

Indo-Russian Economic Cooperation: Prospects and Pathways for Multisectoral Engagement

Sumant Swain

Eurasian Foundation, India, Chief Editor, Eurasian Report and Faculty, International
Institute of Health Management Research (IIHMR), New Delhi, India

ABSTRACT

India and Russia share one of the most enduring strategic partnerships in contemporary international relations. Bilateral relations have evolved through distinct historical phases, from the Soviet era characterized by state-led industrial cooperation and rupee–ruble trade mechanisms to the post-Soviet period marked by market-oriented economic engagement and diversified sectoral collaboration. This article critically examines the evolution, structure, and prospects of India–Russia economic cooperation with particular emphasis on trade dynamics, industrial collaboration, energy security, technology partnerships, and emerging areas such as artificial intelligence and rare earth minerals. The paper highlights how Soviet technical assistance significantly contributed to India’s industrialization during the early decades after independence through major projects in steel, petroleum refining, heavy engineering, and energy production. However, the collapse of the Soviet Union in 1991 disrupted established trade mechanisms, resulting in a sharp contraction in bilateral trade and a gradual transition toward market-based economic relations. In the contemporary period, energy trade—particularly crude oil imports—has become the dominant component of bilateral commerce, creating a significant trade imbalance. Despite strong political relations and a “Special and Privileged Strategic Partnership,” economic cooperation remains below potential. The article identifies key bottlenecks including limited diversification of exports, logistical constraints, financial settlement issues, visa restrictions, and insufficient private sector participation. It further explores emerging opportunities in sectors such as nuclear energy, pharmaceuticals, digital technology, rare earth minerals, railways, artificial intelligence, and defence industrial cooperation. The paper concludes that enhanced institutional frameworks, improved financial connectivity, and deeper integration through mechanisms such as a Free Trade Agreement between India and the Eurasian Economic Union could significantly strengthen the economic dimension of this strategic partnership.

Key word: India–Russia relations, economic cooperation, energy security, trade relations, strategic partnership, and technology collaboration

Address for correspondence : Dr. Sumant Swain, Assistant Professor, International Institute of Health Management Research, Sector 18 A, Plot no 3, Dwarka, New Delhi, Pin:110075, India.
Email: sumanta.swain@gmail.com
ORCID ID: <https://orcid.org/0000-0003-2513-1739>

© The Author(s) 2024. Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third-party material in this article are included in the article’s Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article’s Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

For reprints contact: voiceforvoiceless2013@gmail.com

Received	Reviewed	Accepted	Published
05-June-2025	27-Sept.-2025	22-Oct.-2025	01-Dec.-2025

Volume	Issue	December	ISSN
No. 7	No. 2	2025	2583-1852(P), 2584-0878(O)

How to Cite this Article: Swain, Sumant. Indo-Russian Economic Cooperation: Prospects and Pathways for Multisectoral Engagement. THE THIRD VOICE: REALITY AND VISION. 2025. Vol No-7. Issue No-2. December. Pp: 27-38, DOI: <https://doi.org/10.5281/zenodo.19411838>.

ACCESS THIS ARTICLE ONLINE

Quick Response Code:



Available online at :
thirdvoice.voiceforvoiceless.in

DOI:
<https://doi.org/10.5281/zenodo.19411838>
Article No - TVRV00094

INTRODUCTION

India has emerged as one of the most dynamic economies in the contemporary global system, becoming the world's fourth-largest economy by nominal Gross Domestic Product (GDP) and the fastest-growing major economy. Anchored in the long-term developmental vision of *Viksit Bharat 2047*, India aims to transform into a developed nation by the centenary of its independence. According to the *Economic Survey of India 2025–26*, real GDP growth for FY2025–26 is estimated at 7.4 percent, with projections for FY2026–27 ranging between 6.8 and 7.2 percent and a medium-term potential growth rate of around 7 percent annually, reflecting sustained macroeconomic stability despite global economic volatility. The survey further notes that India contributes more than 16 percent to incremental global growth and is expected to become the world's third-largest economy by 2030 with a projected GDP of approximately US\$7.3 trillion. Complementing these assessments, projections by the International Monetary Fund (2026) estimate India's nominal GDP at about US\$4.51 trillion, with a growth rate of 6.2 percent and a per capita income of roughly US\$3,051. With a population of nearly 1.4 billion—around 17.79 percent of the global population—India's demographic scale, expanding domestic market, and strong economic momentum position it as a structurally significant driver of global economic expansion. In contrast, Russia, with a population of approximately 143 million, remains one of the largest emerging economies in terms of aggregate output and strategic resource endowments. According to IMF projections for 2026, Russia's nominal GDP is estimated at around US\$2.51 trillion, with a projected real growth rate of about 1.0 percent and a per capita income of approximately US\$17,287 despite special military intervention of Ukraine and western sanctions. The Russian economy is characterized by abundant natural resources—particularly hydrocarbons—along with advanced capabilities in energy, defence production, metallurgy, and heavy industry.

