds domestic output, exposing India to import dependence and exchange-rate pressure

Despite this potential, structural constraints limit gold's industrial deployment. Gold has limited visibility in strategic minerals and advanced manufacturing policies, while its use remains concentrated in electronics with minimal diversification into frontier sectors. Gaps in applied research, commercialisation and industry-academia collaboration hinder innovation and scale-up. In addition, high prices and import dependence create cost sensitivities, even in applications where gold offers superior performance. Domestic capabilities in mining, refining and advanced manufacturing also remain underdeveloped.

International experience shows that industrial gold demand grows alongside advanced manufacturing ecosystems. India's industrial gold demand is approximately 10t annually,^{20^} well below Japan (~76t), the US (~64t) and South Korea (~26t).²¹ This reflects differences in technological sophistication and participation in high-value manufacturing rather than gold consumption alone. Japan has strengthened its leadership in semiconductors through sustained industrial policy and investment;²² the US has advanced semiconductor manufacturing, AI infrastructure, aerospace and defence supply chains under initiatives such as the CHIPS and Science Act;²³ and South Korea has scaled semiconductor fabrication and R&D through the K-CHIPS Act.²⁴ Together, these examples demonstrate that industrial

Note: *Advanced manufacturing refers to the use of innovative technologies, automation, digital systems and high-precision production processes to manufacture sophisticated, high-value products more efficiently and competitively; ^ Figures are sourced from the World Gold Council's Gold Demand Trends and exclude gold exchanged for gold. *31,000+ tonnes represents the WGC's estimate of India's total gold stock as of end-2025. The estimate includes jewellery, bars, coins, RBI holdings and ETF holdings.^USD equivalents are based on the latest available exchange rate of USD 1 = INR 91.5



gold demand is driven by technological sophistication and participation in high-value manufacturing ecosystems rather than domestic gold production. As India builds globally competitive semiconductor, electronics and other advanced manufacturing value chains, industrial gold utilisation is likely to grow in parallel. Recognising gold as a strategic mineral can help support this transition, reinforcing the country's broader technology and economic ambitions. While these considerations establish the industrial rationale for recognising gold as a strategic mineral, gold's importance extends beyond manufacturing.

Gold's dual role as an industrial and financial asset

Gold occupies a distinctive position within the economy as both an industrial input and a long-term financial asset. While a portion of imported gold is used in jewellery manufacturing and industrial applications, a significant share is accumulated by households as a store of value, investment and financial safeguard rather than being immediately consumed. Unlike most imported commodities, gold remains within the domestic economy for decades, preserving wealth across generations, supporting household balance sheets and serving as collateral during periods of financial stress. Its ability to retain value over the long-term has reinforced its role as an important savings instrument along other financial assets.

Under the IMF's Balance of Payments framework,²⁵ non-monetary gold imports are recorded as trade in goods and contribute to merchandise imports within the current account, reflecting internationally accepted statistical standards. At the same time, gold occupies a distinctive economic position, as it continues to function as a durable financial asset long after importation. This dual role is reflected internationally through monetary gold, which is recognised separately as a reserve asset held by central banks.

For countries such as India, where household gold holdings are exceptionally large and gold plays an important role in savings, wealth preservation and financial resilience, its contribution extends beyond immediate economic activity. Alongside supporting industrial development, gold contributes to long-term household wealth creation, portfolio diversification and economic resilience, underscoring its unique position within India's economy as both a strategic industrial resource and a strategic financial asset.

This financial role also enhances economic resilience by diversifying reserves and providing a hedge against financial and geopolitical uncertainty. As global fragmentation and volatility increase, leading financial centres are treating gold as a strategic economic asset. Jurisdictions such as Singapore and Hong Kong²⁶ have

developed competitive bullion trading hubs to strengthen liquidity, price discovery and institutional participation, reflecting a broader approach linking gold to industrial competitiveness, development and resilience.

India has also begun recognising this role through reserve management. The Reserve Bank of India has increased gold's share in foreign exchange reserves from below 7% a decade ago to around 17% today.²⁷ While this reflects growing recognition of gold's importance as a reserve asset, there remains an opportunity to complement reserve management with a broader industrial strategy that recognises gold's dual contribution to technological advancement, domestic value creation, financial resilience, manufacturing competitiveness and long-term economic resilience.

Realising gold's strategic potential

India's ambitions in advanced manufacturing and frontier technologies present an opportunity to reposition gold as both a strategic mineral and a strategic financial asset.

Today, industrial applications account for only ~1% of India's total gold demand,²⁸ despite gold's critical role in semiconductors, electronics, aerospace, biotechnology and other high-value industries. Unlocking gold's strategic value presents an opportunity to strengthen industrial competitiveness, catalyse innovation and enhance India's long-term economic resilience. This will require a coordinated policy approach that expands industrial utilisation, strengthens innovation and integrates gold more effectively within India's broader economic and strategic priorities. The following recommendations outline the priority actions to achieve this.

Strategic interventions to strengthen gold's role in economic transformation

The following key interventions can help accelerate strengthen India's position in high-value technology ecosystems.

5.i. Enable industrial scale-up through targeted incentives:

Introduce targeted Production Linked Incentive (PLI)-style incentives in applications where gold delivers clear performance advantages. Priority areas include diagnostics, where gold nanoparticles enable rapid visual detection in point-of-care tests such as malaria diagnostic kits²⁹ (Spotlight 5); high-reliability electronics,

Note: *Advanced manufacturing refers to the use of innovative technologies, automation, digital systems and high-precision production processes to manufacture sophisticated, high-value products more efficiently and competitively.



electronics, where gold's superior conductivity and resistance to oxidation ensure durable electrical contacts in aerospace, telecom and defence applications;³⁰ and sensors and biosensors, where gold's biocompatibility improve sensitivity and reliability.³¹ Incentive structures should prioritise domestic value addition, localisation, exports and commercialisation of these high-value manufacturing capabilities through time-bound pilot and scale-up programmes.

Spotlight 5: Gold in rapid malaria diagnostic kits

Gold nanoparticles are used in rapid malaria diagnostic tests (RDTs), where they generate the visible test line that enables disease detection within minutes.³² Gold is preferred because of its:

- Strong optical properties, enabling clear and rapid visual detection
- High stability, ensuring reliable performance across varied conditions
- Excellent biocompatibility, supporting accurate interaction with biological samples

The widespread use of gold-based diagnostics demonstrates how small quantities of gold can significantly enhance product performance and create opportunities for high-value healthcare manufacturing

5.ii. Strengthen domestic gold refining, recovery and recycling:

Development of robust refining, recovery and recycling ecosystems for gold used in electronics, industrial manufacturing and e-waste streams will be critical to strengthening resource security, reducing import dependence and increasing domestic value addition. Investment in modern refining infrastructure, cleaner extraction technologies and integrated recovery systems can improve traceability, reduce dependence on imported refined bullion and support the development of a more resilient domestic gold value chain Japan's Tokyo 2020 Medal Project,³³ which recovered gold and other precious metals from discarded electronic devices, demonstrates the potential of urban mining to create a secondary source of industrial materials while strengthening circularity and resource security.

5.iii. Promote R&D and commercialisation of gold-enabled technologies:

Establish a CSIR-led national gold industrial research programme focused on commercially viable applications across semiconductors,

advanced electronics, biotechnology, diagnostics, aerospace, quantum technologies and other emerging industrial applications. The programme should prioritise industry-linked research, pilot-scale validation and commercialisation and be supported by stronger collaboration between government, industry, academia and technology providers. Despite being one of the world's largest gold markets, India's innovation footprint in gold-enabled technologies remains relatively limited. Across key application areas, India accounts for approximately 56 patents in gold-enabled technologies, compared with around 322 in the US and over 315 in Japan, highlighting a significant opportunity to strengthen domestic research capabilities and accelerate the commercialisation of gold-based innovation.** Moreover, leading innovation economies have established institutional ecosystems that accelerate the translation of advanced materials research into industrial deployment. For example, Japan's National Institute for Materials Science (NIMS) and National Institute of Advanced Industrial Science and Technology (AIST) support advanced materials innovation for semiconductors, electronics and healthcare applications,³⁴ while the US has integrated advanced materials research with biomedical innovation through the National Institute of Health (NIH) and semiconductor development under the CHIPS and Science Act.³⁵ Building on India's existing initiatives, including the India Semiconductor Mission, **the programme should be complemented by IIT-led centres of excellence, industry-linked curricula and targeted talent development**, with a strong emphasis on translational research, patent generation, technology transfer and industry-led commercialisation to accelerate innovation, diversify industrial demand and strengthen India's advanced manufacturing ecosystem.

5.iv. Evaluate the treatment of gold within external sector accounting frameworks:

India should **evaluate whether the current treatment of non-monetary gold within external sector statistics fully reflects gold's unique economic characteristics as both a long-term financial asset and a strategic industrial input.**

Through evidence-based research and engagement with relevant international institutions and standard-setting bodies, India could contribute to broader discussions on whether existing accounting conventions adequately capture the role of gold in economies where it functions simultaneously as household wealth, productive capital, reserve diversification and industrial infrastructure. While the current international framework provides consistency and comparability across countries, India's distinctive position, as the world's largest household holder of gold and one of its largest importers, creates an opportunity to contribute to evolving policy



discussions on gold's macroeconomic treatment. Any future consideration would need to carefully balance the economic characteristics of gold against broader macroeconomic considerations, including the continued foreign exchange outflows associated with gold imports, external sector management, prudential safeguards governing capital account transactions, implications for import regulation and market participants and consistency with internationally accepted statistical standards.

5.v. Consider the case for recognising gold as a "strategic mineral" to boost innovation and targeted investments:

Gold's expanding role across India's economy raises the question of whether it warrants consideration under the strategic mineral classification framework established under Section 1(D) of the MMDR Act.³⁶ Unlike most strategic minerals, gold creates value across the entire value chain, from domestic mining, refining and recycling to bullion markets,

jewellery manufacturing, exports, financialisation and emerging industrial applications. Its contribution extends well beyond traditional consumption, supporting reserve diversification, financial stability, advanced manufacturing and high-value technology ecosystems. There is a strong case into whether gold should be recognised within India's strategic mineral classification framework in order to better reflect its broader economic and strategic significance. Recognising gold within India's strategic mineral classification framework would strengthen the domestic resource base for a mineral that remains heavily import dependent despite underpinning multiple strategic sectors. Strategic classification would enable faster approvals, allow coordinated centre-state action on exploration, auctions and infrastructure (as discussed in Chapter 3), facilitate overseas resource access where appropriate and support targeted fiscal and investment incentives. Beyond mining, it would also embed gold more systematically within national policy roadmaps for semiconductors, electronics, healthcare, technologies, defence systems and other advanced manufacturing sectors, while strengthening circular economy opportunities through greater recovery from jewellery scrap, e-waste and industrial residues. More broadly, recognising gold's strategic role could support a more differentiated policy approach that reflects its multiple economic functions. Recent international developments further reinforce this perspective.³⁷ China's strategic approach to gold

Spotlight 4: China's recognition of gold as a strategic mineral

Under the National Mineral Resources Plan (2016–2020),³⁸ China classified gold among its 24 strategic minerals, placing it under macro-level regulation and supervision. More recently, the Implementation Plan for the High-Quality Development of the Gold Industry (2025–2027) recognises gold as a strategic mineral with both commodity and monetary attributes that is important for safeguarding national, industrial and financial security. Key measures include:

- By 2027, increase gold resources by 5%–10%, raise gold and silver output by more than 5%, and expand domestic resource reserves and production³⁹
- Strengthen the supply of gold and silver materials for next-generation electronic information, aerospace, medical devices and new energy, while advancing high-precision processing, low-carbon raw materials, and micro- and nano-scale powder production⁴⁰
- Advance technologies for deep and ultra-deep exploration and mining, green and efficient smelting, cyanide-free gold extraction, intelligent unmanned mining and AI
- Promote the high-end, intelligent, green and safe development of the gold industry, while expanding the application of high-end gold and silver materials in semiconductors, electronic information and aerospace⁴¹

Spotlight 5: US administration acknowledges gold as a strategically important mineral.

The 2025 Executive Order recognised gold as a strategically important mineral for US economic and national security by:

- Linking mineral inputs (including gold) to semiconductors, electronics, microprocessors and defence systems, reinforcing its role in high-value manufacturing⁴²
- Enabling fast-tracked permitting, federal financing and policy support for mining and processing⁴³
- With domestic gold production of ~160t (~US\$17bn) in 2025, the US maintains a strong supply base for electronics, defence and high-tech manufacturing⁴⁴
- Integrating gold within a broader minerals ecosystem underpinning multi-trillion-dollar sectors (electronics, energy, defence),⁴⁵ enabling coordinated industrial and supply chain strategy

Note: *Advanced manufacturing refers to the use of innovative technologies, automation, digital systems and high-precision production processes to manufacture sophisticated, high-value products more efficiently and competitively. **Patent analysis based on keyword searches conducted using the WIPO PATENTSCOPE database. Patent counts cover selected gold-enabled technology domains, including gold nanoparticles, gold diagnostics, gold semiconductors and gold catalysts.



demonstrates how policy can support broader industrial, resource security and innovation objectives (Spotlight 4). More recently, the US recognised the strategic importance of gold through the 2025 Executive Order, which included gold within broader measures to strengthen domestic mineral production and economic security (Spotlight 5).

Rather than viewing gold primarily as a consumption commodity, policy could increasingly distinguish its industrial, technological, financial and sovereign roles—supporting jewellery sector competitiveness, higher value-added exports, deeper financialisation, enhanced resource security and greater domestic value creation across the gold ecosystem.

