



India Q1 2022

India's economy recorded real growth of 9% in 2021, as construction, fixed capital investment and exports, in particular, demonstrated robust growth. Although government debt saw a marked increase through 2020 and 2021, the coming fiscal year and a strong economic performance are expected to prompt a decline in that indicator. The Indian government is forecasting 8% growth (other forecasts of 8.5%) for 2022, with a higher level of private sector investment, as investor confidence improves.

The 17.1% growth in real terms in the construction industry seen in 2021 is expected to moderate to 5.8% in real terms in 2022, with the focus on infrastructure projects and programmes that boost domestic industries driving activity forward. Some industry challenges exist, including some land acquisition challenges, delays in permits, inflation and material price escalation, and volatile FX markets.

As material costs will continue to represent a challenge for the construction industry for the foreseeable future, Linesight will publish quarterly updates to track commodities and provide insights about future projections on movements.



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Lumber

India is reliant on imported lumber for construction use, and much of this is sourced from Europe. Reflecting global trends, domestic prices in India rose sharply in 2021, and prices will remain high in 2022. This reflects ongoing strong demand and the disruption in supplies in Europe stemming from bans on imports from Russia.



Concrete and aggregates

The continued expansion in construction output will ensure high demand for cement and concrete, particularly given the large-scale infrastructure developments that are underway. Although India benefits from having domestic supplies of raw materials for cement production, energy costs are on a steep upward trend, and this will contribute to higher production costs.



Concrete blocks and bricks

Brick prices are expected to remain at relatively high levels given the ongoing expansion in construction, along with high costs and tight supplies of coal, on which producers of traditional burnt clay bricks are heavily reliant.



Steel (rebar and structural)

Although India is a major steel producer, with limited reliance on imports of steel products, domestic prices rose in 2021, reflecting strong demand, supply disruptions and a surge in iron ore prices. Demand in India will stay strong in 2022, given government development schemes aimed at boosting residential buildings growth as well as major infrastructure development programmes. Adding to price pressures, India's steel producers are looking to increase exports to Europe, where there is a gap in supplies caused by the current conflict, as Russia and Ukraine were significant sources of European steel imports.



Copper

India's imports of copper have risen sharply in recent years, and it turned into a net importer in 2017/18. Having reached around 234,000 tonnes in 2021/21, imports are projected to reach 300,000 tonnes in 2021/22. Given tight global supplies, prices in India soared in 2021 on an annual average basis, and with price pressures stemming from the Russia-Ukraine conflict, copper prices will remain high in the coming quarters.



India - Commodity Report



	Q3 Q4 2021	Q3 Q4 2022 (f)		Q4 - Q1 (e) 2022
Materials	INR	INR	2021-22 (f) % change	% obongo
Materials	INK	INK	76 Change	% change
Copper (INR/MT)	777,482.8	888,444	14.3% ↑	2.1% ↑ ■
Steel rebar (INR/MT)	58,100	67,428	16.1% 个	4.9% ↑ •
Steel flat (INR/MT)	67,166.7	70,793	5.4% ↑	-2.8% ↓ •
Lumber (INR/M3)	9,228.5	11,156.3	20.9% ↑	13.6% 个 •
Asphalt (INR/MT)	41,903.3	58,195	38.9% ↑	23.1% ↑ •
Limestone (INR/MT)	437	454.5	4% ↑	6.1% ↑ •
Cement (INR/MT)	7,460.2	8,263	10.8% ↑	0.3% ↑ ■
Concrete (INR/M3)	3,925	4,434	13% ↑	2.5% ↑ •
Welded mesh (INR/unit)	319.5	368	15.1% ↑	3.3% ↑ •
Bricks (INR/'000 unit)	8,097.5	9,270	14.5% 个	11.1% ↑ •
Plasterboard (INR/unit)	350	353.5	1% 个	0% → •
Diesel (INR/litre)	89.9	94.71	5.4% 个	-3% ↓ •
Q3 Q4 2021: /	Average	Q3 Q4 20	' 22 (f): Forecaste	d average