Against this economic backdrop, India and Russia share a longstanding and resilient partnership encompassing political, defence, economic, scientific, cultural, and people-to-people cooperation. The bilateral

relationship, which traces its origins to the Tsarist period and strengthened during the Soviet era, has evolved into a contemporary “Special and Privileged Strategic Partnership.” Since the signing of the India–Russia Strategic Partnership Declaration in 2000 and its elevation in 2010, bilateral engagement has been supported by institutional mechanisms such as the India–Russia Intergovernmental Commission (IRIGC) and the 2+2 ministerial dialogue, ensuring regular strategic coordination. The Annual Summit between the Prime Minister of India and the President of Russia, with more than twenty-three summits held to date, represents the highest level of bilateral dialogue. Relations between the two countries have traditionally been characterized by equality, mutual respect, trust, multi-faceted, multi-dimensional, and convergence on major international issues. The Programme for the Development of Strategic Areas of Russian–Indian Economic Cooperation until 2030, adopted at the bilateral summit, outlines a comprehensive roadmap for expanding trade, investment, and sectoral collaboration. Bilateral trade has grown rapidly in recent years, approaching US\$70 billion, although India's share in Russia's imports remains below 2 percent, indicating significant untapped potential. Both countries have therefore set an ambitious target of increasing bilateral trade to over US\$100 billion by 2030, with particular emphasis on expanding Indian exports and creating a more balanced economic partnership. Historically, Russia and India have consistently supported each other during both favourable and challenging periods, reinforcing the depth of trust and solidarity that continues to underpin this enduring partnership.

SOVIET PERIOD

Following independence, India sought to dismantle the colonial economic structure and overcome structural backwardness through rapid industrialization anchored in state-led planning. This strategy, formalized in the Industrial Policy Resolution of 1956 and operationalized through successive Five-Year Plans, emphasized the development of heavy industry in the public sector. Given limited domestic capital and technology, and the reluctance of Western capitalist countries to support such state-directed industrialization, India turned to the Soviet Union for cooperation.

The first major milestone was the 1955 agreement to establish the Bhilai Steel Plant, marking the beginning of large-scale Soviet technical and financial cooperation. Soviet assistance extended beyond individual projects to the creation of integrated industrial complexes linking raw material extraction, machine building, and skilled manpower training. Over 120 industrial enterprises were built with Soviet technical cooperation, including major steel plants at Bokaro Steel Plant and heavy machinery facilities at Ranchi and Durgapur.

In the petroleum sector, Soviet experts played a pivotal role in exploration and refinery construction, including facilities at Barauni, Koyali, Mathura, and Guwahati, and contributed significantly to strengthening Oil and Natural Gas Corporation (ONGC). Cooperation also spanned power generation, coal mining, and pharmaceuticals, substantially expanding India's industrial and energy capacities.

By the early 1980s, enterprises built with Soviet assistance accounted for a large share of India's steel, heavy machinery, power equipment, oil production, and coal output. These state-sector enterprises formed the backbone of India's industrial economy, reinforcing economic self-reliance and reducing dependence on foreign capital. Soviet assistance thus played a transformative role in shaping India's public-sector-led development trajectory.

INDO-SOVIET TRADE

India's foreign economic relations underwent a significant transformation following independence in 1947, reflecting the consolidation of its political sovereignty and the strategic pursuit of economic self-reliance. Within this evolving framework, economic engagement with the Soviet Union (USSR) emerged as a cornerstone of India's external trade policy during the Cold War period. The share of the USSR in India's total exports increased substantially from approximately 1 percent in 1951 to 19.3 percent in 1982. Similarly, the Soviet share in India's total imports rose from 0.2 percent to 8.5 percent over the same period. Indo-Soviet trade turnover expanded markedly, from 0.5 billion Rubles

during 1956–1960 to 5.1 billion Rubles in 1976–1980, and further to 10 billion Rubles during 1981–1984. By the 1980s, India had become the Soviet Union's largest trading partner among developing countries, while the USSR ranked among India's principal trading partners, accounting for nearly 18 percent of India's exports and more than 10 percent of its imports.

Indo-Soviet trade and economic relations were institutionalized through long-term bilateral agreements, which insulated trade flows from volatility in global markets. This structured framework provided predictability in prices and volumes, thereby ensuring mutual protection from international market fluctuations. Such arrangements were consistent with India's planned development strategy and the Soviet model of state-led economic coordination.

An examination of the commodity composition of bilateral trade reveals a complementary structure. Capital goods dominated India's imports from the Soviet Union, particularly during the rapid industrialization phase from the mid-1950s to the mid-1960s. During this period, machinery and equipment accounted for approximately 54–68 percent of India's total imports from the USSR, facilitating the development of heavy industry and infrastructure. In subsequent decades, the share of machinery declined, while imports of petroleum products and fertilizers increased, reflecting shifts in India's developmental priorities and energy requirements.

Conversely, the Soviet Union emerged as a major market for India's traditional exports, including agricultural products and consumer goods. In the context of intense competition in global markets, the USSR provided a stable and assured outlet for Indian goods. At the same time, India functioned as a reliable market for Soviet capital goods, reinforcing the reciprocal nature of the trade relationship.