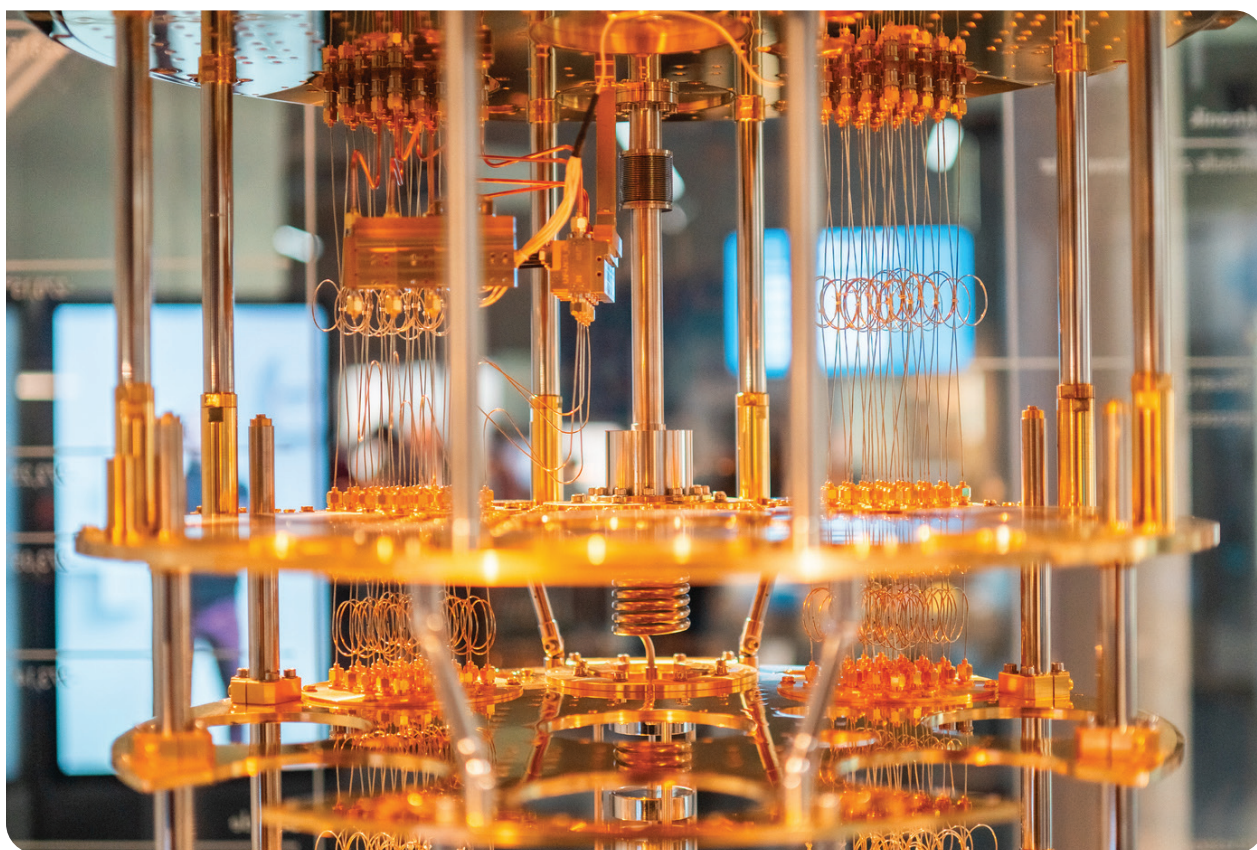
Conclusion

India's ambitions in advanced manufacturing and frontier technologies present an opportunity to reposition gold beyond its traditional role as a precious metal. As applications expand across semiconductors, artificial intelligence, advanced electronics, biotechnology, diagnostics, aerospace and quantum technologies, gold is emerging as a critical enabling material whose industrial importance will continue to grow alongside India's technology ecosystem.

Realising this opportunity, however, will require addressing the structural constraints that currently limit industrial utilisation. Strengthening domestic refining, recycling, research, commercialisation and supply-chain capabilities can improve resource security, reduce import dependence and create greater domestic value addition while supporting globally competitive manufacturing ecosystems.

Gold also occupies a unique position within India's economy that extends beyond industrial production. Unlike most strategic materials, it also functions as a long-term financial asset and supports household wealth and reserve diversification and therefore has macroeconomic characteristics that conventional industrial minerals do not fully capture. Recognising this dual role provides an opportunity to better align industrial strategy, resource security and broader economic resilience within a coherent policy framework.

As India advances towards *Viksit Bharat*, consideration of gold's strategic importance can help unlock greater value across manufacturing, innovation and finance. Rather than viewing gold solely through the lens of jewellery demand or reserves, India has an opportunity to integrate it more fully into its industrial and economic strategy strengthening technological competitiveness, domestic value creation, financial resilience and long-term economic security.



Note: *Advanced manufacturing refers to the use of innovative technologies, automation, digital systems and high-precision production processes to manufacture sophisticated, high-value products more efficiently and competitively.

Chapter 8

The Way Ahead





Imperative for action

Gold and India's Viksit Bharat story

India's gold ecosystem stands at an inflection point. As the country advances toward its Viksit Bharat 2047 ambitions, gold presents an opportunity far greater than a store of value or cultural asset or import burden – it is a strategic economic lever capable of driving growth, exports, financial deepening and global competitiveness.

The sector supports around five million livelihoods and touches nearly every Indian household. Household gold often serves as an important source of financial security and resilience, particularly for women whereas, evolving Gen Z preferences around self-expression, sustainability and seamless “phygital” experiences are reshaping how gold is consumed, invested in and experienced. Together, these shifts create an opportunity to reposition gold as a strategic driver of India's next growth phase, requiring a coordinated, long-term transformation agenda that unlocks value across the entire ecosystem.

Swarnim Udaan 2047 should therefore be viewed not as five standalone pillars, but as an integrated national gold vision. By 2047, India can aspire to increase gold's contribution to economic output, become the Jeweller to the World, mobilise household gold into productive economic use, strengthen domestic supply resilience and position gold as a strategic input for critical technologies and advanced manufacturing.**

These outcomes are interconnected and mutually reinforcing. Pillars focused on financialisation act as key force multipliers by mobilising idle household gold, deepening bullion banking, strengthening recycling flows and improving market infrastructure, liquidity and transparency. This can unlock domestic supply, reduce import dependence and support manufacturing, exports and industrial applications. Similarly, strengthening jewellery manufacturing and exports through modernisation, sustainability, design localisation and stronger “Brand India” positioning can improve global competitiveness while creating higher-value employment. India's vast karigar ecosystem can become a strategic differentiator if supported through skilling, technology adoption and global market integration.

Advances in mining, refining, assaying, traceability and digital infrastructure can further improve supply

resilience, transparency and ecosystem efficiency. Delivering this transformation will require more than alignment of intent – it will need coordinated execution, institutional ownership and clear accountability mechanisms.

Governance and innovation for execution

Delivering this transformation will require coordinated execution, institutional ownership and long-term strategic alignment across government, regulators, industry and financial markets. Realising India's gold opportunity will require a coordinated package of policy reforms that strengthen the domestic gold ecosystem, expand financialisation, modernise market infrastructure, improve ease of doing business across the value chain and enhance India's global competitiveness in gold.

To enable effective implementation, this report recommends establishing a **National Gold Board*** as a cross-sector coordination platform to align priorities, drive policy execution, facilitate collaboration across stakeholders and monitor progress across the ecosystem. Alongside governance, sustaining long-term competitiveness will require institutionalising innovation. Accordingly, the report also proposes establishing a **Gold Innovation Centre** to accelerate capabilities across design, retail, digitalisation, assaying, sustainability, exploration and advanced manufacturing applications.**

By aligning stakeholders around a shared national vision and implementing these reforms in a coordinated manner, India can unlock the full potential of gold to advance its Viksit Bharat 2047 ambitions. Swarnim Udaan 2047 translates this vision into action through five interconnected strategic pillars spanning the entire gold ecosystem. The following pages outline the possible roles and responsibilities of the National Gold Board in driving coordinated implementation across these strategic pillars.

Note: *Akin to the Gold Board of India framework proposed in Transforming India's Gold Market (NITI Aayog; Committee chaired by Shri Ratan P. Watal, February 2018): https://www.niti.gov.in/sites/default/files/2019-06/Report_GoldMarket.pdf; ** Advanced manufacturing refers to the use of innovative technologies, automation, digital systems and high-precision production processes to manufacture sophisticated, high-value products more efficiently and competitively.



Roles and responsibilities of the National Gold Board

The National Gold Board will be central to translating strategy into action across India's gold value chain – aligning priorities, accelerating delivery and ensuring mutually reinforcing outcomes. Operating across government, regulators, industry and financial institutions, the Board will provide oversight to

coordinate actions, strengthen execution and sustain focus across workstreams. Through taskforces, outcome-linked targets and periodic reviews, it can convert strategy into measurable progress.

By acting cohesively and with urgency, stakeholders can catalyse a gold ecosystem that is efficient, transparent and globally competitive – anchoring India's broader ambition of becoming a Viksit Bharat by 2047.

Policy and regulatory coordination



- Provide a unified strategic vision, holistic view and coordinate cross-sector action across India's gold value chain
- Align gold regulations across ministries, regulators and exchanges
- Rationalise taxation and compliance to accelerate formalisation
- Enable regulatory clarity for digital gold, GMS and EGRs
- Accelerate exploration and mining approvals

Illustrative outcome indicators

Increased formal market share
Reduced mine operation timelines
GMS and EGR adoption
Digital Gold regulatory oversight

Market infrastructure & standards



- Drive awareness and adoption of revamped GMS
- Develop a globally competitive bullion and vaulting infrastructure
- Enhance hallmarking, traceability and transparency across the value chain
- Institutionalise IGDS across refining, bullion and exchange ecosystems

Illustrative outcome indicators

Universal hallmarking
Increased traceable gold share
Increased refining capacity
Bullion exchange using IGDS

Industry competitiveness and global positioning



- Support domestic mining, refining, recycling and value-added jewellery manufacturing ecosystems
- Strengthen export competitiveness and market diversification
- Promote technology adoption and skill development
- Expand industrial applications and market development initiatives

Illustrative outcome indicators

Domestic gold production
Global export market share (%)
Industrial gold demand (%)

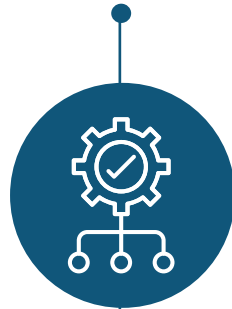


Unlocking innovation to secure gold's future

The Gold Innovation Centre can serve as a catalyst for innovation and future readiness across India's gold ecosystem – accelerating next-generation capabilities in areas such as design, retail, digitalisation, exploration, assaying and advanced manufacturing*

applications. By bringing together industry, government, academia and technology stakeholders, the Centre can strengthen product innovation, drive technological adoption and enhance global competitiveness across the value chain. By institutionalising innovation across the value chain, the Centre can help transform India's gold sector into a globally benchmarked, technology-enabled ecosystem aligned with the country's Viksit Bharat 2047 ambitions.

Innovation and digital transformation

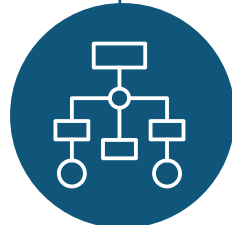


- Scale innovation across mining, sourcing, refining, retail and digital gold ecosystems
- Enable blockchain-based traceability and AI-driven market intelligence
- Build integrated industry data and digital infrastructure platforms
- Develop standards and frameworks for circularity and responsible sourcing

Illustrative outcome indicators

Share of traceable gold (%)
AI/blockchain adoption across ecosystem (%)
Share of recycled/circular gold (%)
Number of innovation pilots commercialized

Ecosystem partnerships and collaborative innovation



- Build partnerships across industry, academia, startups, exchanges and technology firms
- Promote joint R&D in sustainable mining, recycling, assaying and advanced manufacturing
- Enable cross-industry collaboration across fintech, environmental, social and governance (ESG) and deep-tech applications

Illustrative outcome indicators

Number of ecosystem partnerships formed
Joint R&D investments mobilised
Number of collaborative innovation programs launched
Number of cross-sector solutions deployed

Innovation culture, skills and knowledge development



- Upskill stakeholders on digital tools, innovation and emerging technologies
- Support incubation, open innovation and pilot collaboration platforms
- Publish market intelligence, technology insights and best practices
- Facilitate fellowships, global exchanges and artisan capability development

Illustrative outcome indicators

Number of stakeholders upskilled
Number of startups incubated
Number of industry reports/toolkits published
Number of exchange and fellowship programs conducted

Note: *Advanced manufacturing refers to the use of innovative technologies, automation, digital systems and high-precision production processes to manufacture sophisticated, high-value products more efficiently and competitively.



What will success by 2047 look like?

Realising India's 2047 ambition will require coordinated progress across the entire gold value chain, translating strategic intent into measurable outcomes. The recommendations outlined in this

report are designed to strengthen domestic capabilities, unlock greater economic value, improve resource security and position gold as a driver of manufacturing, innovation, financial resilience and global competitiveness. Together, the five strategic pillars define what success could look like by 2047 and provide a framework for tracking India's progress towards a globally competitive, future-ready gold ecosystem.

