



FINANCE AND SECURITY



WHERE ARE WE?

Strengths

- Robust Gross Domestic Product (GDP) Growth
- High Per Capita Income
- Managed Fiscal Deficit
- Growth in the Service Sector
- Budgetary Reforms in Place
- Good Performance of Public Sector Enterprises
- PPP - Parivar Pehchan Patra
- High in Goods and Services Tax (GST) collections

Opportunities

- Advanced Technologies and AI Integration
- Risk Management Strategies
- Blended Financing Model
- Integrated Crime Control Centre
- Digitalisation & Tokenisation

Areas of Improvement

- Increasing Gender-Based Violence
- Increase in Cybercrimes
- Rise in Crimes against Weaker Sections
- Rise in Social Tensions

Threats

- Unpredictable Global Environment.
- Regional Disparities
- Rising Deficit Indicators
- Eroding Trust in Financial and Security Institutions across the World
- Climate Change

WHERE DO WE WANT TO GO?



VISION

To build a robust **Future-Resilient Finance and Security** framework prioritising sustainability, resilience, and innovation



MISSION

To create a **Future-Resilient Finance and Security** framework grounded in three core pillars—**Safe, Secure, and Sustainable (SSS)**—designed to address social challenges while catalysing inclusive economic growth, aiming to meet the 9.39% (constant price) NSVA growth target by 2047.

GOALS

- Trillion Dollar Plus Economy.
- Per Capita GSDP of INR 39,74,460
- Tax-to-GSDP ratio - 15%
- Debt-to-GSDP ratio - < 15%
- Rate of Total Crime against Women (per lakh population) - < 10

ASPIRATIONAL FUTURE

To mirror developed nations through comprehensive, environmentally conscious development, equitable prosperity, and sustainable resilience by adopting green financing initiatives and embracing innovative approaches for a climate-resilient and financially strong economy. To create a robust financial system, disaster preparedness, safety, and security will be priority areas for all citizens to enjoy non-stop economic growth and prosperity even during unexpected changes.

HOW WILL WE REACH THERE?

Financial System Resilience: Strengthen fiscal transparency, create a Medium-Term Debt Strategy, enhance local financial systems, drive financial inclusion, and implement proactive financial risk management.

Green Financing: Establish climate budget frameworks, scale Environmental, Social, and Governance (ESG) reporting, build local green finance capacity, expand green bonds, and implement real-time digital finance monitoring.

Safety & Security: Upgrade cybersecurity and surveillance, deploy AI-driven crime prediction tools, strengthen community policing, and establish integrated real-time security systems.

Partnerships with Developing Countries: Launch joint R&D, foster institutional partnerships, organise trade missions, build cross-border startups, and formalise innovation alliances.

Disaster Preparedness: Implement AI-powered early warning systems, strengthen district-level emergency response, train local communities, and create disaster-resilient infrastructure.

Transition to Green Economy: Create transition frameworks, deploy hydrogen-based industrial processes, support green skills training, build carbon management hubs, and promote circular economy pilots.

3 BIG ACTIONS

01

**Trillion NEXT Haryana
plan for economic growth**

03

**Quantum Ledger
Alliance for digital
governance**

02

**Cyber Fort 2047 for
enhanced security**

INTRODUCTION

Haryana's economic success is evident in its strategic fiscal management and more than doubling of PCI over the last decade. The state has maintained pace with national GDP growth, with a robust GSDP growth rate and a commitment to fiscal prudence, keeping the fiscal deficit below permissible limits. Budgetary reforms have streamlined departmental allocations and introduced innovative funds for research, innovation, and sustainable development. However, the state remains susceptible to external shocks like fluctuating global markets, geopolitical tensions, and emerging security risks.

Recognising that sustained economic growth depends not only on sound financial systems but also on a safe and secure environment for all its citizens, Haryana has pursued an integrated approach that addresses both finance and security as interdependent pillars of inclusive development. This alignment reflects global development frameworks such as SDG 16 and SDG 17, which emphasise strong institutions, public safety, financial resilience, and partnerships as essential enablers of prosperity. Public safety and security in Haryana have seen important strides being made with initiatives like Women Help Desks and increased representation of women police officers. Yet, challenges persist, including rising crimes against women and children, and the growing threat of cybercrimes which highlights the importance of extending the concept of security to encompass physical, digital, social, and financial domains, thus safeguarding citizens of all ages, genders, castes, and communities.

This chapter outlines Haryana's current status, its vision for 2047, and the strategic missions and goals to achieve that vision. It proposes a future-resilient finance and security framework, prioritising sustainability, resilience, and innovation. The state will focus on strengthening financial systems, leveraging green financing, managing the transition to net-zero emissions, fostering partnerships with developing countries, enhancing public safety and institutional security, and prioritising disaster preparedness. Key initiatives include the Trillion NEXT Haryana plan for economic growth, Cyber Fort 2047 for enhanced security, and the Quantum Ledger Alliance for digital governance. By addressing these challenges through integrated strategies, Haryana seeks to build a safe, inclusive, and prosperous future for all its citizens.

WHERE ARE WE?

Current Status

Economic Growth & Fiscal Management

Per Capita Income: More than doubled from INR 1,47,382 (2014-15) to INR 3,53,182 (2024-25) (at current prices).¹

Contribution to National GDP: Increased from 3.41% (2011-12) to 3.71% (2024-25).²

GSDP Growth: Grew by 11.8% in 2024-25, reaching INR 12.13 lakh crore, compared to the national GDP growth of 9.9% (at current prices).³

GST Collection: Achieved INR 1,19,362 crore in FY 2024-25, a 16% growth over 2023-24 fiscal year, securing 5th rank nationally.⁴

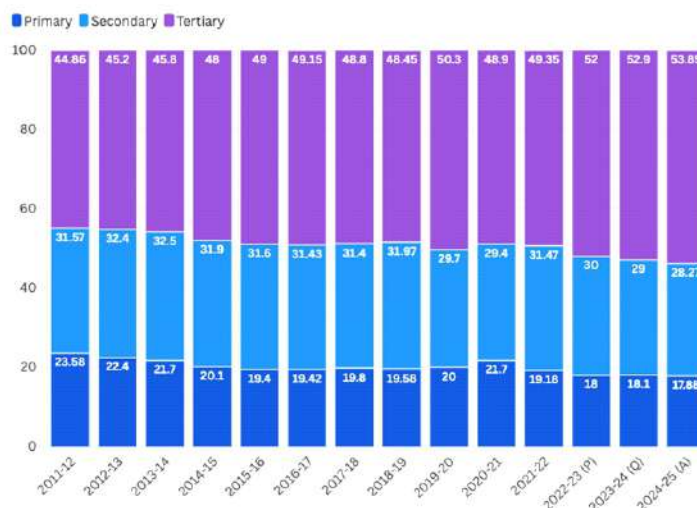
Fiscal Deficit: Contained at 2.7% of GSDP in 2024-25, below the 3.0% limit.⁵

Sectoral Shift: Primary sector share in GSVa declined (20% to 17.9%), while the Services sector share increased (50.3% to 53.9%) between 2019-20 and 2024-25 (at current prices).⁶

State Expenditure: Operations and Maintenance expenditure estimated to increase from INR 1,313.7 crore (2022) to INR 1,737.5 crore (2023-24). Revenue receipt, expenditure, and development expenditure in 2023-24 were 9.3%, 15.3%, and 8.2% of GSDP, respectively.⁷

Budgetary Reforms: Streamlined departmental allocations into 20 rationalised demands organised into eight thematic areas, including funds for research, innovation, and sustainable development. Introduction of the Public Financial Management System (PFMS) has played a crucial role to enhance transparency, accountability and reduce 'Float' in the system.

Fiscal Health: Haryana ranked 14th out of 18 States in NITI Aayog's Fiscal Health Index (2022-23).⁸



Graph 2: Sectoral Contribution to GSVA
(P- Provisional Estimates, Q- Quick Estimates, A - Advance Estimates)
(Source: Department of Economic and Statistical Affairs, GOH)

Public Safety & Security

Women's Safety Initiatives: 239 Women Help Desks operational;⁹ increased proportion of women police officers (9.7% increase in 2021).¹⁰

Policing Technology: Haryana Police ranked first in Crime and Criminal Tracking Network & Systems (CCTNS) implementation and utilising AI to block fraudulent mobile numbers, saving INR 76.85 crore.¹¹

Crime against Women: Crime rate increased significantly from 75.7 per lakh population (2015)¹² to 110.3 per lakh population (2023).¹³ Sexual crimes against women rose from 26.09 per lakh women (2015) to 43.4 (2020) per lakh women.¹⁴

Crime against Children: Trafficking of girl children out of the total children trafficked increased sharply from 26.98% (2015) to 85.71% (2020). Sexual crimes against girl children as a percentage of total crime against children increased from 41.42% (2015) to 49.46% (2020).¹⁵

General Crime Trends:

- Suicide Mortality Rate increased from 13.02 (2015) to 13.70 per 1 lakh population (2020).
- IPC crimes per 1 lakh population increased from 404.26 (2020) to 426.3 (2023).¹⁶
- 71.7 senior citizens per 1 lakh faced crime in 2022.¹⁷
- POCSO Act cases increased from 1,853 (2020)¹⁸ to 2,092 (2022).¹⁹
- 2,217 Arms Act cases reported in 2020.²⁰

Cybercrime: Cyber/IT Act-related crimes against women numbered 90 with 98 victims in 2022 (rate of 0.6 per lakh). 11 incidences of Cybercrime against children were reported (all female victims) in 2022 (rate of 11 per lakh).²¹

FUTURES TRIANGLE (*Refer to page number 28 for an in-depth overview of the Futures Triangle.)

The Futures Triangle analytical framework offers a comprehensive examination of the forces shaping Haryana's financial and security landscape through three intersecting dimensions. The analysis identifies current momentum from fiscal reforms and digital governance initiatives against headwinds of expenditure constraints and emerging security threats. Historical patterns of regional imbalance and rising deficit indicators further influence this dynamic. By mapping these intersecting forces—present drivers, future aspirations, and historical constraints—policymakers can chart strategic interventions to enhance fiscal health, strengthen governance systems, and build a more equitable, secure Haryana by 2047.

Pushes of the Present

Positive

Enhanced investment facilitation through the **Foreign Cooperation Department** for both inbound and outbound investors.

Significant **improvement in the financial performance of Public Sector Enterprises (PSEs)** (From 13 profit-making PSEs with INR 804 crore profit in 2013-14 to 20 profit-making PSEs with INR 1,767 crore profit in 2022-23, reflecting an increase of INR 963 crore).²²

Establishment of the **Directorate of State Audit** to ensure transparency and accountability in government expenditures.

Streamlining of budgetary processes through reforms.

Strengthening of enforcement actions against illegal activities through the establishment of the **Haryana State Enforcement Bureau**.

Establishment of the SDG Coordination Centre (SDGCC) facilitates integrated departmental approaches and significantly improves Haryana's SDG performance.

Implementation of the **Parivar Pehchan Patra** (71.60 lakh families registered, comprising 2.85 crore individuals, as of February 2024).²³

Negative

A significant portion of the state's total revenue receipts, specifically 37.9%, is allocated to meeting committed expenditures such as salaries and pensions, which **limits the funds available for development initiatives**, according to the Budget at a Glance 2025-26, Finance Department Haryana.²⁴

Capital outlay, primarily for infrastructure investment, **has stagnated** and remains low relative to the GSDP.

Haryana lacks a **separate 'Gender Budget Statement'**, limiting its ability to systematically assess and address financial allocations impacting gender equality and women's empowerment.

Challenges persist regarding gender-based violence, inter-caste and inter-religion marriages, and social exclusion, necessitating targeted interventions and resource allocation.

Positive

GST Collections: Increased from INR 22,922.15 crore in 2021–22 to INR 1,19,362 crore Budget Estimate (BE) in 2024–25²⁵. Excise Duty Collections: Increased from INR 7,933.42 crore in 2021–22 to INR 12,650 crore (BE) in 2023–24.²⁶

Establishment of the **Department of Future** to embed anticipatory governance into the state’s development trajectory.

Mahila Thanas have been operationalised across districts to provide gender-sensitive policing and accessible grievance redressal for women.

