

## National Monetization Pipeline (NMP) in India: Initiatives and Challenges

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**Abstract:** The government of India's move to collect six lakh crore rupees through the National Monetization Pipeline (NMP) has received a lot of acceptance and criticism from different parts of the country. However, the government's commitment to infrastructure development is unwavering. Transferring the operational control of the brownfield assets of the central government to private entities may bring about significant changes in India's infrastructure in the coming years. This is an explanatory study, and the objectives are to determine the sectoral share of overall infrastructure investment, to learn about the initiatives and potential impact of the National Monetization Pipeline on the Indian economy, and to understand better the challenges faced when developing infrastructure. In brownfield investment, domestic and foreign investors can directly finance without investing, allowing them to reap direct benefits. The central government's budget for 2021-22 promises the development of the country's infrastructure. Finance Minister Nirmala Sitharaman states that we plan to lease only under-utilised brownfield assets. The central government asserts that the NMP project will enhance Public-Private Partnership (PPP). During 2021-22 central government raised 32,845 crores through disinvestment.

**Keywords:** Brownfield Investment, Greenfield Investment, Monetization, Public-Private Partnership, Acquisition.

The economic reforms implemented in India in 1991 helped attract investments from within and abroad. They support financial stability and strengthen the country's Public-Private Partnership (PPP). Implementing the economic reforms has brought many changes in the country's Primary, Secondary, and Tertiary sectors. The adoption of economic reforms helped the country to enlarge its overall growth.

However, the strategies adopted by the country in 1991 were suitable for India's growth at that time. However, we need to change the strategy and their application for now. The central government pointed out that the National Monetization Pipeline (NMP) is a modern method of asset

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creation, and many countries are applying this strategy worldwide.

The National Monetization Pipeline (NMP) is a collaborative effort to boost the country's economic development through the active participation of private players. The absence of an initial investment requirement, similar to a greenfield investment, makes this project particularly attractive. All necessary resources are readily available, and the private sector assumes responsibility. In contrast, a new investment would require the entrepreneur to source the property and other materials to start a new venture.

However, with an already-running institution or government property, there is no need to obtain approval or fulfil other formalities from the government side to start the business. Increasing job opportunities and improving its citizens' living standards are the primary targets of any welfare government. Therefore, the central and state governments are responsible for eradicating unemployment and enhancing citizens' welfare by introducing new projects and policies.

### **Brownfield Investments Trends and Developments**

Brownfield investment means that a private company or a government entity can start their project in an already existing facility or infrastructure. The central government pointed out that, through the NMP, they want to lease the country's assets rather than sell them to investors. In India, many government undertakings are running at a loss, and through the national monetisation pipeline, the government can rejuvenate these underutilised assets through private participation.

The asset creation of the central government is based on the philosophy of "creation through monetisation" (Economic Survey 2022-23). The government hopes that realising NMP will help the country's overall infrastructure growth. It also hopes that integrating rural and semi-urban areas will help reduce the development gap between rural and urban areas of the country. Finding money without selling government properties is the modern strategy of the central government. The transfer of running ownerships of brownfield assets will help the government determine the revenue in a targeted period.

According to the Global Infrastructure Outlook 2017 (Oxford Economics), the global infrastructure requirement between 2016 and 2040 is 94 trillion US dollars. Most funds are needed to address the requirements of sustainable development, electricity, and drinking water. As an emerging economy, India also contributes to fostering global infrastructure. India's infrastructure investment between 2013 and 2019 was Rs.57 lakh crore (National Infrastructure Pipeline II, Govt of India).

**Table 1. Sectoral Share of Overall Infrastructure Investment (Rs. Lakh Crore)**

Sector	FY13	FY14	FY15	FY16	FY16	FY17	FY18	FY19
Power	2.3	2.5	2.5	2.7	3.2	2.6	1.9	17.7
Road & Bridges	1.0	1.1	1.2	1.4	1.8	1.9	1.9	10.3
Urban	0.7	0.9	1.1	1.2	1.3	1.7	1.8	8.7
Telecommunication	0.4	0.7	1.1	1.6	1.1	1	1	6.9
Railways	0.4	0.4	0.4	0.8	0.9	1.3	1.4	5.6
Irrigation	0.5	0.5	0.5	0.7	0.8	1	1.2	5.2
Airports	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.6
Ports	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.7
Others	0.1	0.1	0.0	0.1	0.1	0.5	0.5	1.4
Total Infrastructure Investment	5.3	6.3	7.0	8.5	9.2	10.2	10.0	56.7
Nominal GDP	99.4	112.3	124.7	137.6	153.6	171	190.1	988.7
Percentage of infra investment of nominal GDP	5.5%	5.6%	5.6%	6.2%	6.0%	6.0%	5.3%	5.7%

Source: National Infrastructure Pipeline II, Govt of India

### Sectoral Share of Overall Infrastructure Investment in India

Regarding share contribution, the public sector makes a significant share of infrastructure, i.e., 70 %, while the private sector's share remains 30%. The major areas of infrastructure investment are power, roads and bridges, urban, telecommunication, railways, irrigation, airports, ports, and others. The sectoral investment shows positive trends in all sectors.