A distinctive feature of Indo-Soviet economic cooperation was the rupee trade and clearing arrangement. In conditions characterized by acute shortages of hard currency, the bilateral clearing system enabled trade settlement in non-convertible currencies. This mechanism allowed India to import essential capital

goods from the Soviet Union without expending scarce foreign exchange reserves. The rupee trade system played a pivotal role in expanding bilateral commerce, contributing to trade turnover reaching approximately 5.5 billion USD by 1990. Overall, Indo-Soviet economic relations represented a strategically structured partnership that supported India’s industrialization and reduced its vulnerability to external market shocks.

POST SOVIET PERIOD

The post-disintegration phase of the Soviet Union marked a period of sharp contraction and structural instability in Indo-Russian economic relations. Bilateral trade declined precipitously from approximately USD 5.5 billion in 1990 to USD 0.5 billion in 1992. This dramatic fall was largely attributable to Russia’s transition toward a market economy under radical reforms initiated during the presidency of Boris Yeltsin. The abolition of the state monopoly over foreign trade and the discontinuation of intergovernmental trade protocols exposed bilateral commerce to market forces, undermining the previously insulated rupee-based clearing system.

Simultaneously, the transformation of the Russian market from a seller’s to a buyer’s market intensified competition. Indian exporters, who had previously enjoyed preferential access, faced competition from countries such as China, Turkey, and the United Arab Emirates. Although the 1993 debt-repayment arrangement provided temporary support—allowing India to repay Soviet-era debts through goods exports—nearly 80 percent of exports were routed through this channel, raising concerns about quality control, corruption, and reputational decline.

Throughout the 1990s and early 2000s, trade volumes fluctuated and remained below pre-1991 levels. A persistent structural weakness has been the narrow commodity base: Indian exports largely comprise agricultural goods, textiles, and pharmaceuticals, while Russian exports are dominated by energy, metals, fertilizers, chemicals, and defense-related supplies, including equipment for the Kudankulam Nuclear Power Plant. This limited diversification continues to constrain the depth and resilience of bilateral trade.

Table: Export and Import between India and Russia in FY 2024-2025

Exports from India to Russia -FY 2024-25 (billion USD)	Imports from Russia to India-FY 2024-25 (billion USD)
Engineering Goods (1.26)	Crude Petroleum (56.8)
Electronic Goods (0.86)	Animal/Vegetable Oils (2.39)
Drug Formulations (0.58)	Fertilizers (1.84)
Chemicals (0.55)	Pearls & Precious Stones (0.43)
Other Exports (0.25)	Other Commodities (0.24)

(Sources: Ministry of Commerce, Government of India)

Russia has historically been an important market for Indian tea and textiles; however, exports of these traditional commodities have experienced a sustained decline in recent years, with India increasingly losing market share to competitors such as Sri Lanka, particularly in the tea segment. Although pharmaceutical exports have shown a recent upward trend after years of stagnation, India’s overall export basket to Russia remains narrow and limited in value. In FY 2024–25, India’s total imports from Russia reached approximately USD 63.84 billion, heavily dominated by crude petroleum, which accounted for nearly 89 percent of total imports. By contrast, India’s exports to Russia stood at only about USD 4.88 billion, led primarily by engineering goods and electronic products. This structural asymmetry highlights a pronounced trade imbalance between the two countries.

PROSPECTS AND PATHWAYS FOR ENGAGEMENT

India and Russia possess large and complementary economies, which create significant potential for expanding bilateral trade and economic cooperation. Despite this inherent complementarity and the existence of a strong strategic partnership, the current level of economic engagement between the two countries remains below its potential. India and Russia maintain a “Special and Privileged Strategic Partnership” and enjoy a long-standing and robust political relationship characterized by mutual trust and regular high-level engagement. However, bilateral trade has not adequately reflected the depth of this strategic partnership nor the economic opportunities available to both sides.

Recognizing this gap, the governments of India and Russia have repeatedly expressed concern regarding the relatively modest scale of bilateral trade. To address this issue, both countries established a Joint Study Group to explore mechanisms for strengthening economic ties and identifying avenues for expanding trade and investment cooperation. As part of their long-term economic engagement strategy, the two countries have set an ambitious target of achieving bilateral trade turnover of USD 100 billion by 2030. Furthermore, during the 23rd Annual India–Russia Summit, both sides signed the Programme for the Development of Strategic Areas of Russian–Indian Economic Cooperation until 2030, which provides a comprehensive framework for enhancing collaboration in key sectors such as trade, investment, energy, technology, and infrastructure. This programme aims to unlock the untapped potential of the bilateral relationship and align economic cooperation more closely with the broader strategic partnership between the two nations.