The **State Emergency Response Centre (dial-112)**, a helpline service, has been launched to offer immediate, integrated police, fire, and ambulance support across the state, improving citizens’ sense of safety and rapid response.

Pulls of the Future

Positive

Utilising advanced technologies and risk management strategies strengthens the resilience of the financial system.

Implementation of blended financing models, integrating public and private funds, **promotes innovation and sustainable development** while enhancing financing accessibility across sectors.

The adoption of advanced data analytics and AI algorithms empowers law enforcement agencies to **predict and prevent future crimes** more effectively, thereby improving public safety and security.

The Haryana State Financial Services Limited, as an in-house treasury manager to Public Enterprises, autonomous bodies, and other State entities, **would enhance financial management and resource utilisation.**

Negative

The state faces **increasing challenges related to cybercrime, data security**, and the protection of personal information amidst growing reliance on technology and the internet.

Delegation of financial powers to the cutting edge is a challenge.

Negative

As society increasingly relies on digital platforms, the **risk of data breaches escalates**, jeopardising privacy and **eroding trust in financial and security institutions.**

Rapid technological advancements expose financial and security sectors to cyber threats, necessitating robust cybersecurity measures for protection.

Potential biases in crime prediction algorithms may lead to unjust accusations or discriminatory practices, undermining public trust in law enforcement.

Weights of the Past

Positive

The Haryana Accountability of Public Finances Act 2019 established a robust framework to ensure accountability of public finances.

The **participation of women in Panchayati Raj Institutions (PRIs) has increased to 42.1%**²⁷, ensuring adequate representation.

Disaster preparedness initiatives like strengthening of Early Warning systems, conduct of special training programmes, and mock drills have enhanced overall resilience and readiness in Haryana.

Negative

GSDP has shown inconsistent trends across sectors, emphasising the importance of targeted development strategies to ensure balanced economic growth.

Persistent regional disparities in development spending.

Unavoidable **increases in revenue expenditures** due to fiscal obligations have strained the state's finances.

WHERE DO WE WANT TO GO?

VISION 2047

By 2047, Haryana will have established a robust and Future-Resilient Finance and Security framework, prioritising sustainability, resilience, and innovation. Our vision is to create a financial system that not only supports economic growth but also incorporates green financing to ensure environmental sustainability.

- A resilient financial system capable of withstanding economic shocks while maintaining growth momentum
- Green financing mechanisms at the core of economic progress
- Industries and manufacturing sectors successfully transition to a new sunrise, an emerging technology-based industry in line with Viksit Bharat's net-zero mandate
- Focus on international strategic partnerships to create new markets that foster mutual growth and knowledge exchange
- Ensure comprehensive security frameworks addressing women's safety, crime prediction, and cybersecurity
- Put in place advanced disaster preparedness systems with robust infrastructure and quick-response capabilities

STRATEGIC MISSION*

Future-Resilient Finance and Security – The SSS approach

Future-Resilient Finance and Security framework grounded in three core pillars—**Safe, Secure, and Sustainable (SSS)**—designed to address social challenges while catalysing inclusive economic growth, aiming to meet the 9.39% (constant price) NSVA growth target by 2047.

1. SAFE: Strengthening Safety for Women, Children, and Labour Force

The **Safe** pillar focuses on strengthening protection for women, children, and workers through integrated monitoring systems across all districts. By expanding smart surveillance, women's help desks, AI-driven public safety monitoring, and structured labour grievance mechanisms, Haryana aims to reduce crime rates against women from the current 110.3 per lakh²⁸ to under 60 by 2030 and under 10 by 2047.



2. SECURE: Ensuring Economic and Cyber Security for Growth

The **Secure** pillar emphasises on economic and cyber security through industrial diversification beyond real estate and automobiles into IT, renewable energy, and logistics sectors to boost manufacturing share in GSDP. This will be reinforced by district-level Cyber Crime Cells, AI-driven fraud detection, and comprehensive cybersecurity training to reduce cybercrime incidence from 2.5 per lakh to under 0.5 by 2047.²⁹

3. SUSTAINABLE Long -Term Financing and Social Balance

The **Sustainable** pillar will implement performance-linked financing mechanisms and balanced social policies, evaluating departments and industries based on clear impact indicators. By expanding models like the Mukhya Mantri Parivar Samridhi Yojana to industries and skill programmes, Haryana aims to improve fiscal metrics, reducing deficit to under 2% of GSDP by 2030 while increasing green finance portfolio from 15% to 25% of total credit.

In pursuit of this vision, the state has outlined several goals across economic growth and public safety.

STRATEGIC GROWTH ACCELERATORS: SECTORAL AND DEMOGRAPHIC PROJECTIONS

The projections for Haryana's State GDP employ a comprehensive triad framework encompassing per capita income, SDG performance, and the Human Development Index (HDI). This framework assesses Haryana's readiness for transition to developed economy status through analysis of historical trends and application of the SGAM for sectoral projections.

To forecast PCI in US dollars, the study projects Haryana's NSVA using the Solow Growth Accounting framework, which inherently accounts for India's economic performance given Haryana's demonstrated high responsiveness to the national economy. The study forecasts the INR -US dollar exchange rate based on Purchasing Power Parity

*Aligned Departments: Finance, Planning, Home, Revenue & Disaster, Training

(PPP) theory, adopting a "realistic scenario" with an average annual depreciation rate of 0.83%, and estimates the evolving World Bank threshold for High-Income Countries (HICs), which has historically grown at approximately 2.383% annually. For HDI projections, two methods are employed: a "normal case" based on average annual improvement of 1.23% and an "optimistic case" reflecting the best year-on-year improvement of 2.35%. The SDG-2030 India Index serves as a proxy for comprehensive development, with a benchmark SDG score of 90 adopted as necessary for avoiding the MIT.

The study outlines three distinct growth scenarios for Haryana's economic trajectory. The Business As Usual (BAU) Scenario extrapolates historical sectoral real growth rates and projects Haryana to achieve high-income status by 2042–43 and become a trillion-dollar economy by 2044–45, with 10.48% average annual growth in PCI in USD.

The Positive Scenario (Achievable Scenario 1 - Estimated Elasticities Method) utilises empirically estimated output elasticities within the SGAM and incorporates strategic assumptions regarding elevated capital and Total Factor Productivity (TFP) growth rates due to policy interventions. This scenario projects Haryana reaching HIC status by 2039–40 and becoming a trillion-dollar economy by 2041–42, with PCI in USD growing at an average annual rate of 8.34%.

The Aspirational Scenario (Achievable Scenario 2 - Fixed Elasticities Method), also based on SGAM, employs fixed output elasticities derived from national-level data and shares similar optimistic assumptions for TFP and capital growth as Achievable Scenario 1. This scenario projects Haryana achieving HIC status by 2038–39 and a trillion-dollar economy by 2040–41, with PCI in USD growing at an average annual rate of 11.89%.

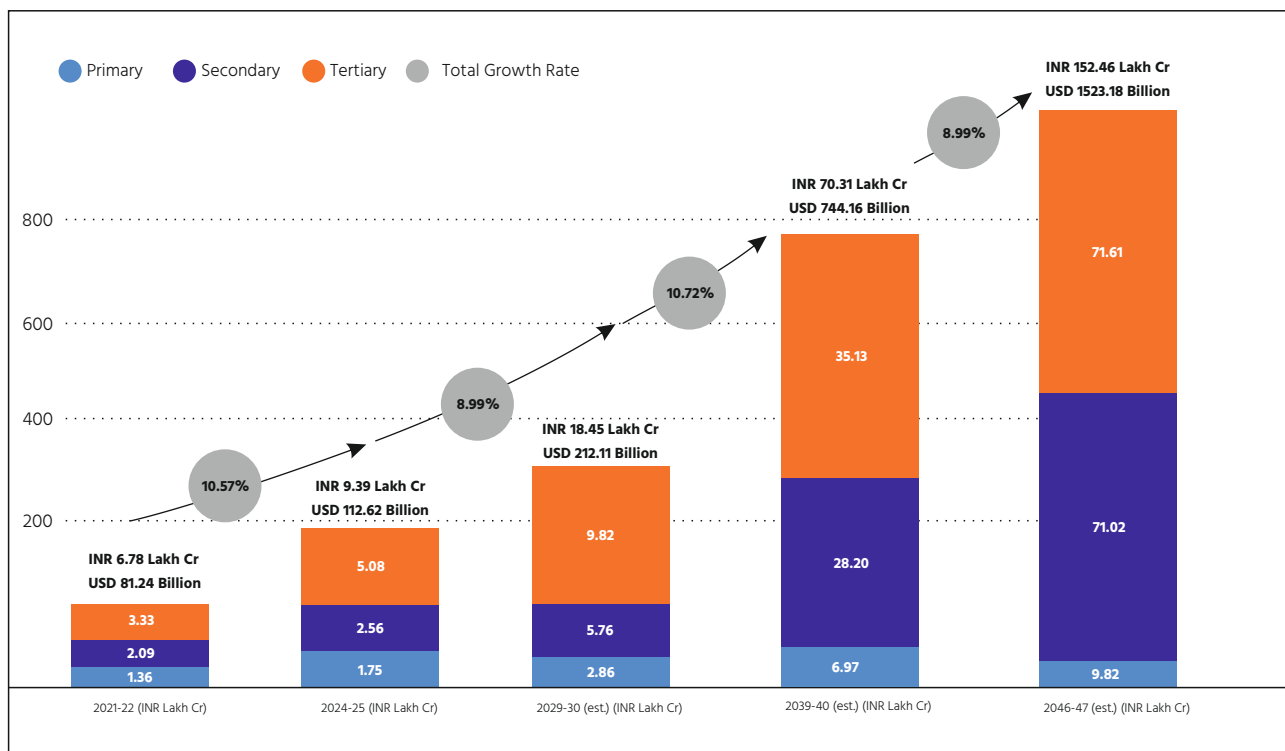
These projections are grounded in rigorous growth accounting analysis. The methodology employs the Perpetual Inventory Method (PIM) for capital stock estimation, utilises workforce data from National Sample Survey Office surveys, and projects future workforce distribution using targeted sector-wise employment growth rates aligned with official population projections. For the projection period, this is divided into three phases: F-1 (2024–25 to 2029–30), F-2 (2030–31 to 2039–40), and F-3 (2040–41 to 2046–47), with capital and TFP growth rates calibrated to reflect policy interventions and eventual maturation effects.

On the human development front, under the normal case, Haryana is projected to achieve the HDI threshold of 0.85 by 2039. Under the optimistic scenario, this milestone could be attained as early as 2031, indicating that with concerted policy action, Haryana could align human development outcomes with its economic ambitions well before reaching high-income status.

Similarly, based on historical patterns of an average annual improvement of 2 points in SDG scores, Haryana is expected to cross a score of 90 by 2032–33, thereby meeting key socio-environmental benchmarks necessary for attaining sustainable high-income status.

For further technical details on the projection methodology, output elasticities, sector-wise growth assumptions, and comprehensive data tables, please refer to Annexure 2.

