





By:
Sita Ram Garg | Research Assistant
Bureau of Research on Industry & Economic Fundamentals (BRIEF)
Feb., 2022

What is PM Gati Shakti?



- ✓ In order to ensure comprehensive planning and implementation of infrastructure projects, PM Gati Shakti is a digital platform that links 16 ministries, including Roads and Highways, Railways, Shipping, Petroleum and Gas, Power, Telecom, Shipping, and Aviation.
- ✓ Although the Gati Shakti National Master Plan will have a significant domestic economic multiplier effect, it must also be used to have an influence outside by being coordinated with India's regional and global connectivity efforts.
- ✓ In order to connect more than 1,200 industrial clusters via multiple modes of transportation, Prime Minister Narendra Modi has unveiled the ambitious Gati Shakti Master Plan, which will cost ₹100 lakh crore.





Scheme	Department/ Ministry	Features
National Investment Fund		 □ In order to channel the proceeds from the sale of the government's minority stake in successful CPSEs, the government decided to establish a "National Investment Fund" (NIF) in January 2005. □ Income from the fund is utilized to invest in various social projects and to raise funds for a few lucrative and viable businesses. According to the theory, Disinvestment has no effect on the government's social goals.
Deendayal Upadhyaya Gram Jyoti Yojana	Ministry of Power	 Aim: to augment power supply to the rural areas and to strengthen subtransmission and distribution systems To separate agriculture and non-agriculture feeders facilitating judicious rostering of supply to agricultural and non-agricultural consumers in rural areas
Sagarmalascheme	National Sagarmala Apex Committee (NSAC)envisaged; will be chaired by Minister of Shipping + CMs and CSs of relevant states	 Port-led development: develop a string of ports around India's coast, Supporting and enabling Port-led Development through appropriate policy and institutional interventions Efficient Evacuation to and from hinterland
Swiss Challenge Method		'Swiss Challenge Method' in Infrastructure: Swiss challenge method is a process of giving contracts. A development proposal can be submitted to the government by anyone with the appropriate credentials. A second individual may offer comments to enhance and surpass that plan when it is posted online. It is a technique whereby outside parties submit bids (challenges) for a project within a predetermined time frame in order to prevent inflated project

expenses.



Why is infrastructure important?



- ✓ Infrastructure spending has a multiplier effect on the economy.
- ✓ Aside from the obvious advantages, which include the creation of jobs and increased demand for raw materials for construction, the economy would also gain from indirect advantages.
- ✓ The impacts that are caused by increased connectedness are the second-order effects.
- ✓ People and goods would move faster between destinations reducing logistics costs.
- ✓ For every rupee the government spends on infrastructure development, studies by the RBI and the National Institute of Public Finance and Policy have found, the economy gains between ₹2.5 and ₹3.5 in GDP.
- ✓ It's crucial that urban clusters spread out across the nation rather than being concentrated in a few key places in order to achieve balanced regional growth. This is possible by a coordinated approach in infrastructure development, for instance, roads would feed into railway lines which in turn would feed into ports, efficiently moving goods from the hinterlands to the ports.



From Economic Survey 2022



- ✓ Other efforts to strengthen the logistics ecosystem The government has made a number of actions in the recent years to increase logistics efficiency through process reforms and infrastructural improvements. Some of these include the implementation of FASTag, Turant Customs, the requirement for RFID (Radio Frequency Identification) tags to be placed on all containers headed for EXIM, E-San chit, Indian Customs Enquiry for Trade Assistance and Knowledge (ICETRAK), ICEDASH (Indian Customs EDI Dashboard), Secured Logistics Document Exchange (SLDE), Import Clearance System, GHG Calculator, etc.
- ✓ A variety of initiatives are being made to facilitate maritime trade, including the promotion of free trade warehousing zones, the development of port-specific master plans and a coordinating structure for their execution. Selected Land Customs Stations (LCS) are also being upgraded to Integrated Check Posts (ICPs).