1. India expands responsible domestic gold mining



10–15% of annual gold demand met through domestic mining

- 50%+ of OGP explored with multiple world-class mines in operation
- Higher exploration investment, advanced technologies and faster digital approvals
- 1,000–1,500 direct jobs created per mine*
- Each mining job supports 6–10x induced employment**

2. India becomes the world's leading jewellery export hub



#1 jewellery exporter globally by 2047

- Largest global market share and a stronger "Made in India" positioning
- India's largest value-added export industry, driving manufacturing and employment
- Indian jewellery sets new standards for quality, design and compliance

3. Household gold becomes productive national capital



10–15% of household gold mobilised into formal financial ecosystem

- Gold-backed financialisation is mainstream
- India is a leading bullion banking, refining and gold trading hub
- Household gold powers credit, MSME growth and financial resilience
- Gold recognised as contributing to capital formation, not only current account outflows

4. India leads the future of jewellery retail



2 in 3 Young Indians embrace re-imagined gold jewellery

- Hallmarking within "1 km" and end-to-end traceability become the norm
- Jewellery becomes a lifestyle product through design and innovation
- Modern, design-led manufacturing powered by skilled karigars
- India sets global benchmarks in omnichannel retail and consumer trust

5. Gold powers India's strategic and industrial ascent



Gold recognised as a **strategic asset** and mineral

- Gold powers semiconductors, electronics, aerospace, biotech, healthcare and clean energy
- Refining, recycling and advanced manufacturing strengthen resilience
- Leading regional bullion and gold innovation hub

Enabled by coordinated leadership and innovation

National Gold Board

A trusted cross-sector institution providing coordinated leadership, aligning policy across the value chain and accelerating implementation of India's gold strategy

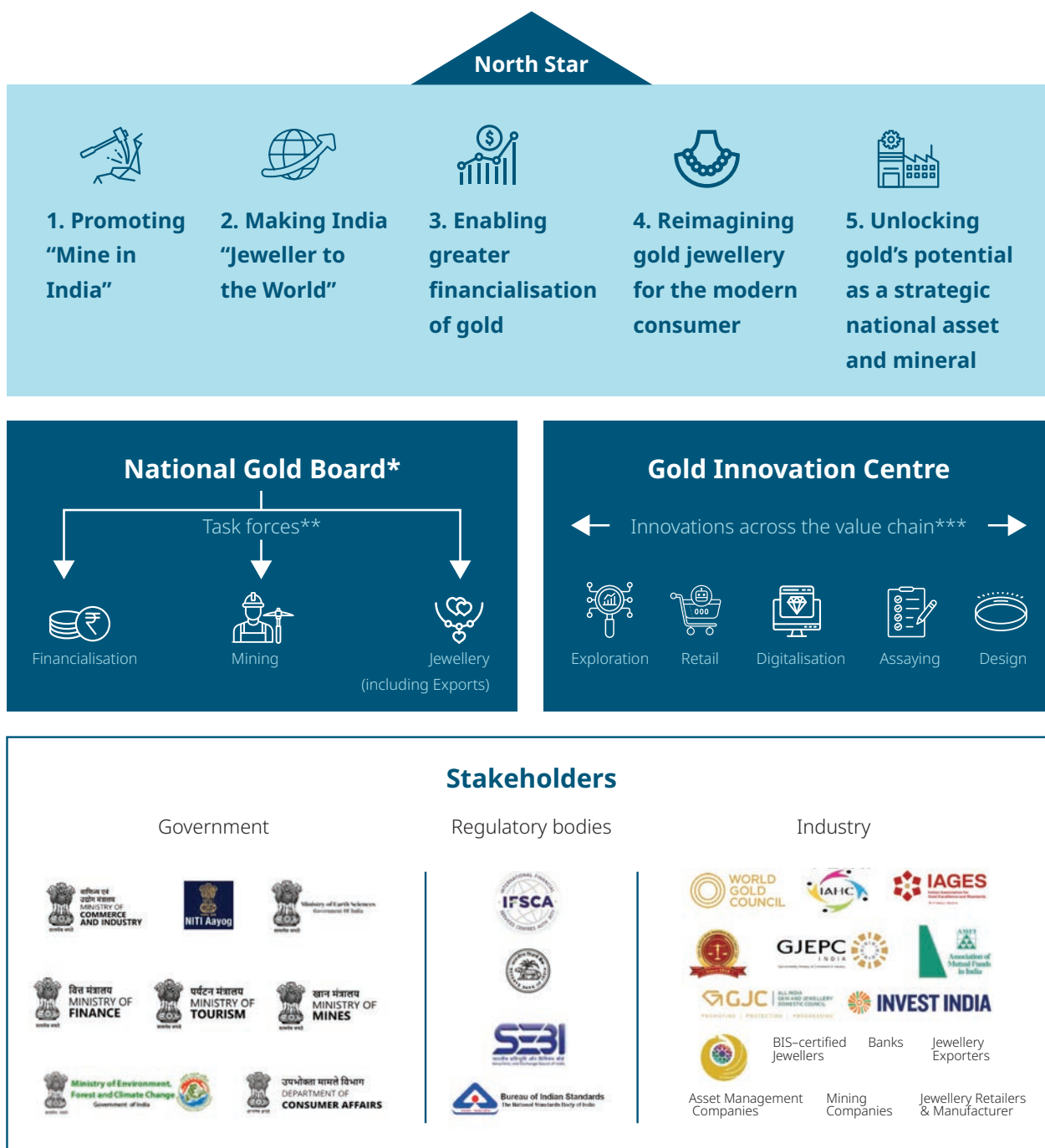
Gold Innovation Centre

India's leading platform for gold innovation, accelerating research, commercialisation and industry adoption across mining, manufacturing, retail and advanced technologies

Note: *Live case s: Jonnagiri Gold Project (Andhra Pradesh), India's first private gold mine, is expected to create ~700 direct jobs



The framework towards Swarnim Udaan, 2047



*Akin to the Gold Board of India recommended in “Transforming India’s Gold Market” (NITI Aayog; Advisor Shri–Ratan P. Watal); **Final composition of taskforces to be decided; ***Illustrative value chain nodes across the value chain



Swarnim Udaan 2047

To unlock the full potential of India's gold sector is not merely an economic opportunity – it is a strategic imperative. As the nation charts its path toward Viksit Bharat 2047, gold must transcend its legacy role as a passive store of value and become an active enabler of growth, innovation and inclusion. India's long-standing cultural affinity with gold gives it a unique edge, but realising this potential requires a future-oriented ecosystem that blends heritage with technology, capital and policy vision. This is a decisive moment – the choices made today will determine whether gold remains a static asset or evolves into a cornerstone of India's economic transformation.

This report seeks to catalyse a structured, ecosystem-centric discourse on India's gold sector by objectively baselining current industry dynamics, consumer behaviour and institutional participation and by mapping potential pathways for their evolution. Technological disruption, emerging consumer preferences and evolving financial markets are converging to redefine the industry's contours. At the same time, macroeconomic shifts, new trade architectures and changing regulatory frameworks are creating both opportunities and risks. Countries around the world are reimagining gold not only as a commodity but also as a strategic, investable asset. For India – the largest consumer and a growing exporter – this moment is both a challenge and a chance to lead.

The pathway forward demands coordinated action across stakeholders: policymakers, regulators, industry players, financial institutions and consumers. Transforming the sector requires aligning infrastructure, innovation and investment with a coherent vision. It means fostering trust through transparency, enhancing formalisation, scaling financialisation and positioning India at the centre of the global gold value chain. This is not a journey of isolated reforms but of collective momentum.

Several future trajectories are possible, but only decisive action will secure India's leadership in a rapidly evolving global gold landscape. To delay risks entrenching inefficiencies and ceding strategic ground. But with bold, future-ready investments and reform, India can shape a modern gold ecosystem – one that powers growth, creates employment, enhances exports and strengthens financial stability.

The time to act is now. By reimagining gold as a dynamic economic lever – rooted in heritage, powered by innovation and aligned with national ambition – India can secure its golden future and build a legacy that endures for generations to come.

The following section presents a detailed roadmap and priority actions to drive transformation across each of the pillars of the Swarnim Udaan 2047 vision.



Chapter 9

Implementation roadmap





North Star roadmap to Pillar 1: Promoting “Mine in India”

Near Term



1.i

Consider recognition of gold as a 'strategic mineral' in Section 1[D] of the MMDR Act¹



1.ii

Establish a national gold mining taskforce



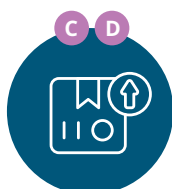
1.iii

Grant “exploration credits” in the mining auction process to companies that have carried out exploration in the block



1.iv

Strengthen exploration incentives for early-stage / junior miners



1.v

Benchmark mining auction charges against global standards with the objective of streamlining the overall cost structure



1.vi

Integrate environmental and land clearances within pre-bundled ELs



1.vii

Extend EL duration to at least 10 years with phased land surrender



1.viii

Mandate mining approvals within 1–2 months, aligned with global best practices



1.ix

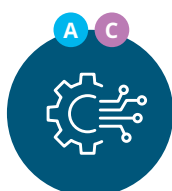
Strengthen global investment outreach and a flagship Global India Mining and Critical Minerals Summit to attract strategic investments



1.x

Strengthen long-term gold supply through strategic investment and partnerships like increasing NMET3 funding for early-stage gold exploration

Medium-Long term



1.xi

Advance mining technology adoption and targeted upskilling to build a future-ready workforce

Stakeholders

A PMO

B MoEFCC⁴

C Ministry of Mines

D Ministry of Finance

E DPIIT (Invest India)⁵

F MSDE⁶

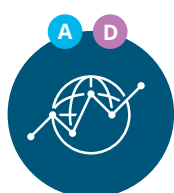
Catalysts: WGC

Note: For detailed recommendations, please refer to the corresponding chapter; [1] Mines and Minerals (Development and Regulation) Act, 1957; [2] National Geoscience Data Repository; [3] National Mineral Exploration Trust; [4] Ministry of Environment, Forest and Climate Change; [5] Department for Promotion of Industry and Internal Trade; [6] Ministry of Skill Development and Entrepreneurship.



North Star roadmap to Pillar 2: Making India “Jeweller to the World”

Near Term



2.i

Prioritise high potential export markets



2.ii

Conduct targeted research in key export markets to tailor design, purity and product formats



2.iii

Build a distinctive “Brand India” for jewellery



2.iv

Launch a dedicated tech fund to boost adoption of advanced jewellery manufacturing tools



2.v

Invest in cluster infrastructure and technology to position Indian hubs alongside global export leaders



2.vi

Facilitate MoUs between Indian and global industry bodies to upskill artisans in advanced techniques and design trends



2.vii

Strengthen export financing and working capital support in order to reduce constraints for exporters



2.viii

Partner with temples to spotlight India's gold heritage through themed tourism and branded products along with developing gold museums in India



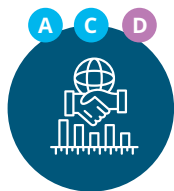
2.ix

Position gold jewellery as a cultural magnet through tourism campaigns and annual showcases



2.x

Establish gold experience centres in global fashion capitals



2.xi

Strengthen “Brand India” by launching India Gold Fashion Week as a global showcase



2.xii

Strengthen and expand international market access through trade and investment partnerships

Stakeholders



GJEPC¹



Ministry of Commerce



Ministry of External Affairs



Ministry of Culture



Ministry of Finance



RBI



Manufacturers & Exporters



Ministry of Tourism

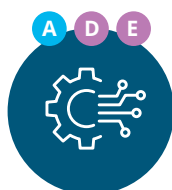
Catalysts: GJEPC, WGC

Note: For detailed recommendations, please refer to the corresponding chapter. [1] Gem & Jewellery Export Promotion Council



North Star roadmap to Pillar 3: Enabling greater financialisation of gold

Near Term



3.i

Revamp GMS through a bank driven, tech enabled and recycling focus approach



3.ii

Allow insurance and pensions funds to invest up to 1-3% of AUM in gold and regulated gold products



3.iii

Enable redemption of gold ETFs in the form of certified jewellery / bars and coins to enhance retail appeal and strengthen awareness for gold ETFs across multiple media



3.iv

Define GST applicability and input tax credit eligibility for conversions between physical gold and EGRs.



