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Big Hope

Construction growth key to economic recovery

The government has often reiterated its focus on infrastructure development. The National Infrastructure Pipeline and the government's target to make the country a \$5 trillion economy by 2024 have created a range of opportunities in the construction sector. While the sector received a major blow due to the outbreak of Covid-19 initially, the impact of the second wave has been moderate. The outlook for the sector, including the construction equipment segment, has been recently revised from negative to stable. Industry experts share their views on recent developments in the sector and the future outlook...

Sanjay Dave

What has been the overall progress with regard to construction in key infrastructure sectors in the past one year?

Among infrastructure sectors such as electricity generation, national highway construction, railway freight, cargo and ports, national highway construction has played a significant role in the past one year. Overall, the year-on-year progress in key infrastructure development has been around 23 per cent in the fiscal year 2020-21. Of this, national highway construction alone contributed 29.9 per cent to the growth in infrastructure-related activities. The per day coverage in road construction stood at 37 km during 2020-21, as per the India Brand Equity Foundation report.

How have construction practices evolved in recent times?

The construction practices that have evolved significantly in recent times are in areas such as protective equipment, efficient technology, construction material, green buildings, modular and off-site construction and smart cities. The use of wearable technologies are increasing for the identification of safety



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issues and monitoring of manpower to provide help and rescue in emergency situations. Also, large diameter monopiles are being used in place of multiple conventional poles. Drones are also being used for aerial photography, survey of inaccessible long distance location and production of valuable aerial heat maps and thermal images. Safety training and hazard simulations using augmented reality and use of lightweight concrete are some of the other construction practices.

What has been the impact of Covid-19 on the sector? What has been your organisation's response to the pandemic?

The unprecedented pandemic hit the entire world and no one was prepared for such eventualities. The priority was protection, survival and sustainability. Gradually, after getting some knowledge, the industry started developing guidelines and standard operating procedures (SOPs) for protecting the workforce. The major impact started with the sudden lockdown of the entire country and restrictions on the movement of manpower and material. Workers started escaping from work locations to their home towns. The disruption of the supply chain, quarantine rules, health issues, etc., resulted in revenue loss and delays in project completion.

Bringing back workers from their home towns was a bigger challenge in the absence of public transport and mandatory medical and RTPCR tests. The site infrastructure was as per standard norms for planned manpower but due to Covid restrictions of social/physical distancing required mess timings to be staggered. Even when the lockdown was lifted there were restrictions of working only in the daytime due to night curfew, thus hampering many critical activities. Continuing concrete pours was challenging in such a scenario.

Maintaining physical distancing between workers was very difficult for activities like lifting and fixing of large diameter rebars, resulting in productivity losses. Oxygen for medical purpose was a key priority but shifting the resources, obtaining funds and arranging logistics

“The construction practices that have evolved significantly in recent times are in areas such as protective equipment, efficient technology, construction material, green buildings, modular and offsite construction, and smart cities.” Sanjay Dave

for life saving activities paralysed the construction sector.

HCC issued SOPs and guidelines immediately after the outbreak. A daily checklist was monitored for sanitisation, social distancing, temperature checks, toolbox talk, etc. The organisation's revenue suffered due to Covid, but it tried to hold the maximum possible workers safely at its camps and during resumption brought them back, conducted medical tests and took precautionary RTPCR tests. Construction activities were planned to meet the guidelines of the local authorities.

What are the key challenges that remain unaddressed?

The guidelines or proposed contractual conditions in similar scenarios are yet to be established. Although the government has announced the extension of timelines for affected projects, the cost compensation in many cases is yet to be done.

Holding a large workforce, maintaining the Covid protocol and meeting the daily needs without revenue generation was a huge task. The revenue losses are to be settled and guidelines and contractual provisions are to be made available.

Many people lost their jobs, were forced to work on reduced pay, and many went into depression. There is a need to provide solace for such cases. The unskilled/skilled manual worker category can stand in queue for free grocery, but educated non-manual workers shy away from standing in such lines. They also need financial and moral support. The provision of a budget/ fund to help them financially without hurting their self-respect is required.

The government and many other individual and non-government organisations helped workers in reaching their homes during the lockdown by running special operating and buses, but similar action during unlocking to restore normalcy was missing. Establishing assurance and protecting workers' interest in a similar future scenario is needed in the form of welfare or other

schemes to win their confidence back. There is need for an improvement in disaster management, expansion of medical facilities for the availability of vaccines and medicines to the entire country in the shortest possible time and a dedicated fund and logistics support for medical facilities so that there is no impact on the progress of the infrastructure sectors. Besides, the fast approval of vaccines being administered in India by all foreign countries is required for seamless business travel. Further, indemnification compensation guidelines are required for small industries and employers due to revenue and productivity losses. Lastly, uniform quarantine rules across states and countries are needed. Projects in Bhutan are suffering as they are still imposing a 21-day quarantine period, resulting in delays in the remobilisation of workers.

What is the construction outlook for the next one to two years?