National Monetization Pipeline has generated significant revenue for the Indian government. As of June 2024, the total value of assets monetised under NMP stands at Rs.3.85 trillion since 2021-22. The private sector contribution exceeds Rs.1.56 trillion in the financial year 2023-24.

### Assets Monetised Since FY2023

#### The Major Framework of Asset Monetisation Strategies of NMP Includes

**Table 2. Assets Monetised Since FY2023**

Sl No	Asset monetised from	Amount (Rs- Crore)
1	Road	40,314
2	Coal	56,794
3	Power	14,690
4	Mines	4,090
5	Petroleum and natural gas	9,587
6	Urban	6,480
7	Shipping	7,627

Source: National Infrastructure Pipeline II, Govt of India

### 1. Provision of “Rights” but not “Ownership”

The most important attraction of NMP is that investors can easily start their projects without making any new investments in brownfield assets. However, investing in these assets does not imply a transfer of ownership. Investors can utilise the existing infrastructure and also make additional changes and modifications according to the central government's guidelines.

### 2. De-Risked Assets with Steady Revenue.

This helps the government generate sufficient revenue from the de-risked assets. The government can transfer risks to the private sector and also assist in reducing future losses. Increasing the value of de-risked assets helps the government attract investments and alleviate the burden of asset management.

### 3. Well-Defined Contract.

Well-defined and structured contracts are NMP's sole advantage. The various forms of contracts on brownfield assets include public-private Partnerships, Joint ventures, Concessions, lease agreements, asset management partnerships, development agreements, and hybrid models. Well-defined contract agreements and stringent performance standards increase the overall performance of brownfield assets.

Vodafone Telecommunication's investment is an example of such an investment. The Vodafone company is located in London and has acquired the telecom sector in India. Later, it became one of the largest telecom providers in the country. Another investment is made in this field by TATA Motors. In 2008, it took over Jaguar Land Rovers from the most prominent

**Table 3. Medium and Long-Term Proposals for Infrastructure Assets Funding**

Sl No	Development Financial Institutions (DFI)	Asset Monetisation
	It act s as a provider of infrastructure funding	Monetising existing infrastructure assets helps create new infrastructure construction.
1	The central government passed the National Bank for Financing Infrastructure and Development bill in March 2021	Increase the potential brownfield infrastruclt asset through the National Monetization Pipelin
2	A body cooperate s with an initial goal holding of 100%.	Asset monetisation pipeline of the potent brownfield infrastructure asset.
3	Provide 20000 crores at the initial time , and the target lending portfolio increased to Rs.5 lakh crore (3 years)	Different assets/asset classes are proposed : monetisation during FY 2021-22

Source: NITI Aayog National Monetization Pipeline Volume-I

automotive manufacturer, Ford Motors. Leasing brownfield assets will help the government meet the expenses incurred after the post-COVID era.

This type of investment is also known as "Asset Recycling." Private investors can make fresh investments in this field and modify this sector. It helps the government expand the existing infrastructure without spending additional money. Central and state governments often engage in developmental activities by temporarily selling their assets or borrowing money from domestic or foreign sources like the IMF or World Bank. One of the major advantages received by the government is that it can modify or restructure the existing infrastructure without incurring any debt.

### **Initiatives and Potential Impact of the National Monetisation Pipeline in India**

Government expenditures will increase employment opportunities and the country's overall growth. The Atmanirbhar Bharat Abhiyan scheme introduced by the central government in 2020 has boosted capital expenditure in India. Apart from the capital expenditure package announced by the central government through Atmanirbhar Bharat in 2020, the central government announced another financial package and disinvestment initiatives of public sector investment through the Union Budget 2021-22.

The recent central government initiative to reform private sector participation in infrastructure development has had a tremendous impact. The recent debt financing initiatives taken by the central government, both short-term and long-term, have attracted both domestic and foreign investors to participate in asset recycling. Central government initiatives to remove stamp duty on asset transfer attract private investors and streamline the asset recycling monetisation procedure.

The government is responsible for developing infrastructure. As a welfare government, it is the state's responsibility to provide welfare to its citizens. NITI Aayog has prepared and issued a detailed report through volumes I and II of its guidebooks. It clearly shows the essential instruments, designs, and key imperatives. The new initiatives, through the motto of "Creation through Monetisation," are a long-term sustainable investment strategy for the government.