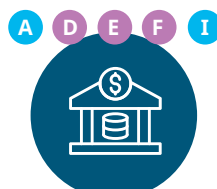
3.v

Enhance risk-proportionate regulatory oversight for digital gold



3.vi

Build internationally recognised refining capabilities to establish India as a trusted regional refining hub



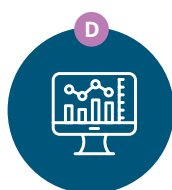
3.vii

Enable seamless interoperability across GMS, EGRs, IGDS-compliant bullion, banks, exchanges and digital gold ecosystems to strengthen gold's financial integration



3.viii

Encourage consumer recycling through targeted tax and regulatory incentives



3.ix

Allow banks to offer integrated bullion trading, custody, financing, monetisation and gold-linked savings solutions across the gold ecosystem

Medium-Long Term



3.x

Establish India as a leading regional bullion trading hub



3.xi

Evaluate the case for recognising gold as a Level 1 HQLA asset, enabling 100% of its value to be counted towards SLR

Stakeholders

A SEBI

B WGC, IBJA¹

C AMFI²

D RBI and Banks

E Ministry of Finance

F IFSCA³

G IRDAI⁴

H PFRDA⁵

I BIS⁶

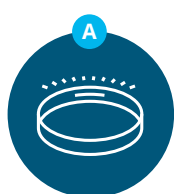
Catalysts: WGC, IBJA

Note: For detailed recommendations, please refer to the corresponding chapter; [1] India Bullion and Jewellers Association; [2] Association of Mutual Funds in India (AMFI); [3] International Financial Services Centres Authority; [4] Insurance Regulatory and Development Authority of India; [5] Pension Fund Regulatory and Development Authority; [6] Bureau of Indian Standards



North Star roadmap to Pillar 4: Reimagining gold jewellery for the modern consumer

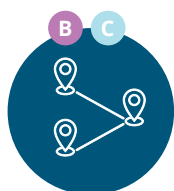
Near Term

**4.i**

Elevate gold as the symbol of everyday celebration by linking it to personal milestones and gifting

**4.ii**

Repositioning gold as aspirational, lifestyle-led expression of identity and celebration

**4.iii**

Expand universal hallmarking coverage through accessible AHC1 networks

**4.iv**

Create awareness on HUID verification, hallmark authentication and end-to-end traceability mechanisms

**4.v**

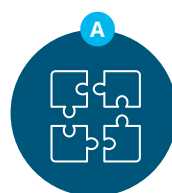
Accelerate Vienna Convention membership to strengthen global acceptance of Indian hallmarking

**4.vi**

Promote interactive digital kiosks for immersive jewellery experiences

**4.vii**

Scale omnichannel retail through digital, quick-commerce and integrated online-to-offline shopping experiences

**4.viii**

Create modular, configurable designs for flexible occasion-based styling

Medium-Long Term

**4.ix**

Modernise gold jewellery through smart, technology-enabled and multifunctional product innovation

Stakeholders



Jewellery Industry



Ministry of Consumer Affairs



Ministry of Commerce

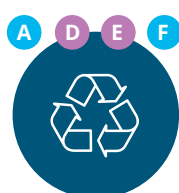
Catalysts: GJC, GJEPC, WGC

Note: For detailed recommendations, please refer to the corresponding chapter. [1] Assaying and Hallmarking Centres



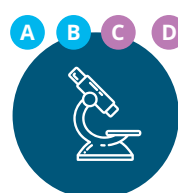
North Star roadmap to Pillar 5: Unlocking gold's potential as a strategic national asset and mineral

Near Term



5.i

Develop gold recovery and recycling ecosystems for electronics, industrial use, and e-waste to strengthen circularity



5.ii

Establish funded research programs in gold materials science at top institutions to and launch a dedicated Gold Industrial Research Programme with research institutes like CSIR



5.iii

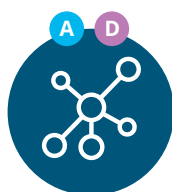
Evaluate gold's treatment in external sector accounting to reflect its dual role as a financial asset and industrial input



5.iv

Consider positioning gold as a "strategic asset and mineral" in critical sectors to boost innovation and support India's growth as a global technology hub

Medium-Long Term



5.v

Create incentives for manufacturing products where gold is used industrially (e.g., rapid diagnostic tests for malaria using gold nanoparticles)

Stakeholders

A DST¹

B CDSCO²

C DRDO³

D MeITY⁴

E Ministry of Environment, Forest and Climate Change

F CPCB⁵

G Ministry of Mines

H Ministry of Finance

I RBI

Catalysts: WGC

Note: For detailed recommendations, please refer to the corresponding chapter. [1] Department of Science and Technology; [2] Central Drugs Standard Control Organization; [3] Defence Research and Development Organisation; [4] Ministry of Electronics and Information Technology; [5] Central Pollution Control Board



Annexes

Annex 1: Methodology

To develop a forward-looking and relevant understanding of the forces shaping the future, we adopted a structured and comprehensive methodology grounded in extensive research and collaborative curation. The objective was to surface the most consequential macro-level driving forces that will influence global change and directly or indirectly impact the future trajectory of India's gold industry.

The process began with a wide-ranging review of authoritative reports, articles and foresight studies published by leading global institutions known for their work on future trends and scenarios. These included the World Economic Forum, Global Futures Society, Deloitte Centre for the Long View, Singularity University and the World Bank, among others. In parallel, we explored the individual writings and viewpoints of globally recognised futurists such as Peter Fisk, Ray Kurzweil and Peter Diamandis, whose insights offered an imaginative view of the future.

In total, over 1,400 sources – spanning articles, podcasts, editorials, blogs and thought papers – were examined. This yielded a comprehensive longlist of more than 350 driving forces, representing the breadth of factors that are expected to shape societies, economies and industries over the coming decades.

The longlist was then refined through an iterative process. Redundancies were removed where different sources referenced similar ideas under varying nomenclature. We subsequently conducted a joint

workshop with members of the World Gold Council and the Deloitte team, aimed at filtering the list to retain only those forces with high relevance to the gold industry and India's broader development vision. This collaborative effort ensured that the prioritised drivers were both globally significant and strategically aligned with national priorities.

To complement this secondary research with practical, on-the-ground perspectives, we also undertook extensive consultations with stakeholders from within and beyond the gold ecosystem. These included jewellers, exporters, financial institutions, regulators, policymakers, futurists and technology experts. These discussions helped validate emerging trends, challenge prevailing assumptions and shape a more nuanced and forward-looking view of the forces likely to influence the future of India's gold sector.

Finally, the list underwent a consolidation phase where overlapping themes were grouped and distinct, high-impact drivers were identified. This resulted in a curated set of 21 critical driving forces, which were then systematically categorized into five key domains: social, technological, economic, environmental and political (STEEP).

These 21 forces now serve as the foundation for the next section of this report, where we explore each in detail to understand their implications for India's future and the evolving role of gold in that journey, systematically categorized into five key domains: Social, Technological, Economic, Environmental, and Political (STEEP).

These 21 forces now serve as the foundation for the next section of this report, where we explore each in detail to understand their implications for India's future and the evolving role of gold in that journey.

Methodology



Forbes

singularity
UNIVERSITY

WORLD
ECONOMIC
FORUM



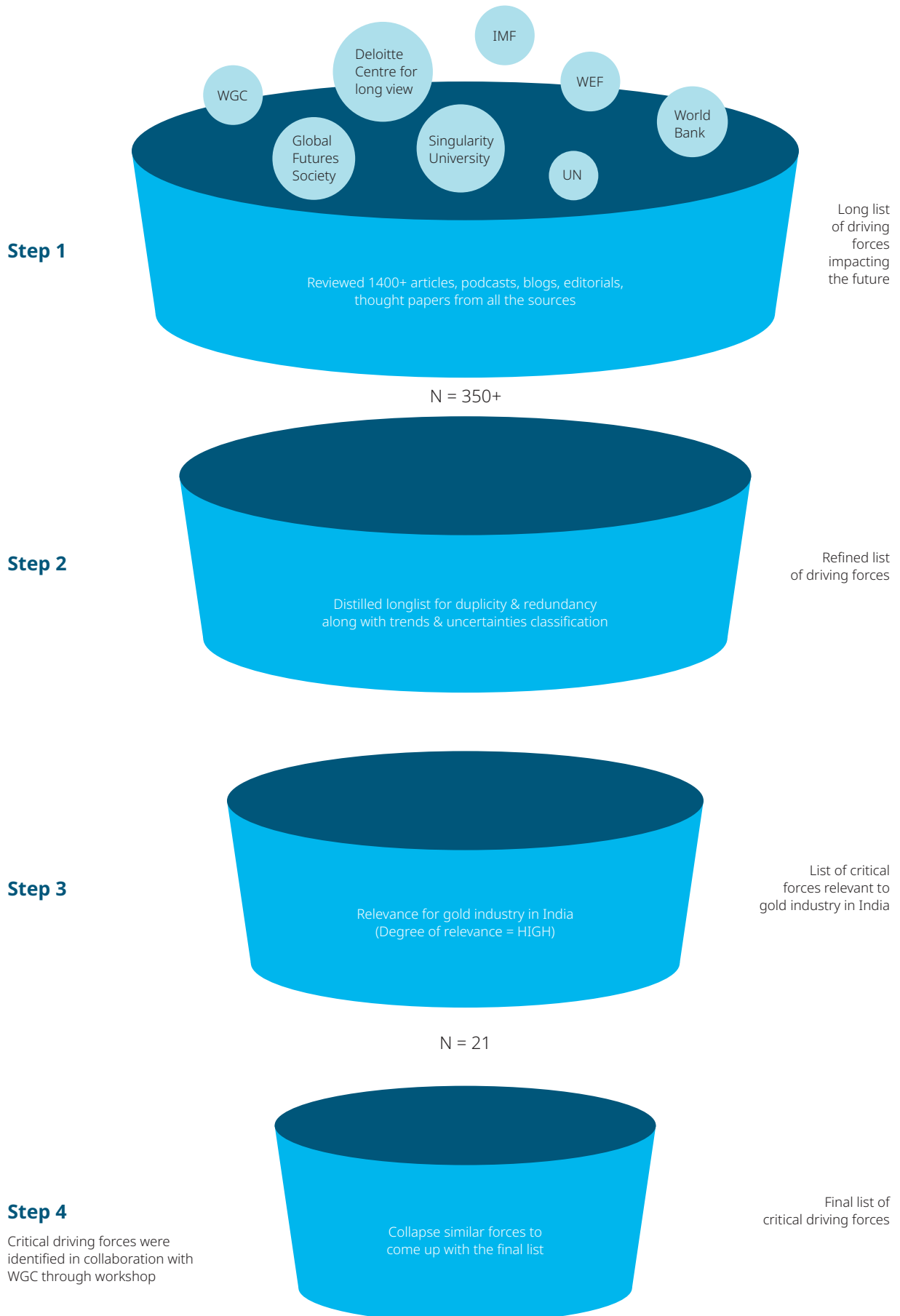
**WORLD
GOLD
COUNCIL**



مؤسسة دبي للمستقبل
DUBAI FUTURE FOUNDATION



Deloitte.





Reference List

Chapter 1: Viksit Bharat 2047 mission and introduction to Swarnim Udaan

1. India sets an ambitious target to become a US\$30 tn economy by 2047, Economic Diplomacy Division, Ministry of External Affairs, July 2024, <https://indbiz.gov.in/india-sets-ambitious-target-to-become-a-us-30-tn-economy-by-2047/>
2. India sets an ambitious target to become a US\$30 tn economy by 2047, Economic Diplomacy Division, Ministry of External Affairs, July 2024, <https://indbiz.gov.in/india-sets-ambitious-target-to-become-a-us-30-tn-economy-by-2047/>
3. India Development Update, World Bank, April 2026 <https://thedocs.worldbank.org/en/doc/4262e1e15b463ecb360cec4ad78cf062-0310012026/original/April-2026-India-Development-Update.pdf>
4. Viksit Bharat @2047: A Blueprint of Micro and Macro Economic Dynamics, PHD Chamber of Commerce and Industry (PHDCCI), April 2024, <https://www.phdcci.in/wp-content/uploads/2024/04/Viksit-Bharat%402047-A-Blueprint-of-Micro-and-Macro-Economic-Dynamics.pdf>; Manufacturing Industries in India & its Growth, India Brand Equity Foundation (IBEF), February 2026, <https://www.ibef.org/industry/manufacturing-sector-india>
5. First Advance Estimates of Gross Domestic Product, 2025–26, Ministry of Statistics and Programme Implementation (MoSPI), Press Information Bureau (PIB), January 2026, <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2212087>
6. India Becomes World's 4th Largest Economy, Surpasses Japan: NITI Aayog, News on Air, May 2025, <https://www.newsonair.gov.in/india-becomes-worlds-4th-largest-economy-surpasses-japan-niti-aayog/>
7. Outlook for India's economic growth and policy platforms, S&P Global, November 2022, <http://www.spglobal.com/market-intelligence/en/news-insights/research/outlook-for-indias-economic-growth-and-policy-platforms>
8. India's Impending Economic Boom, Morgan Stanley, November 2022, <https://www.morganstanley.com/ideas/investment-opportunities-in-india>
9. India's gold jewellery market structure, World Gold Council, September 2022 <https://www.gold.org/goldhub/research/indias-gold-jewellery-market-structure>
10. Invest in Gems and Jewellery Sector in India, India Investment Grid (IIG), Department for Promotion of Industry and Internal Trade (DPIIT), <https://indiainvestmentgrid.gov.in/sectors/gems-and-jewellery>; India's gold jewellery market structure, World Gold Council, September 2022 <https://www.gold.org/goldhub/research/indias-gold-jewellery-market-structure>
11. The Pulse of India's Gem and Jewellery Exports, GJEPC, Accessed May 2026, <https://gjepc.org/assets/images/statistics/sez/SEZ-Pulse-of-India-Gem-and-Jewellery-Exports.pdf>; The First-of-its-Kind India Jewellery Park to Come Up at Navi Mumbai Soon, Press Information Bureau (PIB), Ministry of Commerce & Industry, March 2019, <https://www.pib.gov.in/PressReleasePage.aspx?PRID=1567528>
12. Making Gems and Jewellery Clusters Exportable, Export-Import Bank of India (Exim Bank) and Gem & Jewellery Export Promotion Council (GJEPC), January 2026, https://gjepc.org/emailer_gjepc/19-1-2026/Making-G%26j-clusters-Exportable.pdf
13. World Gold Council Estimate
14. International Trade Centre calculations based on World Integrated Trade Solution, World Bank Data (HSN code 711319) as of 2024
15. Indian Minerals Yearbook 2022 – Gold (Part II: Metals & Alloys), Indian Bureau of Mines (IBM), Ministry of Mines, Government of India, 2025, https://ibm.gov.in/writereaddata/files/17125759396613d5c375d13Gold_2022.pdf
16. International Trade Center calculations based on World Integrated Trade Solution, World Bank Data (HSN code 711319) as of 2024