✓ Focus Area for Budget 2022-23:

- ☐ The seven engines will be included in its scope (Roads, Railways, Airports, Ports, Mass Transport, Waterways and Logistics Infrastructure).
- ☐ The infrastructure created by the state governments in accordance with the GatiShakti Master Plan will also be a part of it.
- ☐ The Master Plan's cornerstone will be world-class modern infrastructure, logistics coordination between various means of transportation for both people and products, and the placement of projects.





- ✓ What are the Major Proposals for PM GatiShakti?
- > Road Transport:
 - To enable quicker flow of people and commodities, the **PM GatiShakti Master Plan for Expressways** will be developed in 2022–2023.
 - National Highways network to be expanded by 25,000 km in 2022-23. The expansion will require the mobilization of ₹20,000 crore.
- > Seamless Multimodal Movement of Goods and People:
 - The data exchange among all mode operators will be brought on Unified Logistics Interface Platform (ULIP), designed for Application Programming Interface (API).
 - This will provide **real time information to all stakeholders**, lead to **efficient movement of goods** through different modes, and improve international competitiveness.
 - Open-source mobility stack, for organizing seamless travel of passengers will also be facilitated.



- ✓ What are the Major Proposals for PM GatiShakti?
- ➤ Multimodal Logistics Parks:
 - Contracts for implementation of Multimodal Logistics Parks at four locations through PPP (Public-Private Partnerships) mode will be awarded in 2022-23.
- > Railways:
 - Railways will develop new products and efficient logistics services for small farmers and Small and Medium Enterprises, besides taking the lead in integration of Postal and Railways networks to provide seamless solutions for movement of parcels.
 - 'One Station-One Product' concept to help local businesses & supply chains.
 - As a part of <u>Atmanirbhar Bharat</u>, **2,000 km of network** will be brought under **Kavach**, the indigenous world-class technology for safety and capacity augmentation in 2022-23.
 - 400 new-generation VandeBharat Trains to be manufactured during the next three years.
 - 100 PM GatiShakti Cargo Terminals for multimodal logistics facilities will be developed during the next three years.





- ✓ What are the Major Proposals for PM GatiShakti?
- > Mass Urban Transport including Connectivity to Railways
 - Innovative ways of **financing and faster implementation** will be encouraged **for building metro systems** of appropriate type at scale.
 - Multimodal connectivity between mass urban transport and railway stations will be facilitated on priority.
- > Parvatmala: National Ropeways Development Programme:
 - As a preferred ecologically sustainable alternative to conventional roads in difficult hilly areas, National Ropeways Development Programme will be taken up on PPP mode.
 - The aim is to **improve connectivity and convenience** for commuters, besides **promoting tourism.** This may also **cover congested urban areas**, where conventional mass transit systems are not feasible.
- > Capacity Building for Infrastructure Projects:
 - With technical support from the **Capacity Building Commission**, central ministries, state governments, and their infra-agencies will have their skills upgraded.
 - This will **ramp up capacity in planning, design, financing** (including innovative ways), and implementation management of the PM GatiShakti infrastructure projects.

Source: https://www.india.gov.in/spotlight/union-budget-fy-2022-2023

Vision of PM Gati Shakti





- The existing infrastructure schemes under various ministries will be incorporated into this plan, including Sagarmala, Bharatmala, UDAN scheme, inland waterways, etc.
- The master plan will also cover economic zones such as pharmaceutical clusters, textile clusters, defence corridors, industrial corridors, electronic parks, fishing clusters, and agri zones.
- ➤ It will also leverage technology extensively including spatial planning tools with <u>ISRO</u>(Indian Space Research Organisation) imagery developed by BiSAG-N(Bhaskaracharya National Institute for Space Applications and Geoinformatics).
- > PM Gati Shakti will provide the public and business community information regarding the upcoming connectivity projects, other business hubs, industrial areas and surrounding environment.
- ➤ The program has been launched as an umbrella integrator of ₹111-lakh crore worth of projects under the National Infrastructure Pipeline (NIP) for 2020-25.