Q3 Q4 2021: Average	Q3 Q4 2022 (f): Forecasted average

²⁰²¹⁻²² % **change:** % change from Q3 Q4 2021 average to Q3 Q4 2022 average

Metal prices - Copper - Steel rebar - Flat steel	+5% ↑ +2% ↑ +2% ↑	o O O O O	Copper prices in India remain heavily influenced by international prices, given the country's reliance on imports of copper concentrate. Prices increased during 2021, reflecting strong demand globally and reduced copper production. Prices were expected to decline moderately in 2022 because of an improved supply of refined products and more stable demand, but the Russia-Ukraine conflict has caused upward pressure,

Steel prices started the year at a relatively low level compared to the highs recorded in previous months, but this trend proved shortlived, with prices moving upwards during the remainder of Q1 2022. The jump in prices in February and March was much steeper for rebar compared to flat products, but prices for both will continue on an upward trend, given the prospect of higher coking coal prices, owing to the disruption to supply following the outbreak of the Russia-Ukraine conflict. India is highly dependent on the import of metallurgical coal.

and strong demand in India will keep prices at a relatively high level.

Level of impact of pricing on construction procurement and supply chain *

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% change

Q1 - Q2 2022 (f)

Strong demand for concrete and cement amid the recovery in buildings construction and the infrastructure sector will continue to drive up prices. The sharp rise in cement producers' costs stemming from higher imported coal prices has also fed into the continued high price level, and further upwards pressure is expected in the coming quarters.



Material



Public investment in the expansion and construction of roads will keep demand for asphalt at high levels, and this has already been reflected in an increase in relatively more costly imports compared to rather limited domestic supplies. With the jump in global crude oil prices following the outbreak of the Russia-Ukraine conflict, there will be further increases in asphalt prices in 2022. Price rises in Q1 2022 also reflected disruptions in bitumen imports clearing customs.

Please note that commodity prices are based on representative materials available in the respective countries, and as these materials may not be standard across all markets, cross-country comparisons on prices can be ineffective. For example, asphalt types can vary between hot, cold or a bitumen price, and standard unit sizes for materials can vary across countries.



[•] Q4 to Q1 2022 % change greater than estimation in our Q4 report

[■] Q4 to Q1 2022 % change less than estimation in our Q4 report

India - Commodity Report





	Material	% change Q1 – Q2 2022 (f)	Level of impact of pricing on construction procurement and supply chain *	
0000	Limestone	+1%↑	• 0 0 0 0 Low	Owing to balanced demand in the market, limestone prices will be relatively stable, but higher energy costs will keep prices around current high levels.
	Lumber	+ 2% ↑	•0000 Low	With economic activities picking up pace and the construction industry showing strong demand, prices for lumber rose sharply throughout 2021, mirroring trends in prices across other major markets. Prices underwent another jump in March, as global supply chains were disrupted and fuel prices rose sharply in the wake of the Russia-Ukraine conflict.
	Welded mes	sh +2%↑	o 0	Mesh prices are expected to follow the steel rebar price trend.
##	Bricks Plasterboar	+3% 个 d +1% 个	• 0 D D Low	Having risen throughout 2021, driven in part by higher demand, brick prices are set to remain at a relatively high level, with production costs being pushed up by high energy costs. Bricks produced in India mainly use coal as the key source of energy, as confirmed by the All India Brick Manufacturers Association.
				No major change is expected in the price of plasterboard. Demand increased marginally, owing to the increase in construction activities.
	Diesel	+5% ↑	• OOO Low	India is heavily dependent on imported crude oil, which accounts for 80% of domestic needs. With prices of crude oil jumping in the wake of the Russia-Ukraine conflict, prices are expected to remain volatile, but a high level in the coming months. Russia has offered crude oil to India at discounted rates, but completing the financing of such trades could be problematic, given the impact of international sanctions on Russia's financial system.