Sectoral Share in State NSVA* for Trillion Dollar Plus Economy Goal by 2047 (at current prices)

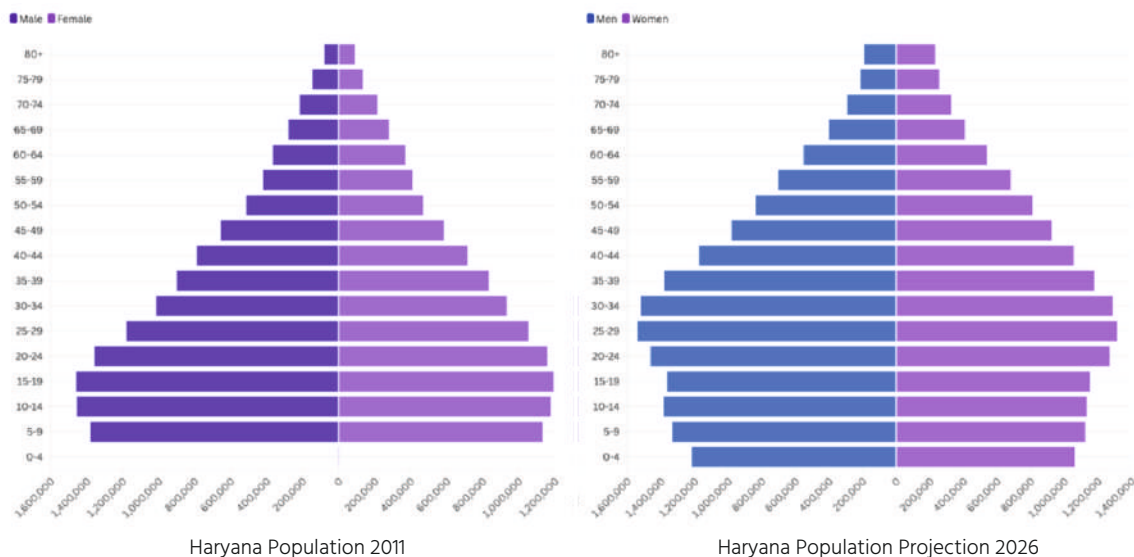


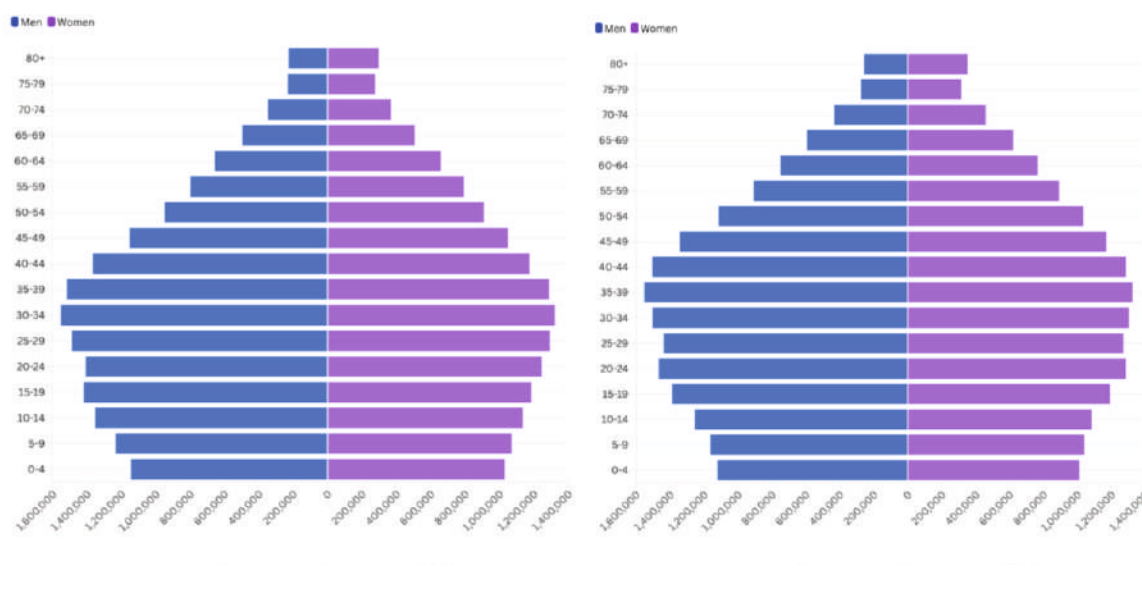
Graph 1: Sectoral Share in State NSVA* for Trillion Dollar Plus Economy Goal by 2047 (at current prices)

Source : NSVA Values and Sectoral Shares for 2021-22 and 2024-25 (Advance Estimates) are taken from the Department of Economics and Statistical Affairs, Government of Haryana. Projections for 2030, 2040, and 2047 are sourced from the research paper, "Viksit Haryana@2047: A Triad Framework for Inclusive and Sustainable Growth" by Prof. N. K. Bishnoi (GJUST Hisar) & Ms. Gargi Boora (Assistant Professor) (Annexure 2).

*NSVA (Net State Value Added) is used instead of GSDP as it excludes depreciation, providing a cleaner measure of actual economic value creation. This makes it more suitable for Total Factor Productivity (TFP) analysis—which measures technological progress and efficiency gains beyond just labour and capital inputs—and development planning. NSVA typically runs 8-12% lower than GSDP but offers greater precision for assessing sustainable growth and avoiding middle-income traps.

HARYANA POPULATION PYRAMID 2011 TO 2036





Graph 4: Haryana Population Projections
(Source: Census of India 2011)

The total projected population for Haryana in 2047 is 37.73 million.

Haryana's population is projected to grow from 25.36 million in 2011 to approximately 37 million by 2047, with significant demographic transitions including ageing, urbanisation, and an improving sex ratio, all of which will necessitate strategic fiscal planning and social security enhancements to ensure sustainable development.

In pursuit of this vision, the state has outlined several goals across economic growth and public safety:

GOALS

Indicator	Baseline	Baseline Source	Target 2030	Target 2036	Target 2047	Benchmarks
NSVA Growth Rate at Current Prices	11.09%	Annexure 2	8.99%	10.34%	8.99%	Projections Based on "Viksit Haryana@2047: A Triad Framework for Inclusive and Sustainable Growth" (Annexure 2)
Per capita Income at current prices (2011-12)	INR 3,53,182	Annexure 2	INR 5,68,653	INR 11,88,904	INR 39,74,460	Projections Based on "Viksit Haryana@2047: A Triad Framework for Inclusive and Sustainable Growth" (Annexure 2)

Indicator	Baseline	Baseline Source	Target 2030	Target 2036	Target 2047	Benchmarks
Growth Rate of Manufacturing Sector	6.8%	Annexure 2	10.61%	12.63%	10.10%	Projections Based on "Viksit Haryana@2047: A Triad Framework for Inclusive and Sustainable Growth" (Annexure 2)
Tax-to-GSDP Ratio	6.5%	Finance Department, Haryana Budget Documents 2024- 25	10%	12%	15%	Organisation for Economic Co-operation and Development (OECD) average tax-to-GDP ratio is approximately 15%
Population with Active Digital Banking	65%	RBI Digital Payments Index for Haryana 2023	90%	94%	100%	Based on Digital India Vision
Women with Bank Accounts	78%	NFHS-5 State Report for Haryana 2021	95%	97%	100%	UN SDG target 8.10 for universal financial access
Total IPC/BNS Crime Rate (per lakh population)	426.3	National Crime Records Bureau (NCRB) Report, 2023, Vol 1	< 250	< 197	< 100	Based on best-performing states and international benchmarks
Police Personnel (per lakh population)	195	Bureau of Police Research and Development Data 2023	250	268	300	UN recommended police-population ratio
CCTNS Implementation Score	85%	MHA CCTNS Status Report 2023	100%	100%	100%	National target for CCTNS implementation

Indicator	Baseline	Baseline Source	Target 2030	Target 2036	Target 2047	Benchmarks
Rate of Total Crime against Women (per lakh population)	110.3	NCRB Report, 2023, Vol 1	< 60	< 42	< 10	UN SDG 5 targets for eliminating violence against women
Sexual Crime against Women (per lakh women)	43.4	NCRB Crime in India 2022	< 20	< 15	< 5	Based on best-performing states (Tamil Nadu, Gujarat, Punjab)
Number of POCSO cases	2,142	NCRB 2023, Vol 1	< 1,000	< 647	0	UN SDG Target 16.2 to end all forms of violence against and torture of children
Cyber Crime Incidence Rate (per lakh population)	2.5	NCRB 2023, Vol 2	< 1	< 0.82	< 0.5	Global Cybersecurity Index benchmarks

POSSIBLE FUTURE SCENARIOS

BUSINESS AS USUAL FUTURE

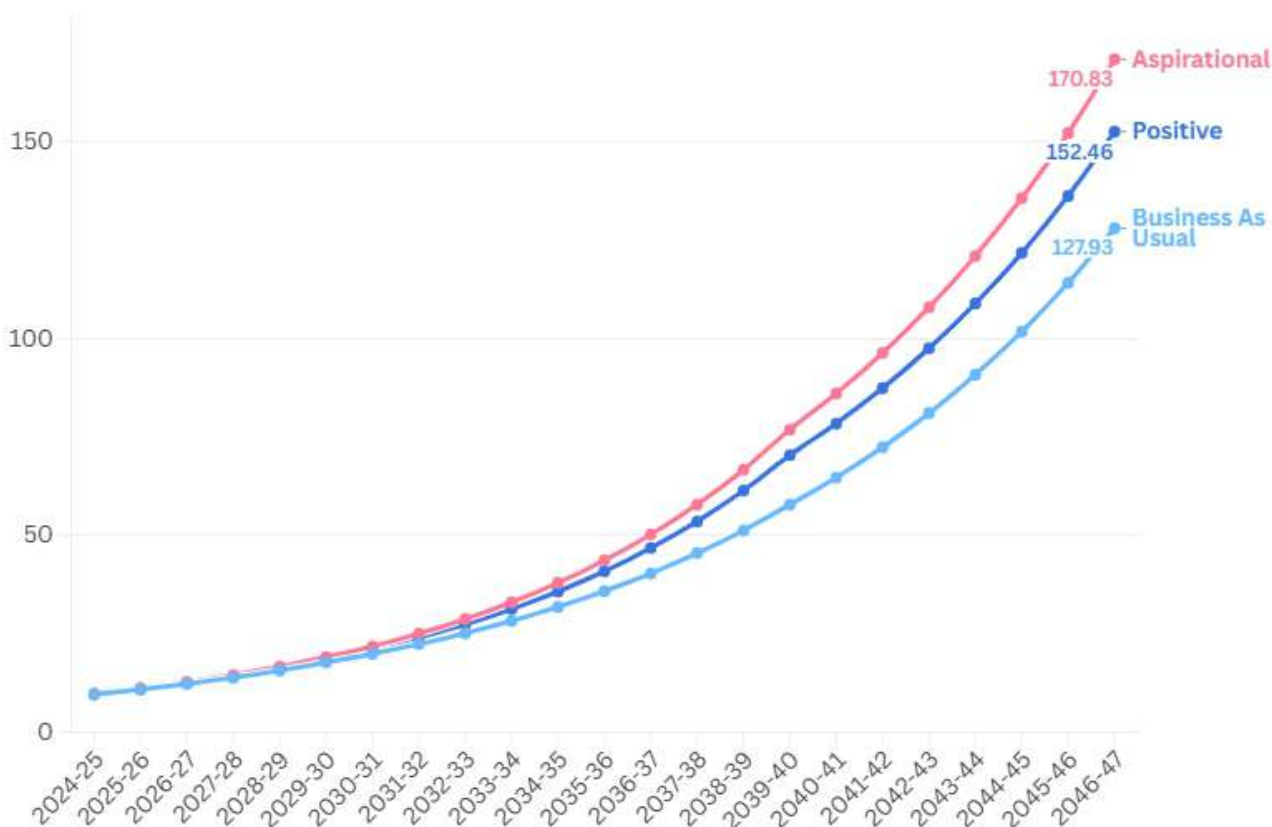
- Haryana continues on its current economic growth trajectory and fiscal prudence in this scenario.
- PCI and GSDP continue to rise steadily, bolstered by ongoing reforms in budgetary processes and strategic allocations towards research, innovation, and sustainable development.
- These reforms are a result of the collaborative efforts of stakeholders, policymakers, and analysts, who have played a crucial role in shaping Haryana's economic and social development.
- However, persistent challenges in public safety and security remain, requiring sustained efforts to address rising crime rates, particularly against women and children.
- While Haryana maintains its economic momentum, a lack of significant disruptions may lead to incremental progress rather than transformative change.
- Haryana's projected GSDP is anticipated to reach USD 1.2 trillion by 2047, assuming an average annual growth rate of 12.52% at current prices. (Annexure2).