The Union budget 2021-22 clearly shows the roadmap for implementing NMP in the country. After the post-COVID scenario, the central government has allocated Rs.3.8 lakh crore in the 2021-22 budget to revive the economy. The major strategies for enhancing sustainable infrastructure financing in the country are: -

- Formation of institutional structure
- Push on the monetisation of assets

- Boosted the share of capital expenditure in both Central and State governments.

Through proper government intervention, the issues related to asset monetisation can be easily resolved. As the youngest country in the world, it is the government's responsibility to provide employment opportunities for the youth. World Bank data on increasing urbanisation and population shows that during the period 2011-17, it increased by 1.2 % and is expected to reach 1.52 billion by 2030. About 42 % of India's population is predicted to be urbanised and modernised in the next few decades. The five major states, Gujarat, Tamil Nadu, Punjab, Maharashtra, and Karnataka, will account for 50% of urbanisation by 2030. Urbanisation helps the country increase its contributions to GDP. The conversion of rural areas into urban will create many changes in the country. Through rural infrastructure development, India can use its working-age population in rural areas and increase the share of rural youth contribution to GDP.

The Airport Authority of India is taking over six brownfield airports under Public-Private Participation (PPP) models, which will help expand airports. It is also taking initiatives to develop city-side infrastructure, which will create new hotels, restaurants, and retail shops adjacent to the airports. The telecom sector is also undertaking new projects, such as expanding telecom tower operations. The telecom authority has decided to share the tower space with private operators to extend the operational space of the brownfield assets.

Innovative trust-based financial instruments, such as Infrastructure Investment Trust (InvIT), help investors access stable and liquid instruments properly. They also significantly impact consolidation and asset monetisation by attracting new investors. Global private investors have started investing in various brownfields, such as pension funds and sovereign wealth funds, which clearly demonstrates the feasibility and scope of asset monetisation.

Real Estate Investment Trust (REIT) is a global real estate company that has also started many business projects in India. It is a US-based company that was established in 1960 and later flourished across the globe. This company has already begun its operations in India, which will provide numerous employment opportunities and help the government raise revenue through its implementation. They mainly concentrate on property such as apartment buildings, medical facilities, warehouses, infrastructure, cell towers, and hotels. The investment of REITs in these sectors will boost their overall development.

### **Other Country's Initiatives for Asset Recycling**

Massive infrastructure deficit is a global issue, so every nation is trying to attract investment from domestic and foreign companies to expand its

infrastructure. Raising funds through public sector sources is very difficult, so governments are inviting and participating in private players for asset recycling. Asset recycling helps governments reduce budgetary risk and transfers it onto the shoulders of the private sector. Conversely, private players can avoid and reduce risk by taking ownership of running brownfield investments.

Asset recycling initiatives of Australia's federal government have created a new history in the country's infrastructure development. The Australian government directed the Productivity Commission in 2013 to study the feasibility and future of asset monetisation. The initiatives aimed to reduce government spending on infrastructure projects in the long and short term. The government's asset recycling initiative, which involves selling and recycling assets, has increased productivity and private partnerships to fund and run companies. These initiatives have helped the country to accumulate 17 billion US dollars for Australia's infrastructure development (National Infrastructure Pipeline, Volume-I). The asset recycling initiatives have also helped enhance infrastructure development in ports, roads, and electricity generation.

The Indonesian government has introduced the "Limited Concession Scheme" (LCS) for asset recycling. Many public and private partnership projects are running in the country, but the government introduced this scheme as an alternative to PPP. The country needs a vast amount of infrastructure funding to expand its connectivity. In February 2020, the government of Indonesia permitted the implementation of the Limited Concession Scheme for financing infrastructure through the utilisation of existing assets. Currently, the government has allowed the operation of the existing infrastructure, namely airports, railways, seaports, bus terminals, telecommunications, oil and gas, and renewable energy. This is how other countries are finding funds to develop new infrastructure.

### **Models Associated with Asset Monetisation**

Asset monetisation is implemented through different strategies and frameworks to ensure effective implementation. The major approaches used to explore asset monetisation are the Direct Contractual Approach and Structural Financing models.

#### **Direct Contractual Model-Brownfields PPP Concession**

In the past, brownfield contacts focused on management contracts, where the government was responsible for providing services and the daily management was entrusted to the private sector. This type of agreement is known as a contractual agreement. However, in the case of Brownfields PPP Concession models, it provides complete freedom to operate and manage the assets, including end-to-end operation and maintenance. Some examples of potential models for such Brownfields PPP Concession

infrastructure owned by the public sector include

### **Direct Contractual Models- Brownfield Public-Private Partnership Concessions**

After transferring the responsibilities of running the infrastructure, it is their responsibility to maintain the entities they possess.