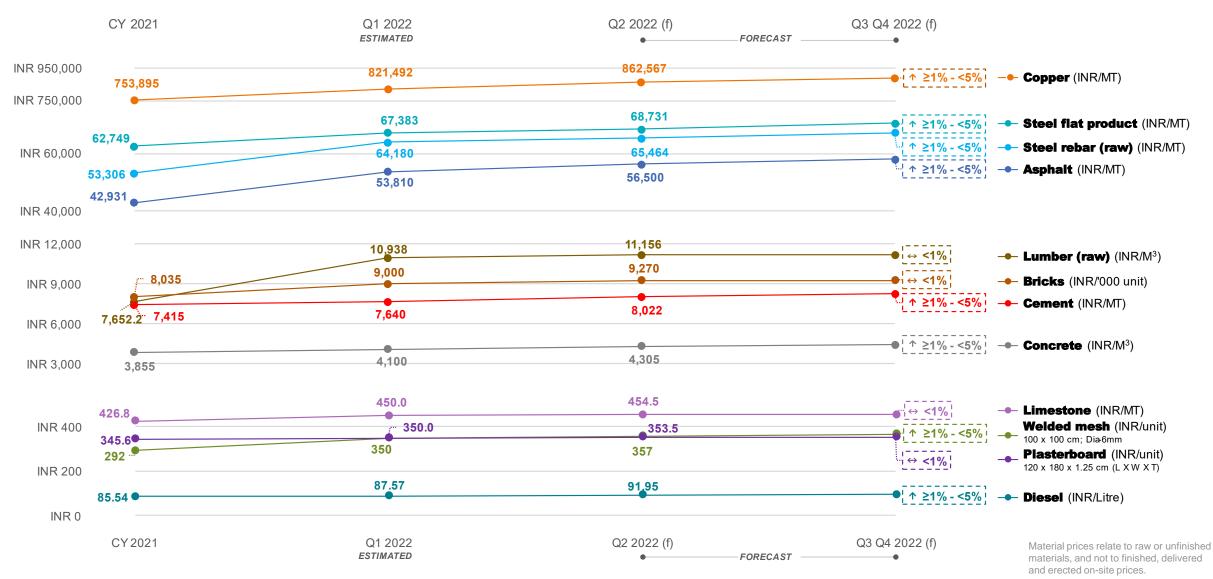
^{*} Level of impact rating reflects a combination of factors: the price movement and also price level (compared to recent past beyond the last quarter), the importance of the material, and general state of the supply chain in terms of stability.

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India - Construction Materials Pricing (2021-2022)







India - Macroeconomic overview



Economic indicators



8.52%

GDP growth in 2022 (f) and 9% in 2021



4.9% inflation rate in

2022 (f) and **5.6%** for 2021



400M people employed in 2022 (f)

and 406M in 2021



7.6%

unemployment rate in 2022 (f) and 7.91% in 2021



166.1

Consumer Price Index in 2022 and 166.2 in 2021

Weather conditions



23°C to 35°C

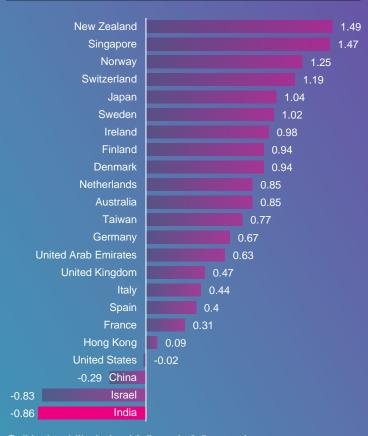
Typical temperature range throughout the year



2,250mm

Average annual rainfall in Mumbai (India).

Political stability



Political stability index (-2.5 weak; 2.5 strong)

The index of Political Stability and Absence of Violence/Terrorism measures perceptions of the likelihood that the government will be destabilised or overthrown by unconstitutional or violent means, including politically-motivated violence and terrorism.

National holidays



10 public holidays in India each year. Most leave is taken during November for Diwali. 10 days during Diwali Festival in November.



India - Macroeconomic overview



Labour productivity



Labour productivity per hour worked in 2020 international dollars, converted using Purchasing Power Parities

India Country Report Q1 2022 - Insights

Labour costs



INR127

is the average hourly earnings

INR2,63,286

average construction worker gross salary in India.

An entry level construction worker (1-3 years of experience) earns an average salary of INR1,99,088. A senior level construction worker (8+ years of experience) earns an average salary of INR3,24,198.