BANKING SECTOR

Cooperation in the banking and financial sector has played an important role in facilitating economic relations and trade between India and Russia, particularly in the post-Soviet period. Following the dissolution of the Soviet Union in 1991, both countries undertook efforts to modernize their financial systems and establish institutional banking channels to support bilateral trade. However, challenges emerged after the financial crisis in Russia in 1998, when Indian banks lost confidence in the Russian banking system and stopped honoring Letters of Credit (LCs) and guarantees issued by Russian banks, which created difficulties in trade facilitation. The exhaustion of rupee funds generated from the earlier debt repayment arrangements further underscored the urgent need for stronger banking infrastructure to support bilateral trade. In response, several initiatives were undertaken to improve financial connectivity between the two countries. State Bank of India and Canara Bank, which had maintained representative offices in Moscow since the Soviet era, established a joint venture bank with a 60:40 equity structure to strengthen banking cooperation. ICICI Bank also

entered the Russian market by acquiring a Russian bank, thereby expanding financial services for businesses engaged in bilateral trade. At the same time, Russian banks have increased their presence in India, with institutions such as Vnesheconombank, Sberbank, and VTB Bank opening offices in New Delhi to support trade financing, infrastructure projects, and investment cooperation. In recent years, banking cooperation has gained renewed significance as both countries have explored alternative financial mechanisms such as rupee–ruble settlement systems and the use of national currencies in trade in order to reduce dependence on Western financial networks. Coordination between the Reserve Bank of India and the Central Bank of Russia has focused on improving payment settlement mechanisms, expanding banking connectivity, and facilitating trade in sectors such as energy, defence, fertilizers, and industrial goods. These developments demonstrate the growing strategic importance of financial cooperation in sustaining and expanding economic engagement between India and Russia in the evolving global financial environment.

LOGISTICS AND TRANSPORT

Shipping arrangements have become an increasingly important component of the expanding economic partnership between India and Russia, particularly as bilateral trade has grown in sectors such as energy, fertilizers, and industrial machinery. Maritime transport plays a crucial role in facilitating the movement of goods between the two geographically distant countries. Historically, much of the cargo movement between India and Russia has relied on shipping companies from third countries, highlighting the need for stronger bilateral shipping arrangements and improved port infrastructure to support expanding trade volumes. Strengthening maritime logistics and transport connectivity is therefore essential for reducing costs, improving supply chain efficiency, and promoting greater trade integration between the two economies. In recent years, both countries have prioritized the development of alternative and more efficient transport routes. A major initiative in this regard is the International North–South Transport Corridor (INSTC), a multimodal network connecting India with Russia through Iran, the Caspian

Sea, and Central Asia. Once fully operational, the INSTC is expected to significantly reduce transit time—potentially by nearly half—for goods transported between India and Russia. Additionally, new connectivity initiatives such as the Chennai–Vladivostok Maritime Corridor and Russia’s promotion of the Northern Sea Route across the Arctic region are gaining attention as potential alternatives for faster trade flows. The simultaneous development of these transport corridors reflects the growing importance of maritime connectivity in strengthening India–Russia trade and enhancing economic cooperation across the broader Eurasian region.

INSURANCE COVERAGE

Insurance services play a crucial role in supporting cross-border trade by covering risks related to transportation, investments, industrial projects, and financial transactions. Institutions such as the Export Credit Guarantee Corporation of India (ECGC) provide protection to Indian exporters against commercial and political risks associated with international trade. However, Russia has often been categorized by ECGC under a lower risk classification (B grade), which effectively limits insurance coverage to about 60–80 percent for exports to Russia. This classification has been viewed by many exporters as a constraint on expanding trade and may discourage Indian companies from entering the Russian market. As bilateral trade, particularly in energy shipments and maritime transport, has increased, there is a growing need for stronger insurance cooperation and improved risk-coverage mechanisms to ensure secure and sustainable trade flows between the two countries.

VISA PROCEDURES

Visa procedures have occasionally posed challenges in the development of economic and people-to-people relations between India and Russia. In the past, Indian business representatives and professionals reported administrative delays, complex documentation requirements, and difficulties during entry procedures, which discouraged some entrepreneurs from exploring business opportunities in Russia. These constraints were

partly linked to concerns about illegal migration through Russian territory toward Europe, which led Russia to emphasize stricter visa controls and discussions on a re-admission agreement with India. However, both governments have gradually taken steps to address these issues and facilitate smoother mobility. Russia has introduced electronic visa facilities and expanded long-term business visas to ease travel for trade, tourism, and academic exchanges. India has also proposed measures such as 30-day free e-tourist visas for Russian citizens, along with agreements on manpower mobility, skilling, education, and youth exchanges. With more than 70,000 Indians currently working in Russia, improved visa facilitation is expected to strengthen labor mobility, tourism, and business cooperation between the two countries.

ENERGY SECTOR

Energy cooperation has emerged as a central pillar of the economic partnership between India and Russia in the post-Soviet period. As India’s energy demand has increased rapidly due to industrialization, urbanization, and rising consumption, Russia—one of the world’s largest producers of hydrocarbons—has become a key partner in ensuring India’s long-term energy security. Indian public sector companies have invested in Russia’s upstream energy sector, most notably through ONGC Videsh Limited’s participation in the Sakhalin-1 project, where India invested about USD 1.7 billion and secured long-term oil supplies. India has also explored investment opportunities in other Russian projects, including the Sakhalin-3 project, the Kovytko gas field, and oil and gas reserves in East Siberia. Cooperation between major energy companies has further strengthened this partnership, with Russian energy giant Gazprom signing agreements with GAIL and ONGC Videsh for gas supply, exploration, and joint operations, including activities in the Bay of Bengal. Russia has also emerged as one of India’s largest crude oil suppliers, helping stabilize global energy markets and supporting India’s energy requirements during periods of geopolitical volatility.