National Infrastructure Pipeline





- ➤ In the budget speech of 2019-2020, Finance Minister announced an outlay of Rs 100 lakh Crore for infrastructure projects over the next 5 years.
- > NIP is a first-of-its-kind initiative to provide world-class infrastructure across the country and improve the quality of life for all citizens.
- ➤ It will improve project preparation, attract investments (both domestic & foreign) into infrastructure, and will be crucial for attaining the target of becoming a \$5 trillion economy by FY 2025.
- > Covers both economic and social infrastructure projects.
- ➤ The <u>task force headed by Atanu Chakraborty on National Infrastructure Pipeline (NIP)</u>, in May 2020, submitted its final report to the Finance Minister.

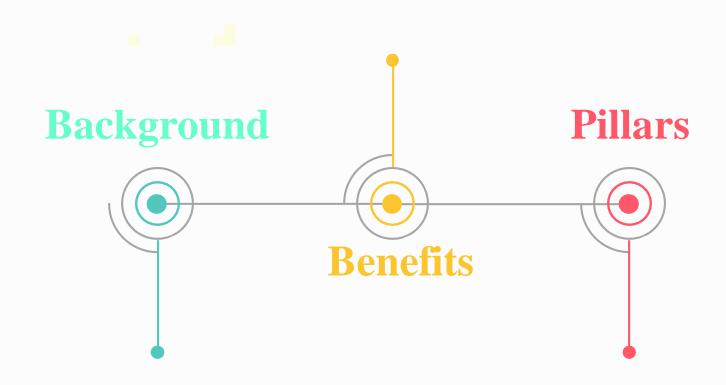
■ Important recommendations and observations made:

- ✓ **Investment needed:** ₹111 lakh crore over the next five years (2020-2025) to build infrastructure projects and drive economic growth.
- ✓ Energy, roads, railways and urban projects are estimated to account for the bulk of projects (around 70%).
- ✓ The centre (39 percent) and state (40 percent) are expected to have an almost equal share in implementing the projects, while the private sector has 21 percent share.
- ✓ Aggressive push towards asset sales.
- **✓** Monetisation of infrastructure assets.
- ✓ Setting up of development finance institutions.
- ✓ Strengthening the municipal bond market.



Key Discussion Area







Background





- ✓ Lack of coordination between different Departments
- ✓ Wasteful expenditure
- ✓ Time-taking approval process
- ✓ Multiplicity of regulatory clearances
- ✓ Hostile land acquisitions
- ✓ Difficulties in getting environmental clearance



Example:



Traditionally, after a road was built, other agencies dug it up again for tasks like installing underground wires and gas pipelines, among other things. This was both an unnecessary expense and a major hassle. In order to overcome this, coordination was improved so that all cables, pipes, etc. could be laid concurrently. Other difficulties, such as the protracted approval procedure and the abundance of regulatory clearances, have also been addressed through the implementation of measures. Through a holistic solution, the government has recently ensured a focus on infrastructure that is unparalleled. This helps to address the past issues through institutionalizing holistic planning for stakeholders for major infrastructure projects. Instead of planning & designing separately in silos, the projects will be designed and executed with a common vision.



Benefits



- ✓ The plan aims to build **Next Generation Infrastructure** which will improve **Ease of Living as well as Ease of Doing Business.**
- ✓ It will **facilitate the last mile connectivity** of infrastructure and also reduce travel time for people.
- ✓ It will provide the public and business community information regarding the upcoming connectivity projects, other business hubs, industrial areas and surrounding environment
- ✓ The plan **enables the investors to plan** their businesses at suitable locations leading to enhanced synergies.
- ✓ It will create **multiple employment opportunities** and give a boost to the economy.
- ✓ It will improve the **efficiency of port operations and cargo handling capacity** and cut the vessel turnaround time.
- ✓ The plan will improve the **global competitiveness of local products** by cutting down the logistics costs and improving the supply chains.
- ✓ Just as JAM (Jan Dhan, Aadhar, Mobile) trinity **revolutionized the access of government facilities** to the people, PM Gati Shakti will do the same for the field of Infrastructure.
- ✓ It will **boost economic growth**, **attract foreign investments** and enhance the country's global competitiveness.
- ✓ It will enable **smooth transportation of goods**, people and services and creating employment opportunities.