POSITIVE DISRUPTIVE FUTURE (OPPORTUNITIES)

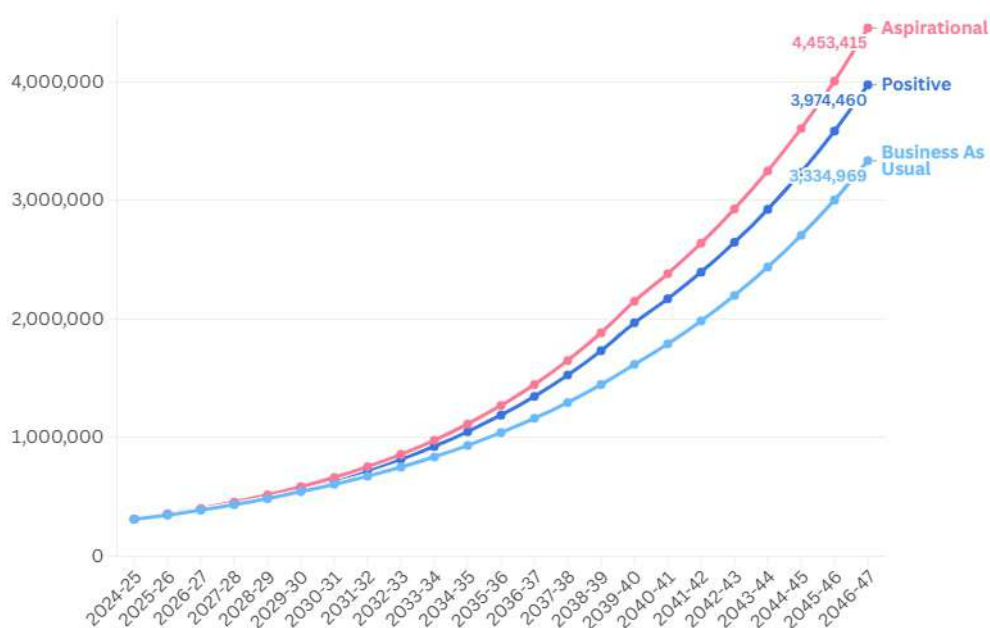
- In this scenario, Haryana would embrace positive measures that propel it into above average prosperity.
- Focus on capitalising on emerging technological opportunities, renewable energy, and sustainable agriculture opportunities for positive growth trajectory.
- Strategic infrastructure, education, and healthcare investments and reforms would lead to inclusive growth and societal well-being.
- Innovative solutions would tackle the root causes of crime, ensuring enhanced public safety and security.
- As a global leader in economic resilience, technological innovation, and social progress, the state will significantly enhance its global standing and reputation, setting new benchmarks for sustainable development.
- Under this scenario Haryana's GDP is expected to grow to USD 1.52 trillion with an average annual growth rate of 13.30% at current prices. (Annexure2).

ASPIRATIONAL FUTURE

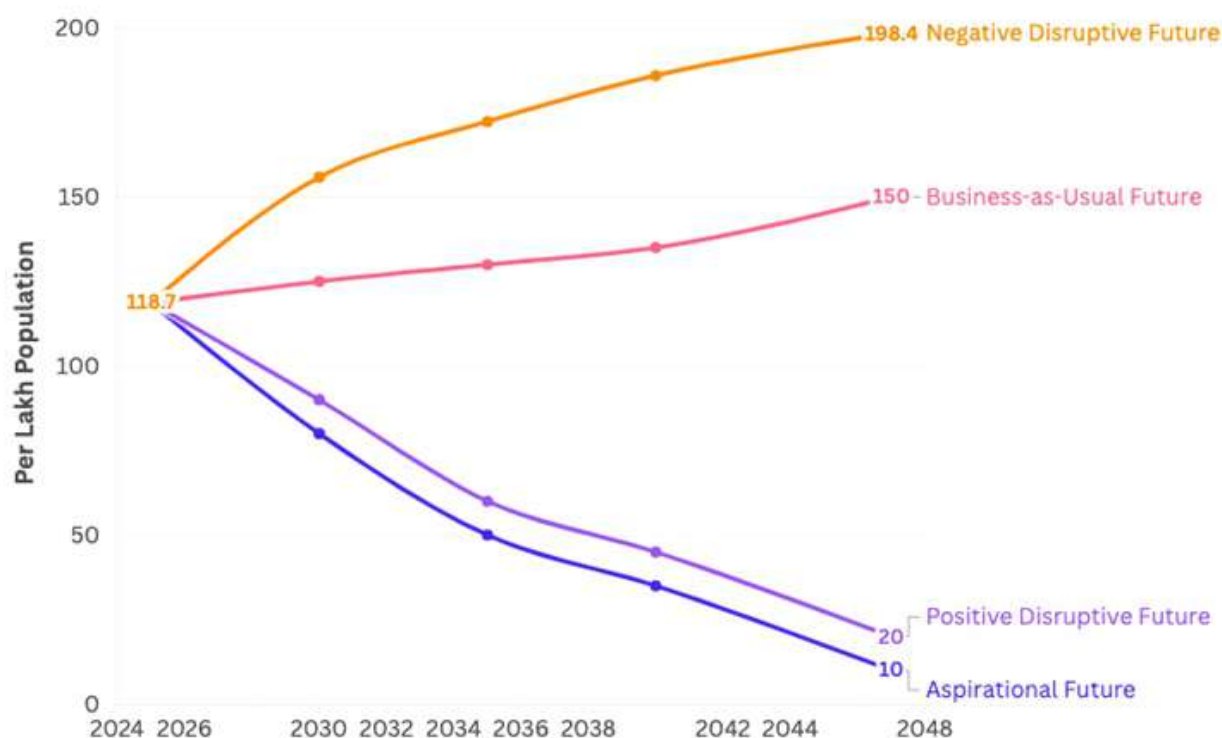
- This scenario assumes the successful implementation of key recommendations from Haryana's Vision 2047. Haryana envisions a future of comprehensive development, equitable prosperity, and sustainable resilience.
- By prioritising green financing and innovation, the state aims for radical reforms towards an environmentally conscious economy.
- Focus on strengthening financial system resilience to sustain growth amid unforeseen challenges.
- Commit to full disaster preparedness and safety, especially for women, children, tourists, and investors.
- Aspire to lead in global partnerships as a premier destination for safe investments and high living standards.
- In the aspirational scenario Haryana's GDP is expected to grow to USD 1.7 trillion with an average annual growth rate of 13.87% at current prices. (Annexure 2).



Graph 5 (a): NSVA Growth (INR Lakh Crore)
(Source :Viksit Haryana@2047: A Triad Framework for Inclusive and Sustainable Growth - Prof. N. K. Bishnoi GJUST Hisar & Ms. Gargi Boora Assistant Professor)



Graph 5 (b): Per Capita Income (INR) (at Current Prices)
(Source :Viksit Haryana@2047: A Triad Framework for Inclusive and Sustainable Growth - Prof. N. K. Bishnoi GJUST Hisar & Ms. Gargi Boora Assistant Professor)



Graph 5 (c): Rate of Crime against Women

HOW WILL WE REACH THERE?

As we navigate the complexities of shaping an aspirational and ambitious future, to ensure that Strategic Mission is successfully implemented, it becomes imperative to confront the hurdles hindering the realisation of our vision. By identifying and addressing these barriers and issues head-on as mentioned below, we can craft actionable strategies to surmount obstacles and progress towards our shared goal of establishing a stable financial system supported by safe and secure environment that fosters economic growth.

Issues

- 🔍 Financial System Resilience & Fiscal Efficiency
- 🔍 Green Financing/Innovative Financing for Green Economy
- 🔍 Safety & Security (Internal Security, Women's Security, Prediction of Futuristic Crime Patterns, Data Security & Privacy, including Cybersecurity Measures)

- 🔍 Partnerships with Developing Countries
- 🔍 Disaster Preparedness
- 🔍 Managing Successful Transitions of Traditional and Old Technology Industries, Manufacturing, and Services to Modern and Future-Proof Sectors, Pursuing the Net-Zero Emissions Goal

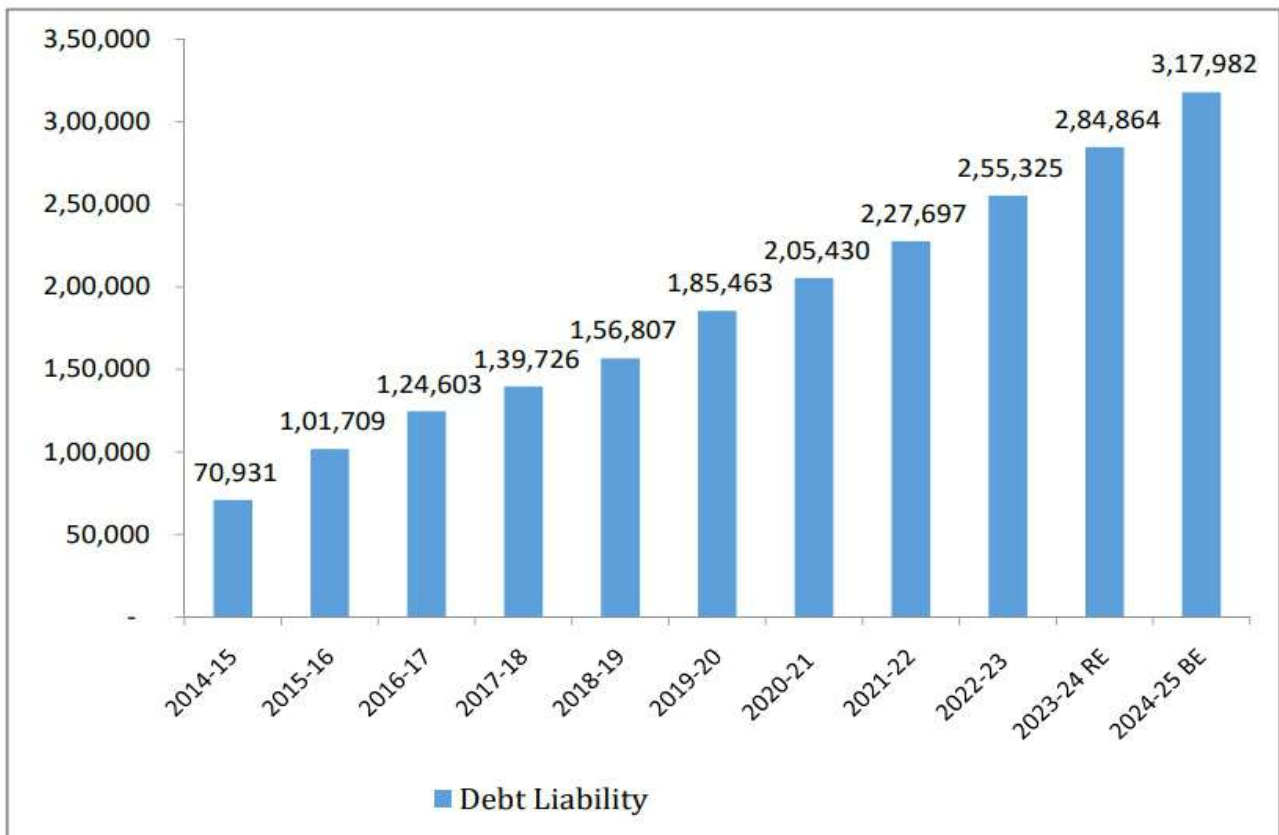
ISSUE 1: FINANCIAL SYSTEM RESILIENCE & FISCAL EFFICIENCY

Haryana's financial system demonstrates resilience through its diverse network of financial institutions, including commercial banks, cooperative banks, Post Office Saving Banks, and Sarva Haryana Gramin Bank branches. The improving Credit-Deposit Ratio indicates more effective utilisation of available funds for lending, which stimulates economic activity. However, the significant portion of expenditure allocated to debt repayment in the 2024-25 budget presents a challenge. While necessary for financial stability, this allocation must be balanced with adequate investment in development initiatives to ensure long-term economic growth. Additionally, opportunities exist to enhance financial inclusion and promote lending to priority sectors like Agriculture, MSME, Housing, Education, and Renewable Energy. Embracing innovative financing mechanisms, particularly in green financing, can support sustainable development while strengthening financial stability.