Another significant dimension of bilateral energy cooperation is nuclear power development. Russia has

played a major role in supporting India's civilian nuclear energy programme through technology transfer, technical expertise, and financial cooperation. The Kudankulam Nuclear Power Plant in Tamil Nadu, developed with Russian assistance from Rosatom, represents one of the largest examples of Indo-Russian technological collaboration in the energy sector. Beyond the initial two reactors, both countries have worked to commission another four units, which will be operational soon to expand the project with additional reactors and explore advanced technologies such as small modular reactors, floating nuclear power plants, and other peaceful applications of nuclear technology. This partnership contributes to India's clean energy transition, diversification of energy sources, and long-term electricity generation capacity while strengthening Russia's position as a leading global provider of nuclear technology and energy solutions.

DEFENCE COOPERATION

Defence cooperation has long been one of the most significant pillars of India–Russia relations, contributing substantially to both strategic security and economic collaboration. Since the Cold War period, Russia (formerly the Soviet Union) has remained India's principal supplier of defence equipment, providing aircraft, tanks, submarines, and missile systems. In the post-Soviet era, this partnership has evolved from a traditional buyer–seller model into a broader framework of joint research, development, and co-production. Major collaborative projects such as the BrahMos missile system demonstrate the depth of technological cooperation and industrial partnership between the two countries.

In recent years, India has continued to strengthen its air defence capabilities through major procurements from Russia. India has already received three out of the five contracted squadrons of the S-400 Triumf air defence system and is reportedly considering the acquisition of additional units to further enhance its multi-layered air defence network. The Indian Ministry of Defence has also signed a contract worth approximately \$238 million for Vertical Launch Shtil surface-to-air missile systems for the Indian Navy, aimed at improving warship protection against aerial threats.

Furthermore, India and Russia are engaged in advanced consultations regarding the possible joint production of Su-57 fifth-generation stealth fighter aircraft in India. Such initiatives highlight the growing emphasis on technology transfer, local production, and long-term defence industrial cooperation between the two countries.

COAL INDUSTRY MODERNIZATION

Cooperation in the coal sector represents an important dimension of India–Russia economic and technological engagement in the energy industry. The Jhanjra coal mine, designed and constructed with Soviet technical assistance in the 1980s, remains one of the most promising supply units in India's coal sector. Russian companies such as Rusugolmash and Zarubezhugol have expressed strong interest in participating in projects aimed at modernizing India's mining infrastructure. The Giproskhakt Institute has also implemented several design projects under a memorandum of understanding with the Central Mine Planning and Design Institute of India (CMPDII). According to Coal India Limited, Russian mining equipment is technologically advanced, cost-competitive, and suitable for developing new open-cast mines in India.

INVESTMENT

Investment cooperation has become an increasingly important dimension of the economic partnership between India and Russia, although the overall level of mutual investment has historically remained limited. Earlier estimates suggested that total Russian investment in India was around USD 200 million, while Indian investment in Russia reached approximately USD 2 billion, with a major share coming from ONGC Videsh Limited's USD 1.7 billion investment in the Sakhalin-1 energy project. Despite the dominance of private sectors in both economies, private companies have been relatively slow to explore business opportunities in each other's markets. However, efforts have been made to encourage greater private sector engagement through initiatives such as the Indo-Russian Investment Forums held in 2007 and 2008, which aimed to strengthen business partnerships. Indian companies such as the Sun Group, Tata, Mahindra, and Reliance

have explored opportunities in Russia, while Russian firms including AFK System and Basic Element have shown growing interest in investing in India's telecommunications, infrastructure, and industrial sectors.

PHARMA SECTOR

India, often referred to as the “pharmacy of the world,” is one of the largest global producers of generic medicines and vaccines, and Russian healthcare markets increasingly rely on high-quality and affordable pharmaceutical products manufactured by Indian companies. Several leading Indian firms, including Sun Pharmaceutical Industries, Dr. Reddy's Laboratories, and Cipla, have expanded their presence in Russia through exports, partnerships, and distribution networks. In recent years, cooperation has also expanded to joint research, clinical trials, and vaccine production, most notably during the COVID-19 pandemic through the collaboration on the Sputnik V vaccine developed by the Gamaleya Research Institute. Further strengthening this partnership, a major Russian-Indian pharmaceutical plant is planned in the Kaluga region of Russia to produce high-quality anti-cancer drugs. The regional government has created a 100-hectare special economic zone to facilitate the project, highlighting the growing potential for collaboration in pharmaceutical manufacturing and healthcare innovation.