Chapter 2: Driving forces of the future

1. Spend Z, GEN Z changes everything, Global Gen Z Spending Report, NielsenIQ, https://nielseniq.com/wp-content/uploads/sites/4/2025/05/NIQ_GenZ-Report_Final.pdf
2. Ibid
3. Spend Z, GEN Z changes everything, Global Gen Z Spending Report, NielsenIQ, https://nielseniq.com/wp-content/uploads/sites/4/2025/05/NIQ_GenZ-Report_Final.pdf
4. Ibid
5. Gen Z spending to hit US\$2 tn by 2035, The Hindu, October 2024, <https://www.thehindu.com/sci-tech/technology/gen-z-spending-to-hit-2-tn-by-2035-report/article68756418.ece>
6. Ibid
7. Ibid
8. Gold Demand Trends Q2 2025, Metals Focus / World Gold Council, July 2025, <https://www.gold.org/goldhub/research/gold-demand-trends/gold-demand-trends-q2-2025>, World Gold Council Internal Data
9. AUM Data, Association of Mutual Funds in India (AMFI), <https://www.amfiindia.com/research-information/aum-data>; Jewellery demand down 7%, ETFs surge 216% as India shifts to financial gold, CNBC TV18, February 2025, <https://www.cnbctv18.com/personal-finance/gold-prices-jewellery-demand-down-7-pc-etfs-surge-216-pc-india-shifts-19560510.htm>
10. Gold Demand Trends Q2 2025, Metals Focus / World Gold Council, July 2025, <https://www.gold.org/goldhub/research/gold->
11. Vehicle Subscription Programs: Porsche Enlarges Offer in North America, Porsche Newsroom, August 2020, <https://newsroom.porsche.com/en/2020/company/porsche-cars-north-america-vehicle-subscription-programs-21977.html>
12. De Beers Group Introduces World's First Blockchain-Backed Diamond Source Platform at Scale, De Beers Group, May 2022, <https://www.debeersgroup.com/news-insights/business-market/2022/de-beers-group-introduces-worlds-first-blockchain-backed-diamond-source-platform-at-scale>

13. Qstay Launches Tokenized Hospitality Revenue Platform – First Two Properties Fully Funded Within 24 Hours, EIN Presswire, October 2025, <https://www.einpresswire.com/article/861904386/qstay-launches-tokenized-hospitality-revenue-platform-first-two-properties-fully-funded-within-24-hours>
14. Going Outside Has Never Looked Better, Thanks to Gucci's Collaboration With The North Face, GQ, December 2020, <https://www.gq.com/story/gucci-the-north-face-collaboration-reveal>

Chapter 3: Promoting "Mine in India"

1. Gold Demand Trends: India Focus Q1 2026, World Gold Council, April 2026, <https://www.gold.org/goldhub/research/gold-demand-trends/gold-demand-trends-india-focus-q1-2026>
2. Indian Minerals Yearbook 2022 – Gold (Part II: Metals & Alloys), Indian Bureau of Mines (IBM), Ministry of Mines, Government of India, 2025, https://ibm.gov.in/writereaddata/files/17125759396613d5c375d13Gold_2022.pdf
3. Gold Demand Trends: India Focus Q1 2026, World Gold Council, April 2026, <https://www.gold.org/goldhub/research/gold-demand-trends/gold-demand-trends-india-focus-q1-2026>
4. Cratons are the oldest and most stable parts of the Earth's crust, formed billions of years ago and are globally recognised as prime hosts for gold and other mineral deposits because their geological stability allows metals to accumulate and concentrate over time.
5. Geological Survey of India (GSI), Ministry of Mines, Government of India, <https://gsi.gov.in/>
6. Overview of Mining Sector in India, Ministry of Mines, Government of India, January 2025, https://mines.gov.in/admin/storage/ckeditor/DAY_1_PPT_2_1737541727.pdf
7. Ibid
8. Monthly Summary on Minerals and Non-Ferrous Metal, Ministry of Mines, Government of India, accessed June 2026, <https://mines.gov.in/webportal/content/monthly-summary-on-minerals-and-non-ferrous-metal>
9. Australia Gold Production, CEIC Data, 2024, <https://www.ceicdata.com/en/indicator/australia/gold-production>



10. Overview of Mining Sector in India, Ministry of Mines, Government of India, January 2025, https://mines.gov.in/admin/storage/ckeditor/DAY_1_PPT_2_1737541727.pdf
11. Gold, Indian Minerals Yearbook 2022 (Part II: Metals and Alloys), Indian Bureau of Mines, Ministry of Mines, Government of India, February 2024, https://ibm.gov.in/writereaddata/files/17125759396613d5c375d13Gold_2022.pdf
12. Ibid
13. World Gold Council, India Gold Market Update: Import Tightening, 22 May 2026, <https://www.gold.org/goldhub/gold-focus/2026/05/india-gold-market-update-import-tightening>; Reuters, India Raises Gold and Silver Tariffs to 15% to Curb Imports, Support Rupee, 12 May 2026, <https://www.reuters.com/world/india/india-raises-import-tariffs-gold-silver-government-order-says-2026-05-12/>
14. Bulletin of Mining Leases, Composite Licences, Exploration Licence and Auction – 2023, Indian Bureau of Mines (IBM), December 2024, https://ibm.gov.in/writereaddata/files/1735044585676aade9ec979Bulletin_MLPL.pdf
15. Ibid
16. Ibid
17. India's first private gold mining project all set for launch in Andhra Pradesh, The Times of India, April 2026, <https://timesofindia.indiatimes.com/city/hyderabad/indias-first-private-gold-mining-project-all-set-for-launch-in-andhra-pradesh/articleshow/130360451.cms>
18. Overview of Mining Sector in India, Ministry of Mines, Government of India, January 2025, https://mines.gov.in/admin/storage/ckeditor/DAY_1_PPT_2_1737541727.pdf
19. World Gold Council Internal Estimate
20. India is producing less than 200 times its potential gold output, Times of India, December 2023, <https://timesofindia.indiatimes.com/blogs/seeing-the-invisible/india-is-producing-less-than-200-times-its-potential-gold-output>
21. Australia's Identified Mineral Resources 2024, Australian Government, Geoscience Australia, 2024, <https://www.ga.gov.au/aimr2024/mineral-exploration>
22. Canadian Mineral Exploration, Government of Canada, Natural Resources Canada, 2024, https://natural-resources.canada.ca/sites/admin/files/documents/2025-03/24-06378%20Mineral%20Exploration_EN_2025_online.pdf
23. Incentivizing Non-Fuel Mineral Exploration in India, Center for Social and Economic Progress (CSEP), June 2023, <https://csep.org/wp-content/uploads/2023/06/Incentivizing-Non-Fuel-Mineral-Exploration-in-India.pdf>
24. World Exploration Trends 2026, S&P Global Market Intelligence, March 2026, <https://www.spglobal.com/content/dam/spglobal/mi/en/documents/general/World-exploration-trends-2026.pdf>
25. Panthera Resources subsidiary files arbitration against India, ICLG, May 2025, <https://iclg.com/news/22616-panthera-resources-subsidiary-files-arbitration-against-india#:~:text=Published%20at%2021%20May%2025,BIT%20between%20India%20and%20Australia>
26. 52nd Annual report 2023–24, Mineral Exploration and Consultancy Limited, https://mecl.co.in/writereaddata/meclpdf/Annual_Report23-24_Hindi.pdf
27. Ibid
28. India's Critical Mineral Mission, Press Information Bureau, Government of India, September 2025, <https://www.pib.gov.in/PressNoteDetails.aspx?NoteId=155158&ModuleId=3®=3&lang=1>
29. Department of Natural Resources and Renewables, Government of Nova Scotia, <https://novascotia.ca/natr/meb/geoscience-online/about-novascan.asp>
30. Geoscience Australia portal, Government of Australia, <https://www.ga.gov.au/data-pubs>
31. Mineral (Auction) Amendment Rules, 2024, Ministry of Mines, Government of India, January 2024, <https://mines.gov.in/admin/storage/app/uploads/65e1ad6b9faf51709288811.pdf>
32. Exploration and the Listed Resource Sector, Reserve Bank of Australia (RBA) Bulletin, September 2012, <https://www.rba.gov.au/publications/bulletin/2012/sep/5.html>



33. The Junior Minerals Exploration Incentive, Discovery Alert, April 2025, <https://discoveryalert.com.au/junior-minerals-exploration-incentive-2025-benefits/>
34. Federal Opposition backs Junior Minerals Exploration Incentive, Association of Mining and Exploration Companies (AMEC), April 2026, <https://amec.org.au/wp-content/uploads/2026/04/16.-Federal-Opposition-backs-Junior-Minerals-Exploration-Incentive.pdf>
35. Mineral (Auction) Amendment Rules, 2024, Ministry of Mines, Government of India, January 2024, <https://mines.gov.in/admin/storage/app/uploads/65e1ad6b9faf51709288811.pdf>
36. Ibid
37. Mineral (Auction) Amendment Rules, 2024, Ministry of Mines, Government of India, January 2024, <https://mines.gov.in/admin/storage/app/uploads/65e1ad6b9faf51709288811.pdf>
38. MyMinesOnline and Resources Digital Services, Queensland Government, Updated Resource Portal, Accessed May 2026, <https://www.nrmrdd.qld.gov.au/mining-exploration>
39. Assessment Timeframes for Mining Environmental Applications, Department of Energy, Mines, Industry Regulation and Safety (DEMIRS), Government of Western Australia, 2025, https://www.wa.gov.au/system/files/2025-03/assessment-timeframes-mining-environmental-applications_0.pdf
40. QLD Government Streamlines Mining Approvals Process, Discovery Alert, April 2025, <https://discoveryalert.com.au/queensland-resources-cabinet-committee-2025-reforms/>
41. National Mineral Exploration Trust (NMET), Government of India, Ministry of Mines, <https://nmet.gov.in/content/project-report.php>
42. Ibid
43. Annual report 2023–24, National Mineral Exploration Trust (NMET), Government of India, Ministry of Mines, https://mines.gov.in/admin/storage/ckeditor/NMET-Annual-Report_English-2023-24_1725528239.pdf
44. Sizing up Syama: The World's First Fully Automated Mine, Mining Technology, October 2018, <https://www.mining-technology.com/features/sizing-syama-worlds-first-fully-automated-mine/>
45. Squadron Deploys Drone-Based Geophysical Survey at GMDC, Construction Week India, March 2023, <https://www.constructionweekonline.in/business/squadron-deploys-drone-based-geophysical-survey-at-gmdc>
46. Vedanta Aluminium Deploys AI-Powered Drones to Elevate Mine Safety Standards, DQ India, February 2025, <https://www.dqindia.com/news/vedanta-aluminium-deploys-ai-powered-drones-to-elevate-mine-safety-standards-8719728>
47. Artificial Intelligence to Slash Fatigue Events and Downtime on a Mine Site, Mantrac Group (Barrick Gold Mine Case Study), June 2025, <https://www.mantracgroup.com/en-ch/industry-solutions/mining/barrick>
48. BHP Saves \$5.5M by Predicting Mining Truck Maintenance Requirements with Machine Learning, Best Practice AI, <https://bestpractice.ai/ai-use-cases/case-studies/manufacturing-industrials/bhp-saves-5-5m-by-predicting-mining-truck-maintenance-requirements-with-machine-learning>
49. Sustainable Development Report 2011–12, Sesa Goa Iron Ore., 2012, <https://sesagoaironore.com/pdf/sd-reports/SDR%202011-12.pdf>
50. Annual report 2024–25, National Mineral Exploration Trust (NMET), Government of India, Ministry of Mines, [https://nmet.gov.in/upload/uploadfiles/files/NMEDT-Annual-Report-2024-25-\(English\).pdf](https://nmet.gov.in/upload/uploadfiles/files/NMEDT-Annual-Report-2024-25-(English).pdf)

Chapter 4: Making India jeweller to the World

1. Export Import Data Bank (Commodity-wise Exports and Imports, HSN Code 71), Directorate General of Commercial Intelligence and Statistics, Ministry of Commerce & Industry, 2025–2026, https://tradestat.commerce.gov.in/eidb/commodity_wise_export
2. Directorate General of Commercial Intelligence and Statistics (DGCI&S), Department of Commerce, Ministry of Commerce & Industry, Government of India, <https://www.dgciskol.gov.in/>