Current Status

- ✔️ Distribution of financial institutions: 4,775 commercial banks, 612 cooperative banks, 20 Indian Postal Payment Banks, and 690 Sarva Haryana Gramin Bank branches (as of 31 March 2025)³⁰
- ✔️ Credit-Deposit Ratio of Scheduled Commercial Banks improved from 86% (March 2024) to 89% (March 2025)³¹
- ✔️ **Women's Financial Inclusion**³²
 - As of 31 March 2025, 52,70,339 women (50.10% of the total) in Haryana have Pradhan Mantri Jan Dhan Yojana (PMJDY) accounts out of 1,05,19,359 total PMJDY accounts.
 - Out of 4,40,98,537 CASA (Current Account/Savings Account) accounts, 2,33,72,224 (over 53%) belong to women, indicating significant progress in women's financial inclusion.
- ✔️ The state's outstanding guarantee peaked at INR 30,387.70 crore in 2015 but decreased to INR 24,342.60 crore by March 2022³³
- ✔️ Fiscal deficit at 2.7% of GSDP (2024-25)³⁴
- ✔️ Debt-to-GSDP ratio at 26% (2023-24)³⁵
- ✔️ Revenue deficit at 1.10% of GSDP (2023-24)³⁶

Trend in State Debt Liability (INR Crore)

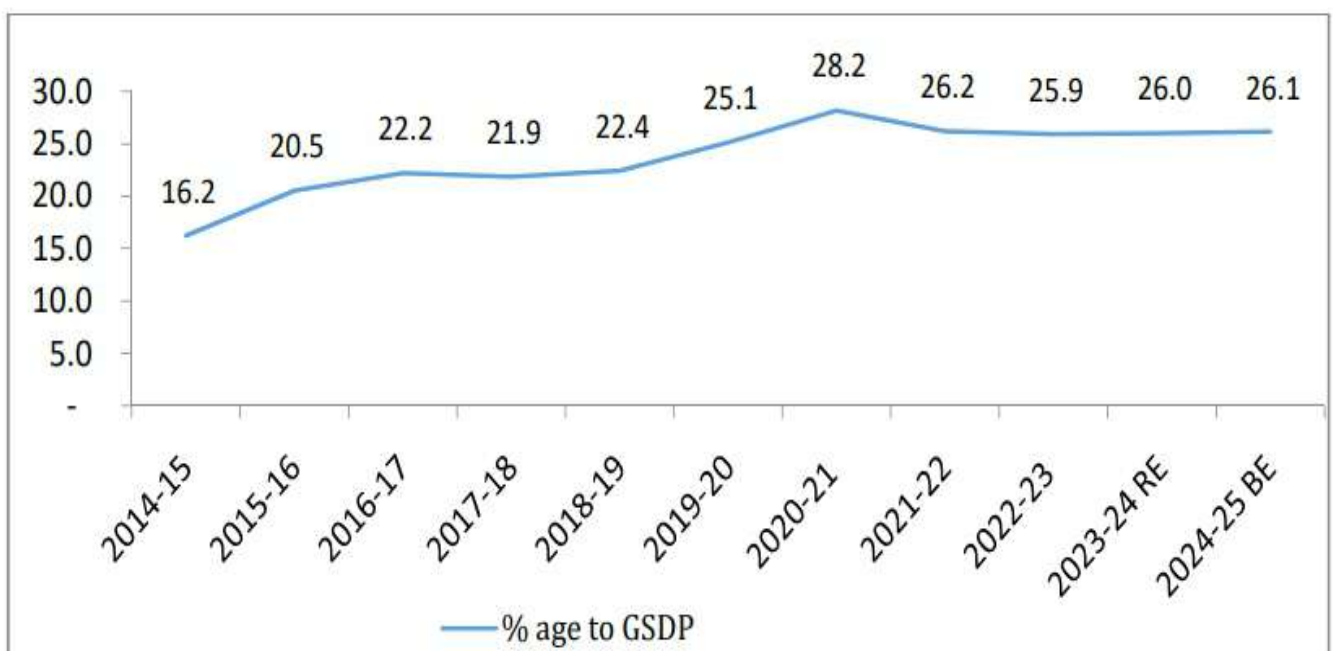


Graph 6: Trend in State Debt Liability

(Source: Finance Department, Haryana. "BUDGET 2024-25.")

<https://cdnbbsr.s3waas.gov.in/s386e78499eeb33fb9cac16b7555b50767/uploads/2024/02/20240223851992219.pdf>

Trend in State Debt Liability to GSDP (%)



Graph 7: Trending State Debt Liability to GSDP

(Source: Finance Department, Haryana. "BUDGET 2024-25.")

<https://cdnbbsr.s3waas.gov.in/s386e78499eeb33fb9cac16b7555b50767/uploads/2024/02/20240223851992219.pdf>

Final Ranking of States for 2022-23

States	FHI Score	Rank 2022-23	Quality of Expenditure	Revenue Mobilisation	Fiscal Prudence	Debt Index	Debt Sustainability
Odisha	67.8	1	52.0	69.9	54.0	99.0	64.0
Chhattisgarh	55.2	2	55.1	56.5	56.0	79.6	29.0
Goa	53.6	3	45.5	87.1	59.4	51.0	25.2
Jharkhand	51.6	4	47.3	45.7	62.4	66.9	35.7
Gujarat	50.5	5	40.0	48.7	52.7	69.0	42.0
Maharashtra	50.3	6	37.1	59.1	41.8	76.4	36.8
Uttar Pradesh	45.9	7	45.8	34.6	44.7	59.9	44.5
Telangana	43.6	8	36.9	75.2	40.8	53.3	11.7
Madhya Pradesh	42.2	9	59.7	27.6	35.6	61.0	27.2
Karnataka	40.8	10	47.4	43.9	43.9	62.2	6.7
Tamil Nadu	29.2	11	32.0	41.2	25.8	36.0	11.1
Rajasthan	28.6	12	38.3	35.4	19.9	32.3	16.8
Bihar	27.8	13	56.1	5.3	11.5	47.2	18.8
Haryana	27.4	14	24.8	47.8	26.1	24.1	14.3
Kerala	25.4	15	4.2	54.2	34.0	23.1	11.3
West Bengal	21.8	16	32.3	12.4	25.4	18.3	20.6
Andhra Pradesh	20.9	17	31.4	22.1	13.3	37.8	0.0
Punjab	10.7	18	4.7	28.1	5.6	0.0	15.2

Table 1: Fiscal Ranking of States
(Source: Fiscal Health Index 2025, NITI Aayog)

Factors Influencing the Issue

Stable governance and regulatory frameworks foster trust in financial institutions. Robust GDP growth and sound fiscal policies support capital inflows and investment opportunities. Technological advancements drive innovation and streamline processes, but require adaptation to emerging cybersecurity risks. Strong regulatory frameworks ensure transparency and accountability, strengthening the financial system's resilience against systemic threats.

Impacts of the Issue

Direct Impact

- Increased economic stability and investor confidence, fostering sustainable growth
- Reduction of systemic risk and financial vulnerabilities, safeguarding overall economic stability
- Enhanced access to financial services across diverse demographics and regions
- Improved public finance management and fiscal sustainability
- Greater transparency and accountability in financial transactions

Indirect Impact

- Improved access to credit and capital for businesses and individuals
- Increased competition among financial institutions, leading to better quality of services
- Enhanced consumer and investor trust, creating conditions for long-term savings and investment
- Promotion of foreign investment inflows and economic development
- Enhanced investor confidence in the state's commitment to sustainability

Global Learnings

Global Best Practice

Green Bond Principles (GBP): The Green Bond Principles by the International Capital Market Association (ICMA) offer globally accepted voluntary guidelines to ensure transparency and integrity in green bond issuance. They emphasise clear use of proceeds, project evaluation, management, and reporting. Widely adopted, the GBP standardises green financing practices, fostering credibility and growth in the global green bond market³⁷.

Disruptive Technologies - Palm Payment in China: The Body as a Wallet

In a remarkable leap toward biometric innovation, China has introduced palm-based payment systems, allowing individuals to make purchases simply by swiping their palm. This cutting-edge technology uses unique vein patterns in a person's hand to verify identity and authorise transactions—eliminating the need for physical cards, smartphones, or even wearables.

Piloted at popular locations like Tencent's cafeteria and now expanding to metro stations and retail outlets, this form of biometric authentication offers unmatched convenience and speed. The palm scan, which takes just a second, is linked to the user's WeChat Pay account, streamlining the entire payment process.

While this advancement raises valid concerns around data privacy and surveillance, it also marks a significant shift in the way financial transactions are conducted. As biometric payments gain traction, they could redefine the future of fintech by integrating identity and access into a single, seamless gesture—literally putting payment power in the palm of your hand.³⁸

Possible Pathways

Short-Term Pathway (2030)

Strengthen Fiscal Transparency:

- Review off-budget borrowings of Public Sector Undertakings (PSUs)
- Establish GST oversight committee to address tax irregularities
- Reform Integrated Financial Management System

Long-Term Pathway (2047)

Institute Long-Term Fiscal Frameworks:

- Create Medium Term Debt Strategy distinct from fiscal policy
- Establish Fiscal Stabilisation Fund for containing economic volatility
- Develop advanced financial forecasting capabilities

Short-Term Pathway (2030)

Empower Local Government Finance

- Implement Own Source Revenue (OSR) augmentation reforms for PRIs and Urban Local Bodies (ULBs)
- Enhance accounting and auditing reforms
- Prevent idle parking of State funds with "Just-in-Time" releases

Enhance Financial Inclusion

- Leverage the State Rural Livelihood Mission (SRLM) to reduce disparities by facilitating access to financial services and sustainable livelihood opportunities.
- Partner with civil society organisations (CSOs) to boost financial literacy in backward districts
- Enhance international collaboration on financial regulations

Implement Proactive Risk Management

- Conduct periodic stress tests and scenario analyses
- Identify and mitigate potential financial stability risks
- Develop early warning systems for financial vulnerabilities and conduct stress tests for macroeconomic vulnerabilities so as to assess the resilience of the financial systems to various shocks

Long-Term Pathway (2047)

Build Sustainable Local Finance Systems

- Strengthen institutional capacity of local governments
- Implement comprehensive revenue generation reforms
- Develop advanced expenditure management systems

Create Comprehensive Financial Ecosystem

- Evaluate impact of financial inclusion programmes
- Support sustainable economic growth mechanisms
- Maintain long-term stability through diversified instruments like green bonds, public-private partnerships, etc
- Explore the development of a state-level financial innovation hub in Haryana, drawing from models like Gujarat's GIFT City and international best practices from Singapore, Hong Kong, and Shanghai, to attract investment, foster fintech growth, and build institutional capacity in financial services

Achieve Financial Resilience

- Deploy advanced systems for anticipating financial risks
- Create adaptive frameworks for new financial challenges by integrating foresight, agile policy-making, robust institutions, and technological adoption
- Build countercyclical financial buffers

ISSUE 2: GREEN FINANCING/INNOVATIVE FINANCING FOR GREEN ECONOMY

In its latest budget, Haryana Government has increased funding for the Energy sector and the Environment and Forest Department, signalling a strong commitment to green financing and sustainable development. While this focus on renewables and conservation is commendable, challenges persist. Effective fund utilisation demands robust oversight and capacity-building. Despite higher allocations, more investment is needed to fully address environmental issues. Striking the right balance between budget priorities and securing additional funding is essential to maximise the impact of green initiatives and ensure long-term sustainability.

Current Status

- ✔ INR 7,195 crore allocated for assistance to public sector and other undertakings in the energy sector (2023- 24)³⁹
- ✔ Total expenditure on new and renewable energy sources: 4.34% (2022-23)⁴⁰
- ✔ Government enhanced "green" budget by approximately 38.67% (2023-24)⁴¹
- ✔ Honourable Chief Minister announced INR 654.36 crore for Environment and Forest Department projects (2023-24)⁴²

Factors Influencing the Issue

International climate agreements like the Paris Accord are driving supportive policies for green finance. Recognition of financial risks from environmental degradation is spurring demand for sustainable investments. Growing public awareness about environmental sustainability is influencing consumer behaviour and investment preferences, creating market demand for green financial products. Financial technology advancements are enabling innovative mechanisms such as blockchain-based carbon trading platforms. Environmental regulations and ESG integration into investment decisions are reshaping the green finance landscape, driven by the urgent need to transition toward a low-carbon economy.