INFORMATION TECHNOLOGY (IT) COOPERATION

The information technology (IT) sector has emerged as an increasingly important area of cooperation between India and Russia in the post-Soviet period, reflecting the growing significance of the global digital economy. India is widely recognized as one of the world's leading providers of IT services and digital solutions, with an export market exceeding \$200 billion. Indian expertise in software development, digital public infrastructure, and IT-enabled services has created opportunities for collaboration with Russian technology institutions and enterprises. Areas such as cybersecurity, enterprise software, banking technology, and telecommunications have become potential fields for joint engagement. Indian firms are also exploring opportunities to provide data

center services and digital infrastructure solutions globally, including in Russia.

Recent initiatives have focused on strengthening technological partnerships through innovation platforms and research collaboration. Organizations such as NASSCOM and Russia's Skolkovo Foundation have promoted cooperation between startups and technology companies in fields such as artificial intelligence (AI), fintech, data analytics, and smart city technologies. Proposals to establish an Indo-Russian technology hub aim to combine India's large digital market with Russia's strong engineering and scientific expertise. Cooperation is also expanding in advanced fields including quantum communications, 5G networks, and AI-driven automation. With India's IT sector projected to reach \$400 billion by 2030, digital collaboration is expected to become a key pillar of India-Russia economic relations.

FREE TRADE AGREEMENT

The prospect of a Free Trade Agreement (FTA) has become an important dimension of the expanding economic partnership. Negotiations have primarily taken place within the broader framework of the Eurasian Economic Union (EAEU), which includes Russia along with several Eurasian states. India and the EAEU have been working toward a comprehensive preferential trade agreement aimed at reducing tariffs, improving market access, and strengthening economic cooperation in sectors such as pharmaceuticals, agriculture, engineering goods, information technology, and energy. According to Russian Deputy Prime Minister Alexei Overchuk, the first stage of negotiations has been completed and both sides remain optimistic about the progress.

Economically, the proposed agreement could significantly enhance trade flows by reducing regulatory and logistical barriers. It would also provide Russian businesses access to India's vast consumer market while enabling Indian firms to expand into Eurasian markets. Institutions such as the Ministry of Commerce and Industry and the Eurasian Economic Commission continue to assess the agreement's potential benefits,

making the FTA a key step toward deeper regional economic integration.

RARE EARTH AND CRITICAL MINERALS

Rare earth elements (REEs) have emerged as an important area of cooperation between India and Russia, particularly in the context of technological development and strategic resource security. These critical minerals are essential for advanced industries such as semiconductors, renewable energy technologies, electric vehicles, defence systems, aerospace manufacturing, and nuclear energy. Russia possesses significant reserves and technological expertise in the mining and processing of rare earth materials, while India has a growing industrial demand driven by its expanding electronics, clean energy, and defence manufacturing sectors. Globally, Russia also controls substantial shares of several strategic resources, including enriched uranium, palladium, industrial diamonds, titanium, and vanadium, which are crucial for high-technology industries.

Recent collaboration efforts include a Memorandum of Understanding between India's TEXMiN (Technology Innovation Hub on Mining) and Russia's GIREDMET research institute to cooperate on rare earth and critical mineral technologies. With India holding approximately 6–7 million tonnes of rare earth reserves and Russia possessing around 3–4 million tonnes, this partnership aims to strengthen supply chains, promote technological exchange, and support the development of high-technology industries in both countries.

RAILWAY COOPERATION

Following the dissolution of the Soviet Union in 1991, India–Russia economic cooperation expanded beyond defence into sectors such as railways, infrastructure, and heavy industry. In the railway sector, both countries have explored collaboration in modernization, high-speed rail technology, and infrastructure development. Agreements between Indian Railways and Russian Railways have focused on projects such as station redevelopment, freight corridor development, redesign of coaches, and the introduction of advanced signalling and engineering systems. Russia

has also expressed interest in supporting India's high-speed rail initiatives by providing technical expertise and technology. Such cooperation aims to improve transport efficiency, strengthen industrial supply chains, and enhance regional connectivity, thereby contributing to broader economic and infrastructural development.

ARTIFICIAL INTELLIGENCE (AI) COOPERATION

Artificial intelligence (AI) has recently emerged as an important frontier in the technological and economic partnership between India and Russia. Both countries recognize AI as a key driver of innovation, economic growth, and national security in the digital era. Russia has strong capabilities in advanced computing, machine learning, and robotics, while India offers a vast pool of skilled IT professionals and a rapidly expanding digital ecosystem. Collaborative initiatives therefore focus on joint research, academic exchange, and innovation in fields such as data analytics, cybersecurity, smart manufacturing, and digital governance.

Government-level cooperation has further strengthened AI collaboration through institutional partnerships and technology forums. Initiatives involving organizations such as NITI Aayog and Russian technology institutions encourage cooperation in AI applications for healthcare, agriculture, urban management, and defence technologies. India's robust digital infrastructure—including systems such as UPI, recognized by the IMF as the world's largest real-time payment platform—provides a strong foundation for AI-driven innovation. Consequently, AI cooperation is becoming a significant component of the evolving India–Russia technological and economic partnership.