**Table 4. Brownfields PPP Models**

<b>Brownfield Public Partnership Concessions</b>		
Model	Operate Maintain Transfer Concession (OMTC)	Operate Maintain Development (OMD) Model
Adopted as	Toll Operate Transfer (TOT)	Operate Management Agreement (OMA) in Airports Adopted.

*Source: NITI Aayog National Monetization Pipeline Volume-I*

### **Brownfields Public Private Participation (PPP) Models**

In the case of the Operate Maintain Transfer Concession (OMTC) case, it is the private sector's responsibility to operate and maintain the project. This helps the owner party to collect revenue immediately. As an existing infrastructure, the risk for maintenance volatility and running problems of the assets is shallow. This risk and operational power transfer will reduce the burden on the public sector and help the government start a new greenfield investment project. Most OMTC contracts are being done in the road sector, which is a combination of tolling contracts and contracts for operations and maintenance.

#### **Toll Operate Transfer Model (TOT)**

The Toll Operate Transfer Model (TOT) is a variant of the Operate Maintain Transfer Model, which has recently been widely used in the road sector. This is one of the major and convenient models applied in the road sector by both central and state governments. The concept of TOT was introduced by the Ministry of Road Transport and Highways in 2016 to monetise the road sector on a long-term basis by the National Highway Authority of India.

#### **Challenges of Asset Monetisation**

Historically, the country has faced several challenges due to a need for more funding. Since the reform period, the central government has launched various programs and projects to attract domestic and foreign investors. Underutilised and loss-making units are major responsibilities of every government. The monetisation strategy helps the central government generate additional revenue through Public Sector Units



(PSUs). The central government claims that this additional cash can fund a national infrastructure program, which will help strengthen the country's infrastructure in the coming years.

Increasing private participation enhances the country's productivity and competency. Using assets allows the country to increase its maximum potential output capacity. It will create jobs and career prospects and also help to expand the country's supply chain. Utilising existing brownfield assets can help the government attract more domestic and international investment. This will accelerate the country's economic growth and efficiency quickly.

Providing adequate infrastructure facilities is critical in the National Monetization Pipeline (NMP). Every country faces enormous challenges when it addresses infrastructure development. Using existing infrastructure will allow the government to provide its customers and citizens with adequate and high-quality goods and services.

The National Monetization Pipeline intends to bring institutional investors into the country. Institutional investors play an essential role today since they can invest money on behalf of clients or members. This will let them invest in hedge funds, mutual funds, and other financial products. Investors like brownfield projects because they are less risky than greenfield assets. This method will allow the country to acquire more funds in the future. Several state-owned insurance and pension funds have already established their businesses in India.

To raise the funds, the public and private sectors face numerous challenges hindering infrastructure development in the country. The power sector, particularly, is encountering major issues in raising funds due to sluggish demand growth in the industrial and commercial sectors. Additionally, load shedding and low coal production by Coal India Limited pose further threats to this sector. Investments in the road sector are also encountering various obstacles. Private sector investments in this sector have shown a declining trend since the twelfth five-year plan. This sector must grapple with problems such as land acquisition, dispute settlement issues, and poor project preparations.

Compared with the road and power sectors, investments in railways are low. However, since 2016, there has been an increasing trend in railway investments. Currently, the public sector has recognised the importance of this sector and has started new investments by creating new railway lines, doubling and tripling. Additionally, initiatives have been taken to purchase new wagons, coaches, locomotives, and other necessary equipment. One of the major concerns of this sector is the need for cargo management. Furthermore, the need for more funds and the unavailability of land for station development are also significant concerns.

The port sector in India plays a crucial role, as it handles more than 90 per cent of the trade activity conducted through marine routes. The last five-year plan has emphasised promoting the port sector in India. However, it also faces numerous challenges, the major being port traffic. Additionally, there is an issue of underutilisation of both major and minor ports in the country.

The aviation sector in India is facing many issues. India's largest airports, like Delhi and Mumbai, are experiencing significant traffic problems, with capacity utilisation already exceeding 100%. This clearly highlights the infrastructure constraints of the Indian airports. Additionally, the absence of an aviation maintenance and repair industry further increases this sector's running and maintenance costs. These challenges likely hinder the implementation of the NMP in India.

### **Conclusion**

The National Monetization Pipeline (NMP) aims to obtain funds by leasing the major central government brownfield assets. One of the significant hurdles the central government faces is to collect 6 lakh crore rupees from 2021-22 to 2024-25. About 83% of assets come from areas like roads (27%), railways (25%), the power sector (15%), oil and gas pipelines (8%), and telecom (6%). Transferring the power of brownfield assets to the private sector creates more cooperation from the side of the private sector. The major advantage for investors is that, without any new investment, they can start or modify already functioning brownfield industries. The central government hopes that the NMP project will help young people get more jobs and curb unemployment in the country. It also helps to integrate rural and urban areas of the country.

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