Comprehensiveness

It will incorporate the existing infrastructure schemes of different departments and state governments like Bharatmala, Sagarmala, inland waterways, UDAN etc.

Optimization

For the transportation of goods from one place to another, the plan will help in selecting the most optimum route in terms of time and cost

Prioritization

Different Departments will be able to prioritize their projects through cross-sectoral interactions.

Analytical

It will offer 200 layers of geospatial data, including on existing infrastructure as well as geographic information about forests, rivers and district boundaries.

Dynamic

The portal will allow various government departments to track the progress of various projects in real time and at one centralised place.

Synchronization

PM GatiShakti will help in synchronizing the activities of each department in a holistic manner by ensuring coordination of work between them.



Pillars

Targets to be achieved





- > 11 industrial corridors and two new defence corridors in Tamil Nadu and Uttar Pradesh.
- ➤ 4G connectivity in all villages
- ➤ Increasing renewable energy capacity to 225 GW from 87.7 GW
- Expanding the national highway network to 2 lakh km
- ➤ Increasing length of transmission network to 4,54,200 circuit km
- > Creation of 220 new airports, heliports and water aerodromes
- > Increasing cargo handlingcapacity of railways to 1,600 million tons from 1210 million tons
- ➤ Adding 17,000 km to gas pipeline network
- ➤ 202 fishing clusters/harbours/landing centres and more





How Gati Shakti Plan can strengthen India's economic ties with its neighbours?



- ✓ The plan will automatically **generate positive effects** to strengthen economic relations between India and Southeast Asia, the Indian Ocean area, Nepal, Bhutan, Bangladesh, Myanmar, and Sri Lanka.
- ✓ India's investment in roads, ports, inland waterways or new customs procedures **generate positive externalities** for these neighbours, who are keen to access the growing Indian consumer market.
- ✓ India's northern neighbor gains right away from any decrease in domestic logistics costs because **98 per cent of Nepal's** total trade transits through India and about 65 per cent of Nepal's trade is with India.
- ✓ In 2019, trade between Bhutan and Bangladesh was eased through a **new multimodal road and waterway link** via Assam.
- ✓ The new cargo ferry service with the Maldives, launched last year, has lowered the costs of trade for the island state.
- ✓ Under the **South Asia Sub regional Economic Cooperation Programme**, India's investments in multimodal connectivity on the eastern coast is **reconnecting India with the Bay of Bengal** and Southeast Asia through integrated rail, port and shipping systems.
- ✓ It is the alignment of a cross-border railway, the location of a border check post, or the digital system chosen for customs and immigration processes, India's connectivity investments at home will have limited effects unless they are coordinated with those of its neighbours and other regional partners.
- ✓ India recently joined the **Transports Internationaux Routiers** (**TIR**) convention, which facilitates cross-border customs procedures, none of its neighbouring countries in the east has signed on to it.