AVIATION SECTOR

The aviation sector has recently emerged as a promising area of cooperation between India and Russia, reflecting expanding technological and industrial collaboration. A significant development in this field is the landmark joint venture agreement between Hindustan Aeronautics Limited (HAL) and Russia's United Aircraft Corporation (UAC) for the licensed production of the SJ-100 regional passenger aircraft in India. The agreement includes provisions for local manufacturing,

certification, sales, maintenance, repair and overhaul (MRO), and technology transfer. This initiative represents the first full-scale passenger aircraft production project in India since the 1980s. The project is expected to strengthen India's aviation manufacturing capabilities while supporting regional connectivity initiatives such as the UDAN programme under the broader "Make in India" framework.

AUTOMOBILES AND PASSENGER VEHICLES

The automobile sector has also emerged as a growing area of commercial engagement between India and Russia, particularly in the two-wheeler segment. Indian motorcycle brands have gained increasing popularity in the Russian market due to their reliability, performance, and competitive pricing. Jawa motorcycles, manufactured by Mahindra-owned Classic Legends at its production facility in Pithampur, Madhya Pradesh, are among the Indian brands exported to Russia. These motorcycles combine retro styling with modern engineering, attracting a niche segment of consumers in the Russian market.

However, due to complex logistics, transportation routes, and distribution arrangements involved in deliveries to Russia, Jawa motorcycles are often priced higher compared to some competing models. For instance, Royal Enfield motorcycles, which are shipped directly from India with relatively streamlined supply chains, may sometimes be available at more competitive prices despite offering similar features. Nevertheless, the presence of Indian motorcycle brands in Russia reflects the expanding scope of India–Russia trade in the automobile sector and highlights opportunities for further growth in vehicle exports and industrial cooperation.

BEVERAGES AND FOOD TRADE

Trade in beverages and food products has recently become a small but growing component of India–Russia economic relations. In 2025, Russia imported beer from India for the first time, purchasing approximately \$140,000 worth between January and November, according to reports from RIA Novosti. Although the volume remains modest, the trade began gradually in mid-2025 and has shown signs of steady

growth. Overall, India's global beer exports reached about \$37.8 million, indicating the potential for expansion into new markets such as Russia. At the same time, Russia has increased its exports of alcoholic beverages to India. Russian vodka exports to India nearly tripled during January–October 2025, reaching around \$820,000, which represents a 2.9-fold increase and places Russia among the leading vodka suppliers to the Indian market.

Beyond beverages, food and agricultural trade between the two countries is also expanding. India has become Russia's largest supplier of shrimp, with imports reaching approximately 19,000 tonnes in 2025, while Indian pork exports to Russia tripled to about \$1.8 million. Improved connectivity through projects such as the International North–South Transport Corridor and the Chennai–Vladivostok Maritime Corridor is expected to further strengthen bilateral trade in food and beverage products.

FERTILIZERS AND CHEMICALS

Fertilizers and chemical products have become a crucial component of economic cooperation between India and Russia, particularly in recent years. India has emerged as the largest importer of Russian fertilizers, reflecting the growing interdependence in the agricultural sector. In 2025, India imported approximately 6 million tonnes of fertilizers from Russia, representing a significant increase compared to 1.1 million tonnes in 2021. The value of fertilizer shipments also rose sharply, reaching around \$3.02 billion—nearly 1.8 times higher than the previous year. The major categories of fertilizers imported by India include mixed fertilizers valued at about \$1.76 billion, nitrogen-based fertilizers worth \$763 million, and potash fertilizers amounting to approximately \$502 million.

The sharp increase in fertilizer trade has been partly influenced by global supply disruptions and Western sanctions on Russia, which encouraged Moscow to expand trade relations with friendly partners such as India. This growing cooperation plays an important role in supporting India's agricultural productivity and strengthening bilateral economic ties.

CONCLUSION

India–Russia economic relations have evolved significantly over the decades, expanding from a primarily defence-oriented partnership to a multifaceted collaboration encompassing energy, fertilizers, metals and minerals, petrochemicals, information technology, infrastructure, and advanced technologies. Despite strong political ties and decades of strategic cooperation, bilateral trade has historically remained below its potential. However, recent developments—including increased fertilizer trade, collaboration in artificial intelligence, semiconductor technologies, space research, railway engineering, shipbuilding, and biotechnology—indicate new momentum in economic engagement. India’s ongoing structural reforms, such as the implementation of the Goods and Services Tax (GST), labour reforms, and initiatives like “Digital India,” “Make in India,” “Made for World,” “Special defence corridor,” “Special Economic Zones,” “Startup India,” and Production Linked Incentive (PLI) schemes, have significantly improved the investment environment. These reforms create promising opportunities for Russian investors, particularly in sectors such as electronics, semiconductors, automotive manufacturing, and high-technology industries.

Future cooperation is expected to expand through initiatives such as a potential Free Trade Agreement between India and the Eurasian Economic Union, improved connectivity corridors, and stronger institutional mechanisms such as chambers of commerce and industry forums. Deeper collaboration between the private sectors of both countries, supported by prudent state intervention, will be essential to diversify trade and enhance economic integration. Strengthened economic ties will further consolidate the long-standing strategic partnership between India and Russia in an evolving multipolar global order.