Impacts of the Issue

Direct Impact

- Accelerated deployment of renewable energy and sustainable infrastructure
- Establishment of a highly resilient and sustainable energy system, ensuring reliable access to affordable, clean energy
- Improved environmental quality through reduced pollution and conservation efforts
- Enhanced climate resilience of physical infrastructure and natural systems
- Creation of new green jobs and economic growth opportunities in sustainable industries

Indirect Impact

- Stimulate technological innovation and adoption across sectors
- Improved public health through reduced pollution and better environmental quality
- Alleviate energy poverty and raise living standards, especially in rural and underserved areas
- Boost climate resilience and reduce vulnerability to environmental disasters

Global Learnings

Global Best Practice

OSFI Guideline E-21: Operational Risk and Resilience Framework: Canada's OSFI (Office of the Superintendent of Financial Institutions)

Disruptive Technologies - AI and Blockchain Innovations Driving Sustainable Finance

AI is becoming increasingly vital in guiding sustainable investment strategies, complementing traditional analysis and supporting informed

Guideline E-21 sets a robust framework for Federally Regulated Financial Institutions to manage operational risks and build resilience against disruptions like cyber incidents, pandemics, and third-party failures. It mandates governance-led Operational Risk Management Frameworks (ORMFs), disruption tolerances, and scenario testing. Integrated with related guidelines on tech and third-party risk, it promotes a systemic, cross-functional approach to operational continuity.⁴³

decision-making. Natural-language processing tools and AI-enabled analysis of IoT data help investors identify and verify climate-related investments and risks. Innovative solutions streamline data access and standardisation, enabling efficient navigation of the complex ESG landscape. Blockchain-based digital twins of real-world assets linked to climate data facilitate precise reporting of financed emissions to regulators, mitigating greenwashing risks and allowing banks to access lower borrowing costs through sustainability-linked bonds.⁴⁴

Possible Pathways

Short-Term Pathway (2030)

Establish Policy Framework for Green Financing

- Develop Climate/Environment strategy with Green Taxonomy
- Incorporate climate budgeting in finance rules
- Implement mandatory third-party audits for green projects
- Integrate the 'Haryana Green Cluster Scheme' into the green taxonomy, providing financial incentives for MSMEs adopting sustainable practices
- Incorporate the 'Haryana Industrial Equipment Re-use & Scrappage Scheme' within green financing frameworks to support circular economy initiatives.
- Align the 'Haryana EV for Cargo Logistics Scheme' with green financing policies to promote electric vehicle adoption among MSMEs
- Develop and implement climate risk insurance mechanisms for MSMEs as part of the updated MSME Policy 2019 to mitigate financial shocks from climate-related events

Long-Term Pathway (2047)

Mainstream Climate Finance Across Government

- Establish Climate Budget Cells in all departments
- Ensure specialised expertise in climate/green financing
- Scale up ESG reporting quality to all PSUs in Haryana
- Expand the reach and impact of the 'Haryana Green Cluster Scheme', 'Haryana Industrial Equipment Re-use & Scrappage Scheme', and 'Haryana EV for Cargo Logistics Scheme' to cover a wider array of MSMEs across all sectors
- Ensure the updated MSME Policy, with its focus on climate risk insurance, is fully integrated into the financial planning and support systems for all MSMEs

Ensure Comprehensive Financial Governance

- Ensure all PRIs and ULBs follow good accounting practices
- Timely submission of audited statements
- Implement standardised reporting across local governments

Short-Term Pathway (2030)

Strengthen ESG Reporting & Accountability

- Review ESG reports of PSUs
- Conduct capacity-building training on ESG with Securities and Exchange Board of India (SEBI) and Reserve Bank of India (RBI)
- Improve the quality of ESG reports for key departments

Enable Local Green Finance Mechanisms

- Build the capacity of PRIs and ULBs on green budgeting
- Establish credit ratings for municipal bonds
- Help selected Local Self Governments (LSGs) mobilise finances through green bonds

Implement Digital Financial Monitoring

- Develop Digital Public Financial Management Systems
- Operationalise real-time monitoring of climate finance flows
- Create transparency in expenditure management

Long-Term Pathway (2047)

Scale Green Finance Ecosystem

- Enable more PRIs and ULBs to mobilise green finance
- Expand green municipal bond programmes
- Foster innovation in green finance through R&D, including exploring specific green loan products or bonds tailored for MSMEs adopting sustainable technologies
- Unlock new sources of climate finance, particularly dedicated Green Funds, to scale up climate action in Haryana. By implementing investor-friendly policies, strengthening public-private partnerships, and aligning state-led projects with global sustainability standards, Haryana can attract long-term capital for renewable energy, climate-resilient infrastructure, and adaptation initiatives
- Promote the 'Safety Compliance Scheme' as a key component of green finance, recognising its role in reducing risks and improving environmental health and long-term sustainability
- Expand the 'Support for Obtaining Fire Insurance Policy (Under Haryana Textile Policy)' to other susceptible MSME sectors, integrating it into broader climate risk mitigation and green finance initiatives

Achieve Full Digital Integration

- Scale up digital platforms across all local governments
- Implement advanced analytics for financial monitoring
- Create an integrated financial management ecosystem

ISSUE 3: SAFETY & SECURITY

(Internal Security, Women's Security, Prediction of Futuristic Crime Patterns, Data Security & Privacy, including Cybersecurity Measures)

Ensuring safety and security, particularly for vulnerable groups like women and children, remains a top priority for Haryana. The state has made significant strides through innovative initiatives, with its extensive police force and specialised units continuing to strengthen public safety. Haryana Police has demonstrated remarkable adaptability by proactively embracing technology, successfully implementing the CCTNS and leveraging AI to combat fraud. Building upon these achievements, the state is well-positioned to further enhance its security framework through continued investment in predictive crime analysis, advanced data security measures, and strategic policing efforts. These forward-looking approaches will further elevate Haryana's commitment to ensure the safety and well-being of all citizens as it progresses toward its vision for 2047.

Current Status

Overall Crime Statistics

- Total IPC crimes: 1,25,435 (2022), with a crime rate of 426.3 per lakh population⁴⁵
- Sanctioned strength of police force: 74,699 (2022), with 195 police personnel per lakh population⁴⁶
- Law enforcement infrastructure: 28 Cyber Crime Police Stations, 298 Police Stations, 27 Traffic Police Stations, 33 Women Police Stations, and 150 Police Posts (2022)⁴⁷
- Cybercrime incidents surged from 224 cases in 2015⁴⁸ to 681 in 2022, with an incidence rate of 2.5 per lakh population⁴⁹

Crime against Women & Children

- Crime rate against women per lakh population in Haryana in 2023: 110.3, with charge sheeting rate at 57.2%⁵⁰
- Haryana reported 234 cases of Dowry Deaths in 2022 (rate 1.7), higher than India's rate of 1.0 per lakh women.⁵¹
- 17 cases reported in 2022 under the Dowry Prohibition Act 1961.⁵²
- Haryana's incidence rate for cruelty by husband or his relatives stands at 41.7, double the national average of 20.9, with 5,883 cases being reported in 2022 for 5,887 victims.⁵³
- Of 31,516 cases of sexual harassment in the country in 2022, 916 were reported in Haryana as per NCRB.⁵⁴
- Haryana recorded 1,787 cases of rape (rate 12.7), almost three times India's rate of 4.7. The most affected age group was 18–30 years, with 1,094 victims, followed by 30–45 years with 628 victims.⁵⁵
- 3109 female victims of kidnapping and abduction with the most affected age group in Haryana being 16–18 years, with 1,435 cases, followed by 12–16 years with 1,027 cases.⁵⁶
- Violations under the Immoral Traffic Prevention Act 1965 were slightly higher in Haryana at 0.4, compared to India's 0.2.⁵⁷
- Rate of total crime against children (per one lakh of population) increased from 67.3 in 2022⁵⁸ to 70.2 in 2023⁵⁹
- POCSO cases: 2,142 (2023)⁶⁰
- Child Trafficking in Haryana and in India is comparable at 0.1.⁶¹
- 11 cases of foeticide registered with a 0.1 incidence rate.⁶²

(All non-percentage rates are for per lakh population)

Factors Influencing the Issue

Stable governance and effective law enforcement policies are crucial for maintaining internal security and addressing emerging threats. Investment in security infrastructure and technology is essential for combating crime and ensuring public safety. Addressing gender-based violence is imperative for promoting social cohesion and trust in law enforcement. Advancements in predictive analytics and data security measures play a vital role in anticipating future crime patterns while protecting sensitive information from cyber threats. Robust regulatory frameworks are necessary to ensure compliance with data protection laws and strengthen cybersecurity measures.

Impacts of the Issue

Direct Impact

- Decreased crime rates and improved public safety outcomes
- Enhanced trust and confidence in the government's ability to protect citizens
- Strengthened protection of vulnerable populations, particularly women and children
- Improved defence against cybersecurity threats and data breaches
- More effective law enforcement operations through technology integration

Indirect Impact

- Promotion of economic growth by creating a conducive environment for investment and tourism
- Enhanced social cohesion by reducing fear and anxiety among citizens
- Improved public health outcomes through reduction in crime-related injuries and trauma
- Creation of safer learning environments supporting educational attainment
- Development of more resilient communities and stronger civic engagement
- Enhanced investor confidence in the state's commitment to sustainability

Global Learnings

Global Best Practice

NIST Cybersecurity Framework – United States: The NIST Cybersecurity Framework, structured around five core functions—Identify, Protect, Detect, Respond, and Recover—serves as a global benchmark for managing cybersecurity risks. Widely adopted by U.S. industries and globally referenced, it enhances resilience against cyber threats, with organisations like JP Morgan Chase integrating it to strengthen digital defences.⁶³

Disruptive Technologies - Nation-State Cyber Warfare: Redefining the Digital Threat Landscape

The emergence of nation-state actors in cyber warfare and espionage has introduced a new dimension to the digital threat landscape. Countries worldwide are heavily investing in developing sophisticated cyber capabilities, resulting in state-sponsored hacking groups orchestrating some of the most prominent attacks in recent memory. These attacks not only pose significant threats to cybersecurity but also carry profound geopolitical implications and blur traditional boundaries between conventional and



cyber warfare, challenging existing defence frameworks. As nation-states continue to leverage cyberspace for strategic advantage, addressing this evolving threat demands enhanced international cooperation, robust cybersecurity measures, and innovative defence strategies.⁶⁴

Possible Pathways

Short-Term Pathway (2030)

Develop Community-Based Security Networks

- Launch targeted public safety awareness campaigns, strengthening community policing and expanding women's safety initiatives, including an increase in dedicated 'Mahila Thanas'.
- Organise cybercrime awareness campaigns at community and school levels via workshops and hackathons for early vigilance
- Conduct mandatory gender sensitivity training for Panchayat members to empower them in addressing grassroots-level issues and promoting equitable safety within local communities

Implement Data-Driven Policing

- Develop AI-driven crime prediction tools and unified data-sharing systems for law enforcement
- Utilise AI and data analytics to identify crime patterns and vulnerable areas specifically affecting marginalised populations, enabling targeted preventative measures

Strengthen Security Infrastructure

- Invest in advanced CCTV and AI-powered monitoring, enhancing data-sharing between law enforcement agencies and improving real-time intelligence gathering

Long-Term Pathway (2047)

Create Self-Sustaining Security Systems

- Implement crime reduction mentorship programmes, support rehabilitation for at-risk individuals, and build strong law enforcement-community collaborations
- Establish dedicated community liaison units focused on building trust and addressing the unique safety concerns of senior citizens, children, persons with disabilities, and the Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, Asexual and Others (LGBTQIA+) population

Deploy Predictive Security Systems

- Implement comprehensive real-time monitoring, create integrated threat prevention platforms, and develop automated security response protocols
- Integrate advanced AI and behavioural analytics to predict and prevent crimes targeting vulnerable groups, ensuring proactive protection and rapid response

Establish a Comprehensive Security Framework

- Deploy integrated security networks across sectors, implement self-healing security infrastructure, and create multi-layered defense mechanisms

Short-Term Pathway (2030)

- Ensure public spaces and infrastructure are designed with the safety needs of children, senior citizens, and persons with disabilities in mind, leveraging smart city technologies for enhanced surveillance

Strengthening Correctional Administration and Prisoner Rehabilitation

- Correctional Administration and Prisoner Welfare to mandate policies for reducing prison overcrowding through non-custodial alternatives and ensuring humane treatment and rehabilitation for inmates

Long-Term Pathway (2047)

- Enact and rigorously enforce policies for inclusive public safety, ensuring all security initiatives and technological deployments explicitly protect the rights and safety of children, senior citizens, persons with disabilities, and the LGBTQIA+ community as foundational elements

ISSUE 4: PARTNERSHIPS WITH DEVELOPING COUNTRIES

Haryana's strategic location within the NCR, intersected by major expressways and rail connections, positions it as a key player in fostering partnerships with developing countries. This geographical advantage, combined with substantial FDI inflows from October 2019 to December 2023, underscores the state's appeal as a favourable destination for international business and investment. Haryana's unwavering commitment to global economic engagement is exemplified by its active participation in international trade and exports to countries like Morocco in FY 2020-21. By leveraging its connectivity and financial prowess, Haryana aims to deepen partnerships with developing nations to facilitate economic exchange, knowledge sharing, and capacity building. These collaborations create opportunities for mutual benefit while contributing to sustainable development both within Haryana and partner countries. Through stronger ties with developing nations, Haryana seeks to harness shared expertise and resources to drive inclusive growth and prosperity on a global scale.