3. International Trade Center calculations based on World Integrated Trade Solution, World Bank Data (HSN code 711319) for 2024
4. Ibid
5. India's Exports Reach Historic Heights, Press Information Bureau, Government of India, Ministry of Commerce & Industry, February 2025, <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2098447>
6. Directorate General of Commercial Intelligence and Statistics (DGCI&S), Department of Commerce, Ministry of Commerce & Industry, Government of India, <https://www.dgciskol.gov.in/>
7. Export Import Data Bank (Commodity-wise Exports and Imports, HSN Code 71), Directorate General of Commercial Intelligence and Statistics, Ministry of Commerce & Industry, 2025–2026, https://tradestat.commerce.gov.in/eidb/commodity_wise_export
8. International Trade Center calculations based on World Integrated Trade Solution, World Bank Data (HSN code 711319) for 2024, Accessed on 19 June 2026
9. Ibid
10. International Trade Center calculations based on World Integrated Trade Solution, World Bank Data (HSN code 711319) for 2024, Accessed on 19 June 2026
11. Five Indian Brands Feature in the Top 100 Global Powers of Luxury Goods List, Deloitte India, December 2021, <https://www.deloitte.com/in/en/about/press-room/five-indian-brands-feature-in-the-top-100-global-powers-of-luxury-goods-list.html>
12. International Trade Center calculations based on World Integrated Trade Solution, World Bank Data (HSN code 711319) for 2024, Accessed on 19 June 2026
13. Ibid
14. International Trade Center calculations based on World Integrated Trade Solution, World Bank Data (HSN code 711319) for 2024, Accessed on 19 June 2026
15. International Trade Center calculations based on World Integrated Trade Solution, World Bank Data (HSN code 711319) for 2024, Accessed on 19 June 2026
16. Based on primary interviews with industry experts in the gold jewellery manufacturing and export sector
17. IBEF Report, Dec 2025, <https://www.ibef.org/exports/gems-and-jewellery-export>; India's gold jewellery market structure, World Gold Council, September 2022, <https://www.gold.org/goldhub/research/indias-gold-jewellery-market-structure>
18. India's gold jewellery market structure, World Gold Council, September 2022 <https://www.gold.org/goldhub/research/indias-gold-jewellery-market-structure>
19. Insights from stakeholder consultations
20. Ibid
21. Making Gems and Jewellery Clusters Exportable, Export-Import Bank of India (Exim Bank) and Gem & Jewellery Export Promotion Council (GJEPC), January 2026, https://gjepec.org/emailer_gjepec/19-1-2026/Making-G%26J-clusters-Exportable.pdf
22. Industry estimates; Repositioning Making Charges: An Exploratory Study of Consumer Perceptions and Pricing in the Indian Jewellery Market, Indian Institute of Management Ahmedabad (IIMA), June 2024, <https://www.iima.ac.in/sites/default/files/2024-06/Repositioning%20Making%20Charges%202024%20-%20Priya%20Narayanan.pdf>
23. Credit Rating Update – Golkunda Diamonds and Jewellery Limited, Infomercials Valuation and Rating Pvt. Ltd., April 2026, https://infomercialstorage.blob.core.windows.net/uploads/PR_golkunda_diamonds_15apr26_08c442176b.pdf
24. Two Key Interventions Launched to Strengthen MSME Export Competitiveness and Facilitate Easy Access to Trade Finance, Press Information Bureau (PIB), Ministry of Commerce & Industry, January 2026, <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2210874>
25. Centre Takes Series of Measures for Technology Upgradation and Modernization in Textile Industry, Press Information Bureau (PIB), Ministry of Textiles, July 2021, <https://www.pib.gov.in/PressReleasePage.aspx?PRID=1738190>



26. GJEPC Supports Hupari Artisans to Drive Silver Jewellery Exports, Solitaire International (GJEPC), November 2024,
<https://gjepec.org/solitaire/gjepec-supports-hupari-artisans-to-drive-silver-jewellery-exports/>
27. CIBJO and Turkish Jewellery Exporters Association sign MOU pledging cooperation in industry development, The World Jewellery Confederation (CIBJO), January 2023,
<https://cibjo.org/cibjo-and-turkish-jewellery-exporters-association-sign-mou>
28. Insights from stakeholder consultations
29. Plain Gold Jewellery Exports Grew by 61.72% to US\$ 6792.24 mn in FY 2023–24, Gem & Jewellery Export Promotion Council (GJEPC), April 2024,
<https://gjepec.org/solitaire/plain-gold-jewellery-exports-grew-by-61-72-to-us-6792-24-mn-in-fy-2023-24/>
30. Beyond America: How India's FTAs are Rewriting the Gem & Jewellery Export Map, Gem & Jewellery Export Promotion Council (GJEPC), January 2026,
<https://gjepec.org/solitaire/beyond-america-how-indias-ftas-are-rewriting-the-gem-jewellery-export-map>
31. How temple tourism competes head on with beach tourism, Economic Times, July 2023,
<https://economictimes.indiatimes.com/industry/services/travelhow-temple-tourism-competes-head-on-with-beach-tourism/articleshow/102276938.cms>
32. India UAE CEPA Unlocking Significant Opportunities For Indian Exporters, GJEPC, February 2025,
https://gjepec.org/assets/pdf/India_UAE_Cepa_report.pdf
33. Sabyasachi Collaborations, Sabyasachi,
<https://sabyasachi.com/pages/collaborations>
34. Dubai Gold District Launches as the Global Epicentre for Gold and Jewellery Trade, Government of Dubai Media Office, January 2026,
<https://mediaoffice.ae/en/news/2026/january/27-01/dubai-gold-district>
35. VICENZAORO – The Jewellery Boutique Show, Italian Exhibition Group (IEG),
<https://www.vicenzaoro.com/en/>; T.GOLD, Italian Exhibition Group (IEG),
<https://www.vicenzaoro.com/en/t.gold>; Italian Trade Agency Launches The Extraordinary Italian Jewelry Website, Italian Trade Agency (ITA), December 2020,
<https://www.prnewswire.com/news-releases/italian-trade-agency-launches-the-extraordinary-italian-jewelry-website-the-new-official-virtual-home-showcases-italian-jewelry-talents-301195708.html>
- ## Chapter 5: Enabling greater financialisation of gold
1. World Gold Council Internal Estimate
 2. World Gold Council Internal Estimate
 3. World Gold Council Internal Estimate
 4. Rajya Sabha Unstarred Question No. 251, Department of Economic Affairs, Ministry Of Finance, Government of India, July 2025,
https://sansad.in/getFile/annex/268/AU251_q9ZW1j.pdf?source=pqars
 5. Gold Industry of India, ICICI Direct, April 2025
<https://www.icicidirect.com/research/equity/finace/understand-gold-industry-of-india>
 6. Monitor Deloitte Consumer Survey, Swarnim Udaan, April 2025; Monitor Deloitte Analysis
 7. 2024 Year-End- Review for Department of Consumer Affairs, Press Information Bureau, Government of India, December 2024,
<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2088051>
 8. Gold Monetisation Scheme (GMS), Department of Economic Affairs, Ministry of Finance, Government of India,
<https://dea.gov.in/gms>; Gold Monetization Scheme (GMS), 2015, Reserve Bank of India (RBI), October 2015 (updated March 2025),
<https://www.rbi.org.in/commonman/Upload/English/Notification/PDFs/GMS7AF4FA9118674FAF994A9C133D0295CF.PDF>
 9. India's Gold Market Reform and Growth, World Gold Council, October 2022,
<https://www.gold.org/download/file/18332/Indias-Gold-Market-Reform-and-Growth.pdf>
 10. Government Discontinues Fresh Mobilisation under Medium-Term and Long-Term Government Deposits under Gold Monetisation Scheme, Ministry of Finance, March 2025,
<https://pib.gov.in/PressReleasePage.aspx?PRID=2115009>



11. China's Gold ATM Melts Jewellery And Sends Money In 30 Minutes, India Today, April 2025, <https://www.indiatoday.in/business/story/chinas-gold-atm-melts-jewellery-and-sends-money-in-30-minutes-check-here-2712700-2025-04-22>
12. Gold Monetisation Scheme (GMS) FAQs – Department of Economic Affairs, 2014, <https://dea.gov.in/gms>; Significance of Gold in the Practice of Streedhan, World Gold Council (MyGoldGuide), June 2018, <https://www.mygoldguide.in/gold-woman%E2%80%99s-wealth>
13. Life insurers see the shine, seek Irdai nod to invest in gold ETFs, Economic Times, June 2025, <https://economictimes.indiatimes.com/life-insurers-see-the-shine-seek-irdai-nod-to-invest-in-gold-etfs/122101456.cms>
14. Is Including Gold In NPS A Good Idea, PersonalFN, April 2018, <https://www.personalfn.com/fns/is-including-gold-in-nps-a-good-idea>
15. India Plans to Allow Pension Funds to Invest in Gold ETFs, Angel One, August 2025, <https://www.angelone.in/news/economy/india-plans-to-allow-pension-funds-to-invest-in-gold-etfs>
16. Gold Supply and Demand Statistics, World Gold Council, April 2026, <https://www.gold.org/goldhub/research/gold-demand-trends/gold-demand-trends-india-focus-q1-2026>
17. Ibid
18. New-age, hassle-free way to invest in gold, Bombay Stock Exchange, December 2022, https://www.bseindia.com/downloads1/EGRbrochure_21122022.pdf
19. Electronic Gold Receipt (EGR) – Financializing Gold, Prime Database, 2024, <https://www.primedatabase.com/article/2024/Article-C.S.Verma.pdf>
20. World Gold Council Internal Report
21. World Gold Council Internal Estimates
22. Actual gold too hot to handle, buyers turn to digital, Financial Express, June 2025, <https://www.financialexpress.com/market/commodities/actual-gold-too-hot-to-handle-buyers-turn-to-digital/3888485/>
23. How Digital Gold Became India's Favourite Unregulated Investment, AlphaStreet, February 2025, <https://finshots.in/archive/how-digital-gold-became-india-favourite-unregulated-investment-sebi-rbi-mmtc-pamp-augmont-google-pay-phonepe/>
24. 15 mn Indians join digital gold rush amid soaring prices, CNBC TV18, April 2025, <https://www.cnbctv18.com/market/commodities/15-mn-indians-join-digital-gold-rush-prices-all-time-high-demand-19595617.htm>
25. UNI 24K Card, UNI Cards, <https://www.uni.cards/24k-card/>
26. Why Let Gold Sit Idle? Here's How Gold Leasing Can Help Investors Earn Returns, Mint, June 2026, <https://www.livemint.com/money/personal-finance/why-let-gold-sit-idle-heres-how-gold-leasing-can-help-investors-earn-returns-11781263001385.html>
27. World Gold Council Internal Report
28. Monitor Deloitte Consumer Survey, Swarnim Udaan, April 2025; Monitor Deloitte Analysis
29. Master Circular on Investment Guidelines, Pension Fund Regulatory and Development Authority (PFRDA), March 2025, <https://pfrda.org.in/documents/33652/147653/MC%20on%20NPS%20Investment%20guidelines%20-%20NGS.pdf>; Pension Funds Allowed to Invest in Gold and Silver ETFs, Financial Express, December 2025, <https://www.financialexpress.com/market/pension-funds-allowed-invest-in-gold-and-silver-etfs-4074071/>
30. Swiss Pension Funds Make the Case for Gold Allocation in Bull Market, Investment & Pensions Europe (IPE), April 2025, <https://www.ipe.com/analysis/swiss-pension-funds-make-the-case-for-gold-allocation-in-bull-market/10128733.article>
31. WGC Press Release, February 2025, <https://www.gold.org/news-and-events/press-releases/chinas-insurance-funds-inject-new-vitality-global-and-domestic-gold>
32. China Opens Gold Market to Insurers, Insurance Business Asia, February 2025, <https://www.insurancebusinessmag.com/asia/news/breaking-news/china-opens-gold-market-to-insurers-524342.aspx>



33. AMFI Fact Book 2024, Association of Mutual Funds in India (AMFI), 2024 <https://www.amfiindia.com/Themes/Theme1/downloads/AMFIFactbook%202024.pdf>
34. Unlocking the ₹100 tn Opportunity, AMFI, 2019, <https://www.amfiindia.com/Themes/Theme1/downloads/BCG-Banner7.pdf>
35. Mutual Funds Cross ₹70 Lakh Crore Milestone: A Testament to India's Growing Investment Culture, Angel One, May 2025, <https://www.angelone.in/news/mutual-funds/mutual-fund-growth-milestone>
36. World Gold Council Internal Report
37. WGC Gold Refining and Recycling. India Gold Market Series, June 2022, https://www.gold.org/sites/default/files/downloads/2022-06/Gold%20refining%20and%20recycling%20_final.pdf
38. WGC Gold Refining and Recycling. India Gold Market Series, June 2022, https://www.gold.org/sites/default/files/downloads/2022-06/Gold%20refining%20and%20recycling%20_final.pdf
39. Gold Supply and Demand Statistics, World Gold Council, April 2026, <https://www.gold.org/goldhub/research/gold-demand-trends/gold-demand-trends-india-focus-q1-2026>
40. WGC Gold Refining and Recycling. India Gold Market Series, June 2022, https://www.gold.org/sites/default/files/downloads/2022-06/Gold%20refining%20and%20recycling%20_final.pdf
41. Augmont: Best Platform to Buy Gold, Augmont, accessed June 2026, <https://www.augmont.com/>
42. WGC Gold Refining and Recycling. India Gold Market Series, June 2022, https://www.gold.org/sites/default/files/downloads/2022-06/Gold%20refining%20and%20recycling%20_final.pdf
43. Swiss Gold Refineries Are Operating at Full Capacity, Le Monde, April 2025, https://www.lemonde.fr/en/economy/article/2025/04/29/in-switzerland-gold-refineries-are-operating-at-full-capacity_6740715_19.html; Good Delivery, London Bullion Market Association (LBMA), <https://www.lbma.org.uk/good-delivery/about-good-delivery>
44. WGC Press Release, February 2025, <https://www.gold.org/news-and-events/press-releases/chinas-insurance-funds-inject-new-vitality-global-and-domestic-gold>
45. Refined Gold and Silver Bars for Good Delivery – Specification, BIS, December 2019, <https://ibja.co/Upload/GovtCircular/17278.pdf>
46. Refineries FAQs, BIS, <https://www.bis.gov.in/refineries/>
47. GST Exemption for Investment Precious Metals, Inland Revenue Authority of Singapore (IRAS), October 2012, https://www.iras.gov.sg/docs/default-source/e-tax/gst-guide-on-exemption-of-investment-precious-metals7f0062ff-780a-4a53-90fa-e1f3b1e25770.pdf?sfvrsn=475e50d2_46
48. How the Market Works, London Bullion Market Association (LBMA), May 2019, <https://www.lbma.org.uk/videos/how-the-market-works>
49. Gold Ecosystem, Dubai Multi Commodities Centre (DMCC), <https://www.dmcc.ae/gold>
50. Policy Address 2025, Hong Kong Special Administrative Region Government, October 2025, <https://www.policyaddress.gov.hk/2025/en/>; Hong Kong Stakes Its Claim on the Global Gold Trade, Financial Times, February 2026, <https://www.ft.com/content/c4414852-ae4a-4f2c-bb2d-12fe745b7f36>
51. Opening Speech by Mr Gan Kim Yong at the Asia-Pacific Precious Metals Conference, Monetary Authority of Singapore (MAS), June 2026, <https://www.mas.gov.sg/news/speeches/2026/opening-speech-by-mr-gan-kim-yong-at-the-appmc-on-15-june-2026>; Singapore to Establish OTC Gold Clearing System, Introduce Central Bank Gold Vaulting Services, Reuters, June 2026, <https://www.reuters.com/world/asia-pacific/singapore-establish-otc-gold-clearing-system-introduce-central-bank-gold-2026-06-15/>
52. World Gold Council Internal Estimate
53. 4th Annual Report FY 2024–2025, India International Bullion Exchange IFSC (IIBX), https://www.iibx.co.in/download/Annual_Report//Annual%20Report%20FY2024.pdf