There has been a GDP loss due to the pandemic and since construction is making a major contribution to the GDP, the construction outlook seems very promising in the coming years. Considering the need for robust medical infrastructure, the construction of hospitals and medical facilities must increase. The development of pre-engineered and prefabricated structures should increase to function in the shortest possible time to provide a health facility or observation centre. Faster movement of manpower, material and machinery is very

important during the pandemic. Hence, the outlook for road, rail and water transport is very positive. To mitigate the risk of Covid-19 in the future, increase in hygiene practices will be required in the construction sector. An HSE culture is needed across the global construction industry including more training, awareness. There is also a possibility of the introduction of contractual clauses to safeguard contractors' interests in similar circumstances.

Arvind K. Garg

What are the key emerging trends in the construction equipment market? What are the new requirements?

The domestic demand for construction equipment is likely to cross the 100,000 mark next year. This will translate into a 9 per cent compound annual growth rate over the past 10 years. India is now one of the top five largest markets globally for construction equipment and contributes to about 14 per cent of the global demand for construction equipment in volumes. Also, manufacturing in India comes with a distinct cost advantage. This means that there is a huge potential for enhancing the export of construction equipment from India. A focused approach and a supportive ecosystem should help in expanding exports to make India an export hub for construction equipment.

Another key trend is the adoption of digital technologies in the sector – telematics, remote monitoring of assets, AI-assisted preventive maintenance and others. There has been a big shift in the mindset and the way business is conducted. The use of digital technologies is firmly embedded in the system, with benefits for the long term. This shift will truly propel the sector to a different level of growth and will help increase cost efficiencies in many areas of operations. For instance, Komatsu machines are equipped with the Komtrax information communication system, Scania tipper trucks are equipped with fleet management system and the L&T range of equipment has the Digi Eye platform. The adoption of these new technologies and the increasing aware-



Komatsu PC210-10MO Hydraulic Excavator

ness of customers on using digitalisation tools to their advantage speak of the change in the mindset. In addition, hybrid machines, electrically powered machines and autonomous operations will be introduced in the days to come in India.

As mechanisation continues to increase in India, newer applications and attachments are being added to the construction equipment, enhancing their versatility and utility. New products are being extensively used to meet the needs of diverse applications and increase the pace of construction.

What has been the impact of Covid on the demand for construction equipment?

While the construction equipment industry experienced a slowdown in the fiscal year 2020, it started to show signs of recovery in the fourth quarter of financial year 2020. However, the Covid-induced lockdowns and the large infection spread brought about a slowdown in construction activity. During the past year, the effects were severe, but this year, the industry has shown resilience and the demand drop has not been as significant as in the previous year.

Currently, we see the situation improving considerably and construction activity resuming to near normalcy at most worksites. The Government of India has been very supportive and has been focusing on the infrastructure sector as one of the primary drivers to boost the economy and aid job creation. The centre has aggressively allocated funds for infrastructure development and announced several new projects, especially in roads, highways and railways despite the tough situation arising out of Covid. This is leading to a sharp bounce-back of demand in the sector.

“The government has been very supportive and has been focusing on the infrastructure sector as one of the primary drivers to boost the economy and aid job creation.” Arvind K. Garg



L&T 1190 Soil Compactor

What will be the biggest growth drivers for the segment?

The central and state governments continue to focus on infrastructure development. The National Infrastructure Pipeline with over 7,400 projects valued at over Rs 111 trillion has been a key growth driver. Several new tenders were awarded even during the tough situation across all sectors – roads and highways, irrigation, railways, water management, smart cities, etc. Recently, India's largest engineering, procurement and construction (EPC) contract was awarded for a high speed rail project for Rs 250 billion.

The National Bank for Financing Infrastructure and Development Bill, 2021, will pave the way for a government-owned foreign direct investment to fund infrastructure projects. The tax benefits proposed will be a great enabler for fundraising. This is to be set up with a corpus of Rs 200 billion, which will ease financing issues. Financial institutions, both non-banking financial companies and banks, are also opening up and willing to lend more while maintaining a cautious approach.

What is the outlook for the use of energy efficient equipment? What is the potential of alternative fuels?

While several trials have been conducted for biodiesel and ethanol-based fuels on several construction equipment, large-scale implementation is still under way. It may take a couple of years for this technology to see large volumes in India. However, we are confident that biodiesel-operated machines may be a reality in the short term. Electrically operated mining machines are already available

in the country for coal mining and other similar applications. Several experiments on battery-operated small-sized earthmoving equipment are under way. With rising fuel prices and the burden of crude import, these technologies will definitely become very popular in the years to come.

What is the growth forecast for the construction equipment industry?

The construction and infrastructure sectors has been the second largest providers of employment after the agricultural sector. Hence, the key to economic revival lies in ensuring that infrastructure development continues unabated. The central government has awarded 140 per cent higher road projects in fiscal year 2021 and ensured several large contract awards during the pandemic. National High Speed Rail Corporation Limited has awarded the largest-ever EPC contract in India valued at Rs 250 billion for one of the packages for the construction of infrastructure for the high speed rail network. The work orders and contracts are being signed quickly after opening of bids. These factors have helped in healthy demand growth for construction equipment. Key products such as excavators, backhoe loaders, compactors, wheelloaders and other products such as crushers, concrete equipment will see healthy growth in the first half of 2021. This will lead to an overall growth of 10-15 per cent of the construction equipment industry in the medium term. ▀