Current Status

- ✓ 9.12 billion USD FDI inflows, with the Services sector being a major contributor (October 2019 to December 2023)⁶⁵
- ✓ Haryana's export to Morocco in FY 2020-21 was USD 9.44 million (INR 69.75 crore)⁶⁶

Factors Influencing the Issue

Diplomatic relations and foreign policy priorities shape the scope and nature of partnerships, with government initiatives and bilateral agreements facilitating collaboration. Trade dynamics and investment opportunities drive partnerships, with developing countries offering potential markets, investment capital, and development assistance. Cultural exchanges and people-to-people connections foster goodwill and cooperation, enhancing the foundation for collaborative initiatives. Technological advancements and innovation play a crucial role in

enabling knowledge transfer, capacity building, and joint research projects. Legally, regulatory frameworks and international agreements govern partnership terms and conditions, ensuring compliance and accountability.

Impacts of the Issue

Direct Impact	Indirect Impact
<ul style="list-style-type: none"> • Increased access to financial resources, technology, and expertise for economic development • Enhanced infrastructure development through collaborative projects • Improved security capabilities through cooperative arrangements • Expanded market access for local businesses and products • Strengthened institutional capacity through knowledge exchange 	<ul style="list-style-type: none"> • Stimulation of job creation, entrepreneurship, and economic diversification • Fostering of innovation, research, and technological advancement • Promotion of cultural exchange, mutual understanding, and social cohesion • Enhancement of diplomatic relations and regional stability

Global Learnings

Global Best Practice

The Global Partnership for Effective Development Co-operation (GPEDC) is a multi-stakeholder platform uniting governments, development agencies, civil society, and the private sector to enhance the impact of development cooperation. It promotes transparency, accountability, and results-driven partnerships to ensure inclusive and effective development outcomes across all forms of cooperation.⁶⁷

Disruptive Technologies - Empowering Development through Technology Transfer

Technology transfer serves as a vital conduit, granting developing countries access to cutting-edge knowledge, research, and expertise from across the globe. This access acts as a catalyst for upgrading technological capabilities, fueling innovation, and ensuring that industries can compete internationally. By facilitating the exchange of ideas and expertise, technology transfer empowers developing nations to harness the latest advancements in various fields, from healthcare to renewable energy and beyond. As a result, these countries can leverage innovation to address local challenges, drive economic growth, and enhance their standing in the global marketplace. Ultimately, technology transfer stands as a cornerstone in the pursuit of equitable development and shared prosperity worldwide.⁶⁸

Possible Pathways

Short-Term Pathway (2030)

Establish Strategic Collaboration Frameworks

- Launch targeted pilot initiatives in key sectors
- Organise joint workshops to identify shared priorities
- Implement joint R&D projects in priority areas

Create Exchange & Knowledge Transfer Systems

- Facilitate structured exchange programmes
- Establish city/district twinning arrangements
- Develop collaborative knowledge exchange agreements

Implement Trade & Business Collaboration

- Organise trade missions and business forums
- Create joint business incubation challenges
- Establish platforms for cross-border entrepreneurship
- Encourage investments and collaborations in sectors that promote sustainable development and create inclusive employment opportunities

Formalise Partnership Frameworks

- Set up bilateral research teams
- Establish shared innovation labs
- Apply for co-financed grants

Long-Term Pathway (2047)

Build Institutional Partnership Ecosystems

- Foster long-term agreements between institutions
- Develop reciprocal fellowships and exchange programs
- Create technical exchange residencies
- Create a Strategic Bilateral Cooperation Cell (SBCC) within FCD to formalise MoUs, track cross-border initiatives, and promote sectoral collaboration

Develop Integrated Development Networks

- Collaborate on large-scale infrastructure projects
- Co-design transportation and energy networks
- Pool resources for climate-resilient construction

Establish Sustainable Economic Alliances

- Create joint investment funds for innovation
- Target emerging sectors with high-growth potential
- Organise cross-border startup accelerators
- Ensure the alliances contribute to diversified, resilient economies and foster equitable prosperity for everyone involved
- Facilitating targeted outbound investments by leading Haryanvi entrepreneurs to boost exports from the state and support the global expansion of Haryana's MSMEs into emerging international markets, thereby positioning Haryana as a competitive economic powerhouse by 2047

Institutionalise Global Collaboration

- Create permanent collaboration mechanisms
- Develop self-sustaining partnership models
- Build integrated long-term research initiatives

ISSUE 5: DISASTER PREPAREDNESS

Disaster preparedness in Haryana is a paramount concern, given the state's vulnerability to natural calamities such as floods and seismic activities. The state's flood manual identifies 102 vulnerable points requiring special attention during monsoon seasons, with extensive flood-prone areas covering 23.50 lakh hectares. Haryana's location within seismic zones IV, III, and II further underscores the risk of earthquakes. To address these challenges, the 1st Battalion of the Indian Reserve Battalion (IRB) serves as the Nodal Agency for Disaster Management. A significant number of police personnel have undergone specialised training in Crisis-Specific Search and Rescue (CSSR)/Medical First Response (MFR), Chemical, Biological, Radiological, Nuclear, and Explosives (CBRNE) Response, and Flood Rescue Operations. While these efforts demonstrate proactive measures toward emergency preparedness, continued investment in infrastructure resilience, community engagement, and sustainable land management practices remain essential for enhancing the state's overall disaster resilience and protecting lives and livelihoods.

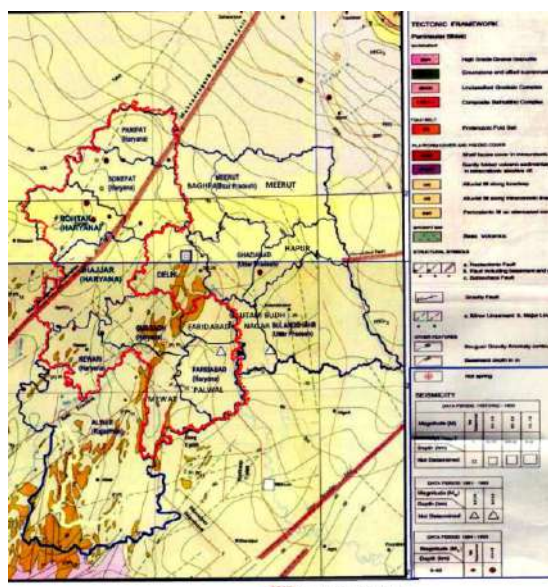


Figure 1: Seismic Tectonic Features in Haryana Sub-Region
(Source: Sub-Regional Plan for Haryana Sub-Region of NCR-2021, Town and Country Planning Department, Haryana)

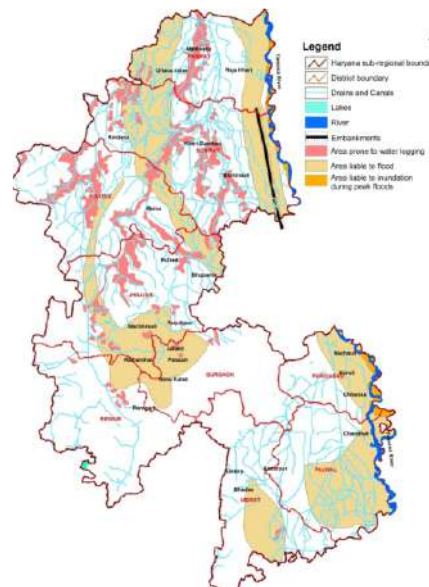


Figure 2: Flood Prone Areas in Haryana Sub-Region
(Source: Sub-Regional Plan for Haryana Sub-Region of NCR-2021, Town and Country Planning Department, Haryana)

Districts of Sub-Region	Earth quack hazard	Flood Hazard	Drought hazard	Fire hazard	Chemical and Industrial	Other types
Faridabad	✓	✓	✗	✓	✓	✓
Palwal	✗	✗	✗	✓	✗	✓
Panipat	✗	✓	✗	✓	✓	✓
Gurgaon	✓	✓	✓	✓	✓	✓
Mewat	✗	✓	✗	✓	✗	✓
Rohtak	✗	✓	✓	✓	✗	✓
Sonipat	✓	✓	✗	✓	✗	✓
Rewari	✗	✓	✓	✓	✓	✓
Jhajjar	✗	✗	✓	✓	✓	✓

Table 2: Analysis of Disaster Management Preparedness in the Haryana Sub-Region
(Source: Sub-Regional Plan for Haryana Sub-Region of NCR-2021, Town and Country Planning Department, Haryana)

Current Status

- ✔ Flood-prone area in Haryana: 23.50 lakh hectares (according to Rashtriya Barh Ayog assessment)⁶⁹
- ✔ 102 vulnerable points identified in Haryana's flood manual requiring special attention during monsoon⁷⁰
- ✔ Haryana falls in seismic zones IV, III, & II, making the region vulnerable to earthquakes⁷¹
- ✔ 1st Battalion IRB designated as the Nodal Agency for Disaster Management in Haryana State⁷²
- ✔ 241 police personnel trained in CSSR/MFR, 70 in CBRNE, and 74 in Flood Rescue, deployed across various companies of 1st IRB throughout the state⁷³

Factors Influencing the Issue

Stable governance and effective policymaking are essential for developing and implementing comprehensive disaster management strategies and regulations. Adequate funding and investment in infrastructure resilience and risk reduction measures are crucial for mitigating disaster impacts on the economy and livelihoods. Community engagement, awareness, and participation in disaster preparedness and response efforts play a vital role in enhancing resilience and reducing vulnerability. Technological advancements, including early warning systems and communication networks, are critical for improving disaster forecasting, response coordination, and public alert mechanisms. Sustainable land management practices and ecosystem conservation are vital for reducing environmental degradation and enhancing resilience to natural hazards.