54. International Financial Services Centres Authority; IIBX Achieves 100-Tonne Gold Trade Landmark, Strengthens GIFT IFSC's Global Role, Gold Price Today, March 2025, <https://goldpricetoday.co.in/iibx-surpasses-100-tonne-gold-trading-milestone-strengthens-indias-bullion-market/>
55. IIBX gold trading crosses 100 tonnes milestone at GIFT IFSC, Business Line, March 2025, <http://thehindubusinessline.com/markets/gold/iibx-gold-trading-crosses-100-tonnes-milestone-at-gift-ifsc/article69381681.ece>
56. HDFC Bank Executes First Ever Trade by Any Bank on IIBX under Special Category Client – Nominated Bank Category for Import of Gold, India International Bullion Exchange (IIBX), March 2025, <https://www.iibx.co.in/download/media/29/Emailing%20PRESS%20RELEASE%20by%20IIBX%20HDFC%20Bank%20trade%248a3ffae8-134b-41ca-9b14-9ad98133b5e5.pdf>
57. Shanghai Gold Exchange: Development On the Back of Marketization and Internationalization, Asia Pacific Precious Metals Conference, https://www.asiapacificpmc.com/appmc2018/presentation/5_Lianhui_NING.pdf
58. Gold Loans Jump 50.4% to ₹18.6 tn in FY26, The New Indian Express, May 2026, <https://www.newindianexpress.com/business/2026/May/27/gold-loans-jump-504-to-rs186-tn-in-fy26>
59. Special Category Client (SCC) – Banks, India International Bullion Exchange (IIBX), https://www.iibx.co.in/static/Special_Category_Client_Banks.aspx
60. India Permits 15 Banks to Import Gold and Silver Till March 2029; ICICI Bank, HDFC Bank, SBI and Others in the List, Angel One, March 2025, <https://www.angelone.in/news/commodities/india-permits-15-banks-to-import-gold-and-silver-till-march-2029-icici-bank-hdfc-bank-sbi-and-others-in-the-list>
61. Precious Metals and Bullion Banking, ICBC Standard Bank, <https://www.icbcstandard.com/en/column/1438058793979494568.html>
2. Making Gems and Jewellery Clusters Exportable, Export-Import Bank of India (Exim Bank) and Gem & Jewellery Export Promotion Council (GJEPC), January 2026, https://gjepec.org/emailer_gjepec/19-1-2026/Making-G%26J-clusters-Exportable.pdf
3. Making Gems and Jewellery Clusters Exportable, Export-Import Bank of India (Exim Bank) and Gem & Jewellery Export Promotion Council (GJEPC), January 2026, https://gjepec.org/emailer_gjepec/19-1-2026/Making-G%26J-clusters-Exportable.pdf
4. Gold Supply and Demand Statistics, World Gold Council, April 2026, <https://www.gold.org/goldhub/research/gold-demand-trends/gold-demand-trends-india-focus-q1-2026>
5. Younger Indians going for 14 karat gold as demand for lightweight jewellery rises, CNBC TV18, June 2025, <https://www.cnbctv18.com/market/commodities/consumers-choose-14k-gold-as-demand-for-lightweight-jewellery-rises-19623162.htm>
6. Monitor Deloitte Consumer Survey, Swarnim Udaan, April 2025; World Gold Council (WGC) Consumer Survey, 2024
7. Based on the average of two WGC surveys indicating that 33% of 18–24-year-olds purchased gold in the past year and 66% of Gen Z currently hold gold; Jewellery Demand and Trade in India: Gold Market Series, World Gold Council (WGC), June 2025, <https://www.gold.org/goldhub/research/jewellery-demand-and-trade-india-gold-market-series>; World Gold Council (WGC) Consumer Survey, 2024
8. Talsam Smart Jewelry That Combines Technology and Fashion to Save Your Life, Wearable Technologies, August 2018, <https://wt-obk.wearable-technologies.com/2018/08/talsam-smart-jewelry-that-combines-technology-and-fashion-to-save-your-life/>
9. 7 Ring – India's First Contactless Payment Wearable Ring, Seven, accessed June 2026, <https://seven.ooo/7ring>
10. Ring AIR, Ultrahuman, <https://www.ultrahuman.com/ring-air/>
11. 7 Additional Districts included in Sixth Phase of Mandatory Hallmarking, Press Information Bureau (PIB), Ministry of Consumer Affairs, Food & Public Distribution, March 2026, <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2239540>

Chapter 6: Reimagining gold jewellery for the modern consumer

1. India's gold jewellery market structure, World Gold Council, September 2022 <https://www.gold.org/goldhub/research/indias-gold-jewellery-market-structure>
11. 7 Additional Districts included in Sixth Phase of Mandatory Hallmarking, Press Information Bureau (PIB), Ministry of Consumer Affairs, Food & Public Distribution, March 2026, <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2239540>



12. 7 Additional Districts Included in Sixth Phase of Mandatory Hallmarking, Vajiram & Ravi Current Affairs, March 2026, <https://vajiramandravi.com/current-affairs/districts-of-india/>
13. Hallmarking Charges, Bureau of Indian Standards, <https://www.bis.gov.in/hallmarking-overview/jewellers-registration-scheme/hallmarking-charges/?lang=en>
14. Hallmarking FAQ, Bureau of Indian Standards (BIS), <https://www.bis.gov.in/hallmarking-overview/hallmarking-faqs/hallmarking-faq/?lang=en>
15. Monitor Deloitte Consumer Survey, Swarnim Udaan, April 2025
16. Ibid
17. Monitor Deloitte Consumer Survey, Swarnim Udaan, April 2025
18. India's gold jewellery market structure, World Gold Council, September 2022, <https://www.gold.org/goldhub/research/indias-gold-jewellery-market-structure>
6. India's Semiconductor Market Projected to Reach USD 100 bn by 2030, India Briefing, April 2025, <https://www.india-briefing.com/news/indias-semiconductor-market-to-hit-us108-bn-by-2030-report-36926.html>
7. Viksit Bharat@2047 A Blueprint of Micro and Macro Economic Dynamics, PHD Chamber of Commerce and Industry, April 2024, <https://www.phdcci.in/2024/06/10/viksit-bharat2047-a-blueprint-of-micro-and-macro-economic-dynamics/>
8. Annual report 2024-25, Ministry of Electronics and Information Technology, Government of India, <https://www.meity.gov.in/static/>
9. Critical Minerals and Data Transmission Networks, SFA Oxford, <https://www.sfa-oxford.com/knowledge-and-insights/critical-minerals-in-low-carbon-and-future-technologies/critical-minerals-in-electronics/critical-minerals-in-data-transmission-networks>
10. India's bio-economy has witnessed a remarkable 16-fold rise in 10 years of the past one decade, Press Information Bureau, March 2025, <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2113745>

Chapter 7: Unlocking gold's potential as a strategic national asset and mineral

1. Hong Kong Stakes Its Claim on the Global Gold Trade, Financial Times, February 2026, <https://www.ft.com/content/c4414852-ae4a-4f2c-bb2d-12fe745b7f36>; Singapore to Establish OTC Gold Clearing System, Reuters, June 2026, <https://www.reuters.com/world/asia-pacific/singapore-establish-otc-gold-clearing-system-introduce-central-bank-gold-2026-06-15/>
2. Gold Demand Sectors, World Gold Council, Accessed May 2026, <https://www.gold.org/about-gold/gold-demand/by-sector?>
3. The Role of Gold in Technology: 5 High-Tech Uses, Securities.io, March 2026, <https://www.securities.io/gold-uses-modern-technology/>
4. Gold Demand Sectors, World Gold Council, Accessed May 2026, <https://www.gold.org/about-gold/gold-demand/by-sector?>
5. Assessing India's Readiness to Assume a Greater Role in Global Semiconductor Manufacturing, Information Technology and Innovation Foundation (ITIF), February 2024, <https://itif.org/publications/2024/02/14/india-semiconductor-readiness/>
11. The Rise of India's Bioeconomy From \$10bn to \$165.75bn in a Decade, Press Information Bureau, Government of India, Ministry of Science & Technology, March 2025, <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2115882®=3&lang=2>
12. Ibid
13. India Information Technology: Quantum Computing Market, International Trade Administration, U.S. Department of Commerce, July 2024, <https://www.trade.gov/market-intelligence/india-information-technology-quantum-computing-market>
14. Gold Demand Sectors, World Gold Council, Accessed May 2026, <https://www.gold.org/about-gold/gold-demand/by-sector?>
15. The Gold Inside Your iPhone: Exploring the Materials Powering Modern Electronics, Stanford Advanced Materials, <https://www.samaterials.com/podcast/gold-inside-your-iphone.html>
16. Mobiles – Catalysts of India's Digital Rise, Press Information Bureau (PIB), Government of India, September 2025, <https://www.pib.gov.in/PressNoteDetails.aspx?ModuleId=3&NoteId=155232>



17. World Gold Council Internal Data
18. India's gold jewellery market structure, World Gold Council, September 2022 <https://www.gold.org/goldhub/research/indias-gold-jewellery-market-structure>
19. Making Gems and Jewellery Clusters Exportable, Export-Import Bank of India (Exim Bank) and Gem & Jewellery Export Promotion Council (GJEPC), January 2026, https://gjepc.org/emailer_gjepc/19-1-2026/Making-G%26J-clusters-Exportable.pdf
20. World Gold Council Internal Data
21. World Gold Council Internal Data
22. Mapping the Semiconductor Supply Chain: The Critical Role of the Indo-Pacific Region, Center for Strategic and International Studies (CSIS), May 2024, <https://www.csis.org/analysis/mapping-semiconductor-supply-chain-critical-role-indo-pacific-region>; TSMC Considering Advanced Chip Packaging Capacity in Japan, Reuters, March 2024, <https://www.reuters.com/technology/tsmc-considering-advanced-chip-packaging-capacity-japan-sources-say-2024-03-17/>
23. Mapping the Semiconductor Supply Chain: The Critical Role of the Indo-Pacific Region, Center for Strategic and International Studies (CSIS), May 2024, <https://www.csis.org/analysis/mapping-semiconductor-supply-chain-critical-role-indo-pacific-region>; A Look at the CHIPS-Related Portions of CHIPS+, Center for Strategic and International Studies (CSIS), August 2022, <https://www.csis.org/analysis/look-chips-related-portions-chips>
24. Enactment of the K-CHIPS Act, Kim & Chang, April 2023, https://www.kimchang.com/en/insights/detail.kc?sch_section=4&idx=28652; Mapping the Semiconductor Supply Chain: The Critical Role of the Indo-Pacific Region, Center for Strategic and International Studies (CSIS), May 2024, <https://www.csis.org/analysis/mapping-semiconductor-supply-chain-critical-role-indo-pacific-region>
25. Balance of Payments Manual, International Monetary Fund (IMF), 5th Edition, 1993, <https://www.imf.org/external/np/sta/bop/bopman.pdf>
26. Policy Address 2025, Hong Kong Special Administrative Region Government, October 2025, <https://www.policyaddress.gov.hk/2025/en/>; Singapore to Establish OTC Gold Clearing System, Introduce Central Bank Gold Vaulting Services, Reuters, June 2026, <https://www.reuters.com/world/asia-pacific/singapore-establish-otc-gold-clearing-system-introduce-central-bank-gold-2026-06-15/>
27. India Central Bank's Gold Pile Tops US\$100 bn on Surging Bullion Prices, Reuters, October 2025, <https://www.reuters.com/world/india/india-central-banks-gold-pile-tops-100-bn-surging-bullion-prices-2025-10-17/>
28. Gold Demand Sectors, World Gold Council, Accessed May 2026, <https://www.gold.org/about-gold/gold-demand/by-sector?>
29. Optical Density Optimization of Malaria Pan Rapid Diagnostic Test Kits, Diagnostics (MDPI), November 2020, <https://www.mdpi.com/2075-4418/10/11/880>
30. Gold and the electronics sector, World Gold Council, July 2018, <https://www.gold.org/goldhub/research/gold-investor/gold-investor-july-2018/13231>
31. Gold Nanoparticles in Diagnostic Applications: A Review, Nanomaterials (MDPI), September 2023, <https://www.mdpi.com/2079-4991/13/18/2571>
32. Gold Nanoparticles in Lateral Flow Assays: A Review, Biosensors (MDPI), October 2022, <https://www.mdpi.com/2079-6374/12/10/780>; Why Is There a Red Line? Gold Nanoparticles in Lateral Flow Tests, Journal of Chemical Education, May 2022, <https://pubs.acs.org/doi/10.1021/acs.jchemed.2c00094>
33. Tokyo 2020 Medal Project, Tokyo 2020 Olympic Games, July 2019, <https://olympics.com/en/news/designs-of-tokyo-2020-s-recycled-medals-unveiled>
34. National Institute for Materials Science (NIMS), Research at NIMS, accessed June 2026, <https://www.nims.go.jp/eng/research/>; National Institute of Advanced Industrial Science and Technology (AIST), About AIST, accessed June 2026, https://www.aist.go.jp/aist_e/about_aist/