FUNDING

The authors received no financial support for this research, authorship and/or publication of this article.

COMPETING INTEREST

The author declare no competing interests.

REFERENCES

- Basic statistics relating to the Indian economy (Vol. 1). (1984). Government of India.
- Bhattacharjee, S., Jana, A., & Chattopadhyay, A. (2025). Linkages of drought and menstrual hygiene practices of adolescent girls and young women: An assessment of 707 districts in India. *BMC Women’s Health*, 25(1), 512. <https://link.springer.com/article/10.1186/s12905-025-03656-9>
- Business Messenger. (2001). Annual publication. Indian Business Alliance.
- Desai, P. (1985). *India and the Soviet Union: Economic and political relations*. Princeton University Press.
- Desai, P. (1999). *Russia’s transition to a market economy*. MIT Press.
- *Economicheskaya Gazeta*. (1984). Issue No. 46, p. 21.
- Government of India, Ministry of Commerce. (Various years). *Foreign trade statistics of India*. Government of India.
- Government of India, Ministry of Commerce and Industry. (Various years). *Export–import data bank and annual trade statistics*. Government of India.
- Government of India, Press Information Bureau. (n.d.). *India becoming an economic powerhouse*. <https://www.pib.gov.in/PressNoteDetails.aspx?NoteId=154660> HYPERLINK “<https://www.pib.gov.in/PressNoteDetails.aspx?NoteId=154660&ModuleId=3®=3&lang=2>” & HYPERLINK “<https://www.pib.gov.in/PressNoteDetails.aspx?NoteId=154660&ModuleId=3®=3&lang=2>” ModuleId= 3HYPERLINK “<https://www.pib.gov.in/PressNoteDetails.aspx?NoteId=154660&ModuleId=3®=3&lang=2>”&HYPERLINK “<https://www.pib.gov.in/PressNoteDetails.aspx?NoteId=154660&ModuleId=3®=3&lang=2>” reg=3HYPERLINK “<https://www.pib.gov.in/PressNoteDetails.aspx?NoteId=154660&ModuleId=3®=3&lang=2>” NoteId= 154660 &ModuleId= 3®=3&lang=2”&HYPERLINK “<https://www.pib.gov.in/PressNoteDetails.aspx?NoteId=154660&ModuleId=3®=3&lang=2>” NoteId=154660 &ModuleId= 3®=3 &lang=2”1 ang=2
- International Monetary Fund. (1991). *Direction of trade statistics yearbook 1990*. IMF.

- International Monetary Fund. (1993). Russian Federation: Recent economic developments. IMF.
- International Monetary Fund. (2026). World economic outlook database. IMF.
- Jha, P. S. (1973). Indo-Soviet trade and economic cooperation. *Economic and Political Weekly*, 8(44), 1875–1880.
- Kapitsa, M. S. (1987). *USSR–India relations*. Nauka Publishers.
- Kumar, R., & Datta, S. (2001). Indo-Russian economic relations in the post-Soviet era. *Economic and Political Weekly*, 36(12), 1041–1048.
- Lo, B. (2002). *Russian foreign policy in the post-Soviet era: Reality, illusion and mythmaking*. Palgrave Macmillan.
- Malyarov, O. (2003). *Indiya: Sotsialno-ekonomicheskie problemy i puti ikh resheniya (India: Socio-economic problems and ways of their solutions)*. Institute of Oriental Studies, Russian Academy of Sciences.
- Mohanty, A. (2001). *Indo-Russian relations: From Yeltsin to Putin (1991–2001)*. Ikar.
- New Theme. (2007). *New Theme Journal*, 7(1), 14.
- Nove, A. (1992). *An economic history of the USSR, 1917–1991 (3rd ed.)*. Penguin Books.
- Siddiqui, K. (1989). Indo-Soviet economic cooperation: A study of trade and industrial collaboration. *Asian Survey*, 29(6), 566–580.
- Soviet Ministry of Foreign Trade. (Various years). *Foreign trade of the USSR statistical yearbook*. Moscow.
- Stasov, M. N. (1980). *India i sotsialisticheskiye strany*. Nauka Publishers.
- Sutela, P. (2003). *The Russian market economy*. Helsinki Institute for Economies in Transition (BOFIT).
- United Nations Conference on Trade and Development (UNCTAD). (1990). *Handbook of international trade and development statistics*. United Nations.
- United Nations Conference on Trade and Development (UNCTAD). (2004). *Handbook of statistics*. United Nations.
- Vatansever, A. (2010). Russia’s energy policy and foreign trade transformation. *Post-Communist Economies*, 22(4), 457–472.
- World Bank. (1991). *World development report 1991: The challenge of development*. Oxford University Press.
- World Bank. (1996). *World development report 1996: From plan to market*. Oxford University Press.
- Worldometers. (2026). *Countries in the world by population*. <https://www.worldometers.info/world-population/population-by-country>