How PM Gati Shakti will help India's development?



project

- ✓ **Bring the economy out of pandemic impacts**: The Covid-19 Pandemic decreased GDP growth, led to significant job losses, low earnings, and decreased consumption. Along with drawing significant investments, the infrastructure projects will create more jobs and raise consumer demand for goods and commodities. The Indian economy can achieve a strong development trajectory by reducing the effects of the epidemic if the Gati Shakti National Master Plan is executed promptly.
- ✓ Solve issues in logistics: An analysis found that the logistics cost in India is roughly 13%–14% of GDP, compared to 7-8% of GDP in Western economies. The strategy will assist India in lowering its logistical costs. To increase trade, the initiative aims to reduce turnaround times at ports and increase cargo handling capacity in addition to lowering logistics costs.
- ✓ Help in increasing economic zones and industrial parks Due to ineffective and fragmented multi-modal connectivity, a number of economic zones and industrial parks are currently unable to operate at full capacity. By incorporating infrastructure schemes under various ministries and state governments, the Gati Shakti platform will **boost the last-mile connectivity.**
- ✓ Reduce implementation overlaps: Poor Infrastructure planning at present results in various challenges. The National Master plan will help to avoid such implementation overlaps.
- **✓** Save taxpayers money
- **✓** Optimum utilization of resources and reduce both cost and time overruns
- ✓ **Help in reducing human intervention within ministry**: Currently, any inter-ministerial issues that arise relating to a are addressed in regular meetings of infrastructure-related ministries. The Gati Shakti portal would help reduce the human **intervention** required as ministries will be in constant touch.



Challenges

- ✓ **Investments from states**: Active Center-State cooperation are important for developing infrastructure, according to the Economic Survey for 2020–21. According to the survey, each side will invest around ₹8.5 lakh crore year in NIP areas like energy, transportation, and railroads between FY 2021 and FY 2022. The state governments don't have enough money to make such a huge investment given the pandemic and its accompanying issues. The master plan's execution will be put off as a result.
- ✓ Low Credit Off-take: According to a document published by the RBI, the growth rate of credit off-take has sharply decreased, falling to 5.8% in November 2020 from 14.2% in 2013. This will result in less private funding for infrastructure initiatives. There are already concerns regarding the banks' deteriorating credit offtake patterns since they don't want to experience another Non-Performing Asset (NPA) crisis in the future.
- ✓ The plan does not address a few key infrastructural challenges: Land acquisition is frequently the major roadblock to India's development. Due to issues regarding land acquisition, many development projects are postponed. Additionally, these delays raise the price of many initiatives, which makes them less effective and more expensive for development. There are other problems, such as legal problems, alienation of local populations, and environmental standards being broken, etc.

These issues make the rate of implementation of projects is very slow on global standards. The Gati Shakti master plan offers little or no solution to these major challenges.



How can India improve the implementation of PM Gati Shakti?



- ✓ Address certain key issues: India must address structural and macroeconomic stability issues that result from large public spending if PM Gati Shakti is to be implemented properly.
- ✓ **Tackle land acquisition decisions**: The policymakers would do better to reclaim degraded and polluted lands than to alienate additional parcels of property given the master plan's accessibility to geographic information systems and remote sensing technologies.
- ✓ Solve the credit offtake challenge: The Economic Survey for 2020-21 mentioned that India needs ₹4.5-lakh crore investments per year from the private sector to boost NIP sectors. So, the government has to address the issues associated with low credit offtake for successful private investments.
- ✓ Incorporate the digital features in all spheres: In addition to railroads and gas pipelines, optical fibers can be added to accomplish this. The Gati Shakti initiative can be used to bring the open network and open protocols together, which would help India's need for digital solutions for demand and supply aggregation.
- ✓ For instance, Tata Projects has already been using such technological solutions for its various projects like the **Dravyavati River Rejuvenation Project**. Similarly, the US has built software platforms that achieve 30 to 40% savings.
- ✓ **Improve the performance of roads**: For a steady delivery of products, India needs to improve the functioning of its roadways. Roads should be made smarter with automated traffic monitoring, drone-based assistance, and drone-based asset maintenance monitoring.





Conclusion

The PM Gati Shakti, will increase economic growth, entice foreign investment, and promote the nation's global competitiveness, facilitating easy movement of goods, people, and services and generating job opportunities. The PM Gati Shakti will thereby aid India in attaining its goal of becoming the "business capital" of the World. But all the challenges must be addressed on priority for the project to be a success.