35. National Institutes of Health (NIH), Strategic Plan for Data Science / Medical Research Programs, accessed June 2026, <https://datascience.nih.gov/strategicplan> CHIPS and Science Act, U.S. Congress, August 2022, <https://www.congress.gov/bill/117th-congress/house-bill/4346>
36. India's Critical Mineral Mission, Press Information Bureau, Government of India, Sep 2025, <https://www.pib.gov.in/PressNoteDetails.aspx?NoteId=155158&ModuleId=3®=3&lang=1>
37. Critical Raw Materials Act, Council of the European Union, March 2024 <https://www.consilium.europa.eu/en/infographics/critical-raw-materials/>; About the 2025 List of Critical Minerals, U.S. Geological Survey (USGS), November 2025 <https://www.usgs.gov/programs/mineral-resources-program/science/about-2025-list-critical-minerals>; China to Speed Up Construction of Strategic Mineral Reserve Sites, Reuters, May 2026 <https://www.reuters.com/world/asia-pacific/china-speed-up-construction-strategic-mineral-reserve-sites-says-government-2026-05-20/>
38. National Mineral Resources Plan (2016–2020), National Development and Reform Commission (NDRC), May 2017, https://www.ndrc.gov.cn/fggz/fzzlgh/gjjzxgh/201705/t20170511_1196755.html
39. Nine Chinese Ministries Unveil 2025–2027 Plan to Promote High–Quality Development of the Gold Industry, State Council Information Office (SCIO), June 2025, http://english.scio.gov.cn/m/pressroom/2025-06/24/content_117943701.html
40. Ren, X., Fan, F., Liu, Q. & Lv, Y., Evaluation of the Importance of Critical Minerals in China, *Frontiers in Earth Science*, Vol. 13, 2025, <https://www.frontiersin.org/journals/earth-science/articles/10.3389/feart.2025.1491360/full>; China's Strategy on Critical Minerals Surpasses Geopolitics, World Economic Forum (WEF), November 2024, <https://www.weforum.org/stories/2024/11/china-critical-mineral-strategy-beyond-geopolitics/>
41. Critical Minerals for Semiconductors: A Comparative Analysis of International Strategies and Implications for China, *Bulletin of Chinese Academy of Sciences*, Vol. 37, No. 11, 2022, Security of China's Strategic and Critical Minerals under Background of Great Power Competition; Mineral Demands for Resilient Semiconductor Supply Chains, Center for Strategic and International Studies (CSIS), May 2024, <https://www.csis.org/analysis/mineral-demands-resilient-semiconductor-supply-chains>
42. Executive Order: Immediate Measures to Increase American Mineral Production, US White House, March 2025, <https://www.whitehouse.gov/presidential-actions/2025/03/immediate-measures-to-increase-american-mineral-production/>
43. New Executive Order Regarding Immediate Measures to Increase American Mineral Production, White & Case, March 2025, <https://www.whitecase.com/insight-alert/new-executive-order-regarding-immediate-measures-increase-american-mineral-production>
44. U.S. Gold Mining Increases Amid Demand for Critical Minerals, *Forbes*, April 2026, U.S. Gold Mining Increases Amid Demand For Critical Minerals
45. Interior Department Releases Final 2025 List of Critical Minerals, U.S. Department of the Interior, 2025, Interior Department releases final 2025 List of Critical Minerals | U.S. Department of the Interior



Contributors

We commissioned Monitor Deloitte to undertake this independent research study, leveraging their global expertise in strategic foresight, advanced analytics and sectoral depth across mining, technology and financial services. Their multidisciplinary team supported the development of this report through rigorous data-driven analysis, scenario modelling and global benchmarking.

To enrich the research further, we engaged a wide cross-section of stakeholders across the gold ecosystem and adjacent domains. These included next-generation changemakers such as futurists, private equity and venture capital investors and AI and technology experts; mining leaders and domain specialists; industry associations and trade bodies; jewellers and value-chain participants; and government and regulatory bodies. The study was further informed by insights and inputs from the World Gold Council's and Monitor Deloitte's India and global teams.

Their diverse insights helped shape a holistic understanding of emerging trends, structural challenges and long-term opportunities for India's gold sector. We extend our sincere gratitude to the government and regulatory bodies, industry associations and trade bodies and all other contributors for their valuable guidance, sectoral expertise and data support, which significantly strengthened the depth and direction of this study.



About the World Gold Council

We are a membership organisation that champions the role gold plays as a strategic asset, shaping the future of a responsible and accessible gold supply chain. Our team of experts builds an understanding of the use cases and possibilities of gold through trusted research, analysis, commentary and insights.

We drive industry progress, shaping policy and setting the standards for a perpetual and sustainable gold market. To learn more about our work, visit the World Gold Council at [gold.org](https://www.gold.org).

About Monitor Deloitte

We are Deloitte's strategy consulting practice, partnering with business and government leaders to solve their most critical strategic challenges and catalyse enterprise-wide, strategy-led transformation.

Our practitioners combine deep industry expertise, rigorous analysis and practical implementation support to help organisations drive growth, strengthen competitiveness and create long-term value. Leveraging Deloitte's global capabilities, we translate strategic ambition into measurable and lasting impact.

To learn more about our work, visit Monitor Deloitte at [deloitte.com](https://www.deloitte.com).



Notice to Reader

The following statements outline the context, limitations, and disclaimers applicable to this report

This report and the information contained in this report is intended to provide only general information on a particular subject or subjects and is not an exhaustive treatment of such subject(s). It should be noted that most of the information contained in this report is based on information that is available in the public domain (sources generally considered to be reliable) however such information has neither been checked nor verified by World Gold Council ("WGC") or its knowledge partners Deloitte Touche Tohmatsu India LLP (DTTILLP). WGC and DTTILLP make no representation or warranty as to the authenticity, accuracy, correctness, sufficiency, or completeness of the information contained in this report.

- WGC and DTTILLP are not making nor have the authority to make any representation or give any warranty, in either case whether express or implied and whether by or pursuant to statute or otherwise, in relation to the information in this report. Accordingly, WGC and DTTILLP expressly disclaim any such representation or warranty as well as legal responsibility for anyone relying on this report for any reason whatsoever.
- WGC and DTTILLP are not by means of this report, rendering professional/ financial/ legal advice or services to any person or entity. The information in this report should be considered as a guide only and is not intended to be relied upon for any decision which may affect a recipient's personal finances or business. Before making any decision or taking any action that might affect a recipient's personal finances or business, a recipient should consult a qualified professional/financial/legal adviser.
- WGC and DTTILLP must emphasize that the information set out within this report (from publicly available sources), is dependent on the validity of business trends, judgments, laws, regulations, treaties etc. on which they are based. The information will need to be reviewed by recipients professional, financial, or legal advisors to check of or reflect on any changes in such business trends, judgments, laws, regulations, treaties etc. whether through appeals, amendments, repeal or otherwise. WGC and DTTILLP accept no responsibility for the validity of such business trends, judgments, laws, regulations, treaties etc.
- This report may contain WGC and DTTILLP's analysis based not only on secondary sources of published information but may incorporate the inputs gathered through meetings with various industry experts and other industry sources, which for reasons of confidentiality, may not have been quoted in this report. WGC and DTTILLP have placed reliance on the accuracy and completeness of the information provided by such industry experts and other industry sources and assumed that the explanations (including verbal explanations, if any) provided by them were accurate and honest representations of current state of affairs, risks, controls, environment and issues. WGC and DTTILLP have not independently validated any such information, explanations or statements and are not responsible for them being incomplete or inaccurate.
- WGC and DTTILLP are not making nor have the authority to make any representation or give any warranty, in either case whether express or implied and whether by or pursuant to statute or otherwise, in relation to the information in this report. Accordingly, WGC and DTTILLP expressly disclaim any such representation or warranty as well as legal responsibility for anyone relying on this report for any reason whatsoever.
- WGC and DTTILLP must emphasize that the realization of the benefits accruing out of any findings or recommendations set out within this report (based on secondary sources, interview with industry experts, WGC and DTTILLP's internal analysis etc.), is dependent on the continuing validity of the approach, methodology and assumptions on which it is based. The approach, assumptions and methodology will need to be reviewed and revised to reflect such changes in business trends, regulatory requirements or the direction of the business as further clarity emerges. WGC and DTTILLP accept no responsibility for the realization of the projected benefits. WGC and DTTILLP inferences therefore will not and cannot be directed to provide any assurance about the achievability of the projections. Since the projections relate to the future, actual results are likely to be different from those shown in the prospective projected benefits because events and circumstances frequently do not occur as expected, and differences may be material. Any findings, view and/ or recommendation indicated in this report shall not amount to any form of guarantee that WGC or DTTILLP has determined and/ or predicted future events or circumstances.
- This report may contain some analysis; this indicates only that WGC and DTTILLP may have undertaken certain analytical activities on the underlying data to arrive at the information presented; WGC and DTTILLP do not accept responsibility or liability for the underlying data.
- The information in this report is not binding on any person, entity, authority, or court, and hence, no assurance is given that a position contrary to those herein will not be asserted by any person, entity, authority and/or sustained by an appellate authority or a court of law.
- WGC and DTTILLP accept no responsibility or duty of care or liability to any person or entity accessing or receiving or using this report. If any recipient uses this report for any purposes whatsoever, it shall do so at its own risk, without recourse to WGC and DTTILLP and WGC and DTTILLP shall not be directly or indirectly be liable for any losses, damages, costs or expenses incurred or suffered by such recipient.
- Any recipient who is provided with or gains access to this report, shall, by so accessing, obtaining, or using this report, be deemed to have accepted the foregoing conditions.



Important information and disclosures

© 2026 World Gold Council. All rights reserved. World Gold Council and the Circle device are trademarks of the World Gold Council or its affiliates.

Reproduction or redistribution of any of this information is expressly prohibited without the prior written consent of World Gold Council or the appropriate copyright owners, except as specifically provided below. Information and statistics are copyright © and/or other intellectual property of the World Gold Council or its affiliates or third-party providers identified herein. All rights of the respective owners are reserved.

The use of the statistics in this information is permitted for the purposes of review and commentary (including media commentary) in line with fair industry practice, subject to the following two pre-conditions: (i) only limited extracts of data or analysis be used; and (ii) any and all use of these statistics is accompanied by a citation to World Gold Council and, where appropriate, to Metals Focus or other identified copyright owners as their source. World Gold Council is affiliated with Metals Focus.

The World Gold Council and its affiliates do not guarantee the accuracy or completeness of any information nor accept responsibility for any losses or damages arising directly or indirectly from the use of this information.

This information is for educational purposes only and by receiving this information, you agree with its intended purpose. Nothing contained herein is intended to constitute a recommendation, investment advice, or offer for the purchase or sale of gold, any gold-related products or services or any other products, services, securities or financial instruments (collectively, "Services"). This information does not take into account any investment objectives, financial situation or particular needs of any particular person.

Diversification does not guarantee any investment returns and does not eliminate the risk of loss. Past performance is not necessarily indicative of future results. The resulting performance of any investment outcomes that can be generated through allocation to gold are hypothetical in nature, may not reflect actual investment results and are not guarantees of future results. The World Gold Council and its affiliates do not guarantee or warranty any calculations and models used in any hypothetical portfolios or any outcomes resulting from any such use. Investors should discuss their individual circumstances with their appropriate investment professionals before making any decision regarding any Services or investments.

This information may contain forward-looking statements, such as statements which use the words "believes", "expects", "may", or "suggests", or similar terminology, which are based on current expectations and are subject to change. Forward-looking statements involve a number of risks and uncertainties. There can be no assurance that any forward-looking statements will be achieved. World Gold Council and its affiliates assume no responsibility for updating any forward-looking statements.

Information regarding the LBMA Gold Price

The LBMA Gold Price is administered and published by ICE Benchmark Administration Limited (IBA). The LBMA Gold Price is a trademark of Precious Metals Prices Limited and is licensed to IBA as administrator of the LBMA Gold Price. ICE and ICE Benchmark Administration are registered trademarks of IBA and/or its affiliates. The LBMA Gold Price is used by the World Gold Council with permission under license by IBA and is subject to the restrictions set forth here (www.gold.org/terms-and-conditions).

Information regarding QaurumSM and the Gold Valuation Framework

Note that the resulting performance of various investment outcomes that can be generated through use of Qaurum, the Gold Valuation Framework and other information are hypothetical in nature, may not reflect actual investment results and are not guarantees of future results. Neither World Gold Council (including its affiliates) nor Oxford Economics provides any warranty or guarantee regarding the functionality of the tool, including without limitation any projections, estimates or calculations.



World Gold Council

B 901 9th Floor,
One BKC Bandra Kurla
Complex Bandra (East)
Mumbai 400051
India

T +91 22 6157 9100

W [gold.org](https://www.gold.org)

Published: August 2026