Impacts of the Issue

Direct Impact	Indirect Impact
<ul style="list-style-type: none"> • Reduced loss of life and injury during disaster events through improved preparedness • Reduced property damage and infrastructure destruction from natural calamities • Enhanced emergency response capabilities and resource deployment efficiency • Improved coordination among disaster management agencies and stakeholders • Protection of critical infrastructure and essential services during emergencies 	<ul style="list-style-type: none"> • Increased community resilience and adaptive capacity to future disaster threats • Reduced economic losses and faster recovery from disaster events • Preservation of livelihoods and agricultural productivity in disaster-prone areas • Improved public confidence in government's disaster management capabilities • Enhanced regional stability through better management of disaster-induced displacement

Global Learnings

Global Best Practice

Philippines' Project NOAH: Project NOAH (Nationwide Operational Assessment of Hazard) is the Philippines' flagship, tech-driven disaster risk reduction programme, offering 6-hour lead

Disruptive Technologies - AI-Powered Early Warning Systems: Revolutionising Disaster Prediction

AI and ML are revolutionising disaster management by enabling advanced, real-time predictions. By analysing data from sources like satellite imagery, weather patterns, seismic

time warnings and enhanced hazard mapping through scientific tools. Managed by the University of the Philippines, it integrates efforts across 21 institutions, including private and media sectors. Its comprehensive, multi-component approach has improved disaster preparedness and serves as a global model for climate-vulnerable regions.⁷⁴

sensors, and social media, these technologies detect early warning signs and subtle anomalies that humans might miss. This leads to more accurate forecasts of events like floods and earthquakes, extending warning times and improving evacuation and preparedness. With each disaster, AI systems learn and improve, enhancing future predictions. Integrated with alert systems and mobile tech, they ensure rapid warnings, potentially saving lives and reducing economic losses.⁷⁵

Possible Pathways

Short-Term Pathway (2030)

Strengthen Early Warning Systems

- Implement advanced forecasting technologies
- Develop multi-channel alert systems
- Ensure last-mile connectivity for warnings. Set up District Emergency Operations Centre in every district
- Set up Haryana's Flood Warning System model, in line with the Integrated Flood Warning System (IFLOWS), Mumbai and Chennai Flood Warning System (CFLOWS) for advanced flood forecasting and planning
- Implement efficient mechanisms to test earthquake resilience of structures

Enhance Response Capacity

- Expand specialised disaster response training
- Procure modern search and rescue equipment
- Establish district-level emergency operation centres

Develop Community Engagement Programmes

- Train community volunteers in disaster response
- Conduct regular mock drills in high-risk areas
- Create community disaster management committees
- Leverage traditional disaster management techniques, local food preservation and storage

Long-Term Pathway (2047)

Build Comprehensive Disaster Resilience Culture

- Integrate disaster education into school curricula
- Create centres of excellence for disaster research
- Deploy sensor networks for continuous monitoring

Create Self-Sustaining Community Resilience

- Build capacity for independent disaster management
- Develop decentralised resource management systems
- Create community-owned emergency infrastructure

Design Disaster-Proof Infrastructure

- Implement next-generation building technologies
- Create resilient and decentralised utility systems
- Develop self-healing infrastructure components

Establish Regional Cooperation Frameworks

- Develop cross-border disaster management protocols
- Create platforms for joint exercises
- Implement international knowledge-sharing initiatives

Short-Term Pathway (2030)

- practices, and launch a state-wide IEC (Information, Education, and Communication) campaign to promote grassroots resilience and awareness

Implement Risk Reduction Planning

- Integrate disaster resilience in development planning
- Enforce building codes in seismic zones
- Implement land-use planning for vulnerable areas

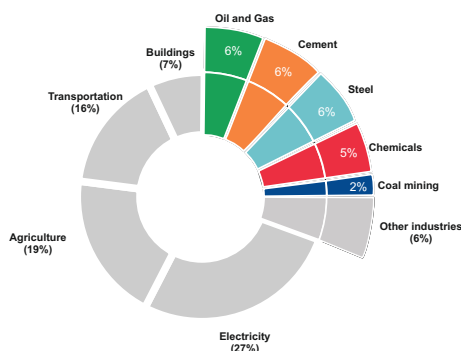
ISSUE 6: MANAGING SUCCESSFUL TRANSITIONS OF TRADITIONAL AND OLD TECHNOLOGY INDUSTRIES, MANUFACTURING, AND SERVICES TO MODERN AND FUTURE-PROOF SECTORS PURSUING NET-ZERO EMISSIONS GOAL

Managing the just transition of industries, manufacturing, and services sectors towards achieving net-zero emissions by 2050 requires strategic and coordinated efforts. Key heavy industries such as cement and concrete, iron and steel, oil and gas, chemicals, and coal mining, accounting for 80% of industrial emissions, must undergo substantial transformation by 2030 to align with this objective. Additionally, the increasing demand for crucial elements like aluminium, steel, and minerals essential for renewable energy infrastructure underscores the urgency for transition. India's ambitious renewable energy targets and the projected creation of green jobs highlight the potential for sustainable growth. Prime Minister Narendra Modi's commitment to achieving net-zero emissions by 2070, along with the introduction of a "net-zero emissions" bill in the Indian Parliament, signifies a crucial step towards fostering a green economy. The challenge lies in ensuring this transition prioritises economic prosperity, environmental sustainability, and social equity, particularly for communities and workers in carbon-intensive sectors who may face significant disruption.

Current Status

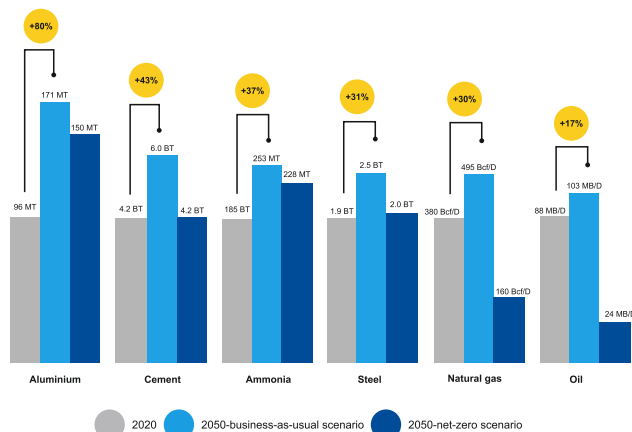
- ✔ Major emission reduction is urgent in five heavy industries - cement/concrete, iron/steel, oil/gas, chemicals, and coal mining, which account for 80% of industrial emissions and must transform by 2030 to maintain the feasibility of 2050 net-zero targets⁷⁶
- ✔ Critical metals and minerals needed for renewable infrastructure will see dramatic demand increases (steel +30%, cement/ammonia +40%, aluminium +80%) over the next three decades. India's renewable capacity is set to double by 2028, becoming the world's third-largest market⁷⁷
- ✔ The ILO projects 54 million green jobs in India by 2030, with the Skills Council for Green Jobs estimating 30-35 million green sector jobs by 2047⁷⁸
- ✔ India announced a 2070 net-zero target at COP26 (2021) and submitted its first Low-Carbon Development Strategy at COP27, followed by a "Net-Zero Emissions" Bill introduced in Parliament (December 2022)⁷⁹

5 heavy industries represent 80% of industrial emissions



Notes: Oil and gas also includes refining. Steel includes iron. Cement includes concrete

Graph 8: Emissions by Sector vs Global Emissions (51 GtCO₂e)
(Source: World Economic Forum)



Notes: *Based on IEA Stated Policies Scenario (STEPS) for all except aluminium; International Aluminium Institute (AI) Business-as-Usual scenario and cement (Global Cement and Concrete Association (GCCA) Business-as-Usual scenario); Based on IEA Net-Zero 2050 scenario for all except aluminium; AI 2060 Net-Zero scenario; *Demand for aluminium based on 2010 data; Ammonia demand does not include ammonia as an energy carrier; Bcf/D: billion cubic feet per day; BT: billion tonnes; MB/D: million barrels per day; MT: metric tonne

Graph 9: Global Demand Projections by Industry 2050
(Source: World Economic Forum)

Factors Influencing the Issue

Supportive government policies and regulations are essential to incentivise and facilitate the transition while ensuring social equity and justice. Investing in green technologies and sustainable practices can drive innovation and competitiveness, albeit with potential short-term costs. Engaging with affected communities and workers to address concerns about job losses and retraining opportunities is crucial for fostering acceptance and support for the transition. Advancements in renewable energy, carbon capture, and sustainable practices offer opportunities for decarbonisation but may require significant investment and infrastructure upgrades. Clear frameworks and standards are needed to guide the transition and ensure compliance with environmental regulations. Mitigating climate change impacts and reducing carbon emissions are paramount, requiring ambitious targets and collective action.

Impacts of the Issue

Direct Impact

- Significant reduction in greenhouse gas emissions and air pollution from industrial operations
- Creation of new green jobs across renewable energy, sustainable manufacturing, and circular economy sectors
- Transformation of industrial processes and business models toward sustainable practices
- Development of new clean technology markets and supply chains
- Enhanced energy security through diversification of energy sources

Indirect Impact

- Improved public health outcomes from reduced pollution and cleaner production processes
- Economic restructuring in regions historically dependent on carbon-intensive industries
- Shifting workforce requirements necessitate new skills and training programmes
- Increased competitiveness in global markets, emphasising upon low-carbon products
- Development of more sustainable urban and industrial environments
- Potential redistribution of economic opportunities across regions and communities

Global Learnings

Global Best Practice

Germany's Ruhr Region: From Coal Mining Hub to Green Industry Centre : Germany's Ruhr region showcases a successful industrial transition from coal mining to green industry through long-term strategic planning, starting with the 1968 Ruhr Development Programme. Despite major job losses, inclusive stakeholder engagement, trade union collaboration, and service sector growth enabled economic recovery. The shift reflects how worker support and environmental remediation can drive a just, net-zero transition.⁸⁰

Disruptive Technologies - Green Hydrogen: Transforming Industrial Decarbonisation

India's National Green Hydrogen Mission (INR 19,744 crore allocation) targets 5 million tonnes of annual production by 2030, with costs projected to fall from USD 5-6/kg to under USD 2/kg. In Haryana, Jindal Stainless has committed INR 1,800 crore to transition its Hisar facility to hydrogen by 2028, targeting 50% emissions reduction. The state's strategic location positions it as a key industrial hub, with its Electric Vehicle Policy now including hydrogen vehicle development and three refueling stations planned along the Delhi-Chandigarh highway. This aligns with national efforts like GAIL's 4.3 tonnes/day green hydrogen plant in Madhya Pradesh and ArcelorMittal Nippon Steel's pioneering green steel facility in Gujarat, which promise 80% carbon reduction compared to conventional methods.⁸¹

Possible Pathways

Short-Term Pathway (2030)

Launch Industrial Efficiency Programmes

- Provide technical assistance and energy audits
- Support the implementation of the best available technologies
- Establish energy performance standards

Develop Green Skills Programmes

- Assess workforce needs in emerging green sectors
- Create specialised training with industry partners
- Establish reskilling initiatives for carbon-intensive sectors

Long-Term Pathway (2047)

Create Comprehensive Carbon Management

- Develop integrated carbon capture networks
- Establish carbon utilisation hubs
- Implement geological storage infrastructure

Build Resilient Green Industrial Ecosystems

- Design industrial systems with climate adaptation
- Develop fully circular material flows
- Create regenerative business models

Achieve Renewable Energy Integration

- Implement smart energy systems for industry
- Develop large-scale seasonal energy storage
- Create intelligent demand response capabilities

Short-Term Pathway (2030)

Implement Clean Technology Pilots

- Support green hydrogen demonstration projects
- Deploy carbon capture pilots at industrial facilities
- Establish circular economy models for waste streams

BIG ACTIONS

1. Trillion NEXT Haryana

A forward-looking plan to guide Haryana toward a trillion dollar plus economy by 2047, harnessing performance-linked budgeting, crowd-sourced innovation, and public-private infrastructure investments for inclusive, long-term financial stability. As part of this vision, each district will develop its own 'District High-Growth Action Plan', leveraging local resources and sectoral strengths to drive bottom-up economic expansion and ensure a balanced, resilient statewide transformation.

2. Cyber Fort 2047

Haryana will deploy a cutting-edge safety network combining AI surveillance, rapid-response systems, and community-led vigilance. This next-gen security grid will safeguard families, women, and the workforce round-the-clock in every district.

3. Quantum Ledger Alliance

A visionary initiative where Haryana invests in next-generation blockchain solutions and digital identity frameworks, forging a tamper-proof ledger for land records, supply chains, and financial transactions. By fusing AI-based risk analytics with state-of-the-art cryptographic technology, the government ensures unstoppable trust in public services, opens new avenues for trade, and solidifies Haryana's position as a pioneer in frictionless commerce and finance.

WORKING GROUP - 1

Departments

- 1. Finance Department
- 2. Training Department
- 3. Planning Department
- 4. Home Department
- 5. Swarna Jayanti Haryana Institute for Fiscal Management
- 6. Department of Economic and Statistical Affairs Haryana
- 7. Haryana Police

Timeline

23/08/2023



First meeting

07/08/2024



Second meeting

21/09/2024



Third meeting



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