

## FUTURE OF CONSTRUCTION INDUSTRIES IN INDIA

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### ABSTRACT

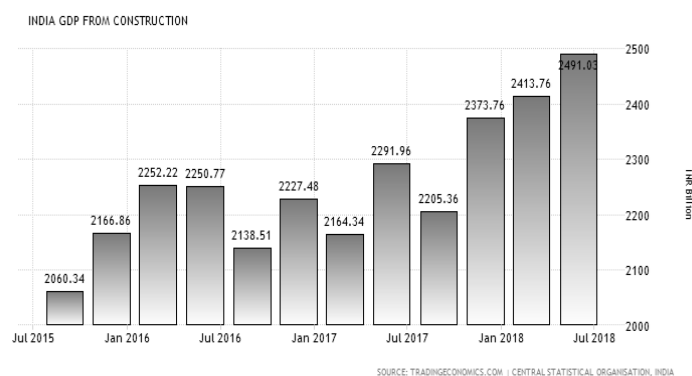
Indian government is motivating the construction industry by means of the urban transformation. The schemes like Smart cities development leads to the great support to the construction industry by means of the major projects. On the other hand the projects like the metro rails and bullet trains have great opportunities for construction industries to contribute. The government is also dreaming for housing to all by means of Pradhan Mantri Awas Yojana in India, where the challenge is to provide the subsidy on houses to all the middle class Indians. In coming decade the construction industries have great opportunities in India to develop there by transforming the present technology to next level in view of the sustainable development of India. Authors have presented the overview of future of the construction Industries in India in this paper.

**KEYWORDS:** Construction industries, Sustainable development, challenges of construction industries, etc.

### INTRODUCTION

The construction industries are growing well in India since last decade. By 2022 construction industries will continue to develop with the ultimate development speed. The Indian government is working hard for the infrastructure development in India. The developed infrastructure is the sign of the complete development of any country. Better the infrastructure better will be the per capita income of the country.

Behind development of any project, the construction industries are contributing to develop a basic structure. The contribution of the construction industries is remarkable in the projects like metro trains, bullet trains, smart cities, housing development, power generation sector and domestic infrastructure development. Being highly populated country, India has great opportunities for construction Industries to develop the infrastructure which lasts and has some innovation included.



**Fig.1 Contribution of Construction Industries in India's GDP**

After an agriculture sector, the construction industries contribute the most in Indian GDP. The industries have adopted the technology positively and making it possible to develop the mega structures in India. The infrastructure development budget requirement of India is about 50 trillion Indian rupees by 2022. The government has permitted 100% FDI for infrastructure development in view of achieving the sustainable progress goal by 2022. For 2017-18 the growth rate of the construction industries is recorded to 11.9% compare to previous financial year. The total contribution of the construction sector is around 8% to the GDP in 2017-18 which is expected to be 9% for coming financial year and 13% by 2025.

## CHALLENGES IN FRONT OF CONSTRUCTION INDUSTRIES

The construction industries in India are although one of the top contributing to the GDP facing several problems. The main challenges in front of the construction industries are as follows:

- **Skilled Manpower:**

The manpower available needs to be trained to work effectively on construction projects. The life of the workers is always in danger and they are living the lives in very poor situations. The most of the local construction industries are not providing even the basic living needs to the labours. It leads to further decreasing the efficiency. The construction workers are neither trained nor certified workers. The people in search of any work for fulfilling their daily needs are most of the times working in the construction industries. It leads to the non effective work culture, thereby reducing the efficiency of the construction projects.

- **Land Availability:**

Domestic infrastructure demand is always on peak in India. The limitation of the land to be developed in the city is one of the key factors in increasing the cost of the construction projects in India. To make the project cost effective, one should never dependent on the land cost as it is increasing in India year by year. The construction industries have to adopt the technology to save the cost in construction operations in order to complete the project at challenging costs.

- **Cost of Materials:**

The most of building materials lies in the slab of 28% of Goods and Service Tax (GST). It increases the cost of the project and cannot be controlled by the industry.

- **Construction Technology:**

Adoption of the technology is always advantageous for the industries. While adopting the technology, the cost involved in the development is another challenge. It needs the equipments and machinery to be purchased and the labours to be trained to work on the machines effectively.



**Fig.2: The technology to be adopted for construction industries**

- **Project Design:**

The cost effective design if the project is another challenge to be addressed. As the design of the project plays a vital role in deciding the cost of the projects. It's always challenging to choose the effective design for the project.

- **Planning the Resources:**

Planning the resources like, material, manpower, electricity and machinery is very important for any construction project. If the resources are not available in time, it directly increases the cost of the construction project. The increase in the cost may lead to the failure of the project completion in time. If the project doesn't complete in time, it further increases the cost of the project.

- **Sustainable Development:**

The sustainable development is important for any country. The construction industries are accountable for around 40% carbon emission globally. It means the carbon emission by the industry processes need to be reduced effectively and suddenly. If the emission continues to the current rate, it causes hazards to human lives.

- **Natural Hazards:**

The climatic disasters in India are very common, almost every year India is facing the problems like floods and shortage of water in various areas. The effect of this on the construction industry is direct and it ultimately results in timely delivery of the project there by increasing the cost involved in project completion.

**Mega Projects in India:**

Indian central government and the various state governments are contributing for the development of the major infrastructure projects in India. Few of the major projects are:

- **National Highways Development Project:**

The national highways development is the need of the country for faster transportation. The target is to complete around 45000 Km of the highways under NHDP. The estimated budget is around US\$ 4000 million.



**Fig.3: NHDP projects in India**

**Smart Cities:**

The most important project for India is the smart cities development. Around 100 cities are identified for development under smart cities project. The estimated cost is US\$980 million.



**Fig.4: Smart cities project in India**

**Bullet Train:**

One of the most optimistic projects in India is Bullet train. The estimated cost for the project is US\$15 billion for developing the infrastructure of bullet train between Mumbai to Ahmadabad.



**Fig.5: Bullet train project in India**

**Navi Mumbai Airport:**

An international airport project is undergoing in Navi Mumbai. The estimated cost of the project is around US\$2.4 billion. The project is supposed to be completed in 2019.

**Shree Chatrapati Shivaji Maharaj Smarak:**

Another optimistic project is Shree Chatrapati Shivaji Maharaj Statue. INR 3800 Cr. Rupees is the estimated cost for this project.



**Fig.6: Shree Chatrapati Shivaji Maharaj Statue**

**CONCLUSION**

The construction industries in India are developing with rapid growth at the rate of around 11% yearly. The major projects developing in India are providing the great opportunities for the construction industries to improve the growth rate further. By 2025 the estimated contribution of the construction industries will be around 13% in India's GDP. To face the challenges of the sustainable development, construction industries have to adopt the technological reforms.

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