\$9

is the labor productivity per hour worked in 2021 international dollars, and \$9 in 2020 (converted using Purchasing Power Parities)



India - Construction overview



Output 2021 and 2022 (f) (in millions)

Sector	Total 2021	Total 2022(f)	% change
Commercial ட்டி ரியிர்	INR 2,940,823.99	INR 3,177,111.35	8%
Energy and utilities	INR 12,072,975.67	INR 12,540,228.78	3.9%
Industrial	INR 3,262,372.05	INR 3,428,015.93	5.1%
Infrastructure /:\	INR 10,274,805.79	INR 10,850,191.05	5.6%
Institutional	INR 1,543,475.09	INR 1,622,035.91	5.1%
Residential	INR 12,573,253.42	INR 13,513,349.25	7.5%
Total output	INR 42,667,721.32	INR 45,130,932.28	5.8%

Long-lead equipment (LLE) – time risks

Long-lead equipment (LLE) lead times have changed drastically since the start of 2022. Suppliers have seen the implications of material shortages, delays and price hikes throughout the supply chain which is leading to extended lead times and reduced commitment from suppliers for new projects. The key areas in focus are:

- 1. Demand: The demand for long lead equipment in the data sector has increased exponentially with the IT boom. More and more data centre and crypto mining providers are joining the market and this new demand far outweighs the capacity of the supply chain. Entry onto the production line has become a significant challenge with suppliers reporting fully booked capacity until Q1 2023. Opportunities exist for the development of Tier 2 and Tier 3 suppliers to Tier 1 status however that will take time to develop an extended supply chain.
- 2. Material shortage: The end of Q1 2022 saw a significant drop in the availability of raw materials used for LLE production. Global factors such as the conflict in Ukraine and the resurgence of COVID19 has halted production which is at its lowest levels in recent years. The ethical approach, which is to manoeuvre away from the use of Russian gas and oil, has reduced production levels and added longer lead times within the supply chain even for APAC, as the European impact is felt. The raw material shortages are expected to continue into Q2 2022, whilst there is uncertainty for the security of the supply chain.
- 3. Freight durations and costs: Heightened by the increase in fuel costs and compounded by the shortage of labour and low supply of shipping containers, freight durations have soared as suppliers look for ways to mitigate these challenges. The demand for freight services has grown across all markets in recent years and the competition amongst industries has had a negative effect on availability and durations. As clients consider alternative solutions, it almost becomes cost prohibitive to use quicker forms of transport such as air freight due to increasing fuel costs.

Construction health & safety practices and culture



38 fatalities

in India every day in the construction industry.



165/1000 injuries

happened on construction sites.



India has the highest accident rate amongst construction workers, according to the International Labour Organisation.



India - Report methodology



Linesight has commissioned independent global research to track construction materials and commodity prices.

The approach and methodology for the collection of construction material pricing and other indicators is based on primary and secondary research.

Primary and secondary research

Primary research is conducted on a quarterly basis with stakeholders in the value chain, including manufacturers and suppliers/distributors of the target materials, to ascertain market information on prices in recent quarters, and also on projections for changes in the coming quarter and remainder of the year. The market analysis also involves a thorough assessment of secondary sources of data on materials and labour prices, in addition to underlying demand and supply trends that will impact market prices.

Sources include GlobalData's Construction Intelligence Center (CIC), the World Bank, IMF, OECD, as well as country specific national statistics offices, such as the U.S. Bureau of Economic Analysis, Bureau of Labor Statistics, and also industry specific associations and publications. A more comprehensive list of sources is included below.

Definitions

- · Commodity prices are net of taxes for all the countries
- Prices are not customer delivered
- · All commodities are raw materials
- Nominal and real data

Nominal data series do not exclude changes in prices and are also referred to as current prices series.

Annual changes in nominal data for construction output will include changes in construction activity, as well as changes in costs for materials and equipment.

Real data series are calculated by keeping prices constant (so, are also referred to as constant price series), and therefore, they reflect changes in activity only. Growth rates in nominal terms can overstate the pace of growth in construction activity if there is high inflation stemming from rising prices for key inputs.

Sample sources – India

For India, sources for this report include, but are not limited to:

- IMF
- Economy.com
- The Global Economy
- · Weather Spark
- ILO
- · Construction Industry Development Council
- · Ministry of Statistics and Programme Implementation
- GlobalData's Construction Intelligence Center (CIC)
- · Conference-board.org



