NBCC: Changing Building Landscape for Sustainable Future

Established in 1960, as a Govt. of India Civil Engineering Enterprise, NBCC with its Headquarter in Delhi, today, holds the status of Navratna CPSE, carrying along a legacy of undisputed Leader in construction industry of the Nation, realized by a dedicated workforce of the Company.

NBCC’s present areas of operation encompass three Primary Segments namely:

a) Project Management Consultancy (PMC): Executing landmark projects in diversified sectors as also Redevelopment Projects for Governments.


c) Real Estate Development: Developing Residential and Commercial inventories for Governments and the Public at large.

NBCC has been executing many Landmark Projects as a PMC which contributes to about 93% of its annual revenue. The segment being the Company’s core strength, the areas covered under its umbrella include Re-development of government properties, Roads, Hospitals & Medical Colleges, Institutions, Offices, Airports, Bridges, Industrial & Environmental Structures etc.

The Real Estate segment of the Company which came into being in 1988, mainly executing Commercial Real Estate Projects, today has undergone a sea change operation wise. NBCC has formidable presence in Real Estate Sector. It has huge land banks all across the country measuring approximately 200 acres and a number of ongoing projects, apart from some major ones already delivered.

NBCC has been operating in Infrastructure Segment as well called EPC, wherein it has been executing projects such as Chimneys, Cooling Towers, and various types of Power Plant Works.

With huge Market Capitalisation, NBCC was listed with both the Indian Stock Exchanges namely, National Stock Exchange (NSE) and Bombay Stock Exchange (BSE) in 2012.

Years back, NBCC entered a new business vertical named Re-Development of Government Properties, under its PMC Segment. The maiden project in this vertical named Re-development of Delhi’s New Motibagh GPRCA Complex was successfully completed and it brought huge appreciation, opening up further opportunities for the company in this vertical one after the other, eventually making this vertical, the prime focus area in its operation.
The Company has registered a tremendous growth rate since 2002-03 and its top line touched Rs 10,151.37 Crore in FY2018-19 against a meagre turnover of Rs 501 Crore in FY 2002-03.

In view of growing business opportunities in recent time and extensive business expansion initiatives, NBCC as a part of its new business strategy has set up subsidiaries namely:

i. **NBCC Services Limited (NSL)** to provide post construction maintenance services to clients.

ii. **NBCC Engineering & Consultancy Ltd. (NECL)** to carry on business operations as Design Consultants providing comprehensive solutions through a team of multiple skills sets including – Architects, Structural Engineers, Valuers, Urban Planners, Interior designers & MEP Engineers.

iii. **NBCC Gulf LLC** to carry out commercial construction activities of buildings, roads, airports, harbour, water sewerage and electricity network in Oman and its neighbouring Countries.

iv. **Real Estate Development & Construction Corporation of Rajasthan Limited**, a JV Company to look into various re-development projects in Real Estate Sector across Rajasthan State.

v. **NBCC International Limited** to extensively and exclusively pursue its operations overseas.

vi. **NBCC Environment Engineering Limited (NEEL)** to exclusively implement all environment related projects both existing as well as upcoming.

vii. **Hindustan Steelworks Construction Limited (HSCL)**

HSCL established in 1964 under the aegis of Ministry of Steel was taken over by NBCC(I) Limited as a subsidiary on April 2017. NBCC will leverage from HSCL’s business activities leading to diversification and new business avenues in steel vertical.

viii. **HSCC**

The company has acquired 100 percent stake in HSCC (India) Ltd., formerly known as Hospital Services Consultancy Corporation Limited, which specializes in works of Health Sector, with a vision to secure business synergies.
MAN POWER
NBCC has a dedicated and highly experienced workforce of 1818 personnel under various disciplines (Fig. 1.0)

The company's well defined system of identifying the training and development needs of all employees at various levels in order to enhance their skills and knowledge and to adapt themselves to continuously emerging business scenario, makes the workforce a highly efficient team in the industry.

ORDER BOOK AND WORKS OUTLOOK
NBCC at present has an outstanding Order Book of INR more than 75,000 Crore (for 2018-19). The Company has a remarkable track record of completing approximately 577 Projects since 2010 and 297 projects are presently ongoing as on January 2019.

Since inception, the Company has a proven track record of implementing mega-value building projects for its esteemed clients who comprise Ministries – both Central and States, PSUs, Government Departments, Autonomous Bodies etc.

Through its robust delivery mechanism, the company has completed major milestone projects in the environment sector where the citizens have been the main beneficiary. Such projects include Sewage Treatment Plant (STP), Sewerage Networks of major cities, Water Treatment Plant (WTP), Water Supply Network including raw water mains, Solid Waste Management.

The company is involved in the development of Rural Roads in underdeveloped and remote areas under “PRADHAN MANTRI GRAM SADAK YOJANA” (PMGSY) in Bihar, Jharkhand, West Bengal, Tripura and Odisha.

Border Fencing along Indo-Bangladesh and Indo-Pak Border undertaken by the company, has majorly contributed in securing India's International boundaries.
Some of the iconic projects completed by NBCC during the last 8-10 years which need special mention include:

- Redevelopment of Delhi’s New Moti Bagh GPRA Complex, the largest IGBC certified Green Home Complex of its kind
- 1200 Bedded Medical College & Hospital, Guwahati, Assam
- 235 Mtr. High TV Tower, New Delhi
- 30 Km. long, 270 cusec, pre-stressed raw water pipe line with horizontal slipform system, from Muradnagar (UP) to Sonia Vihar (Delhi)
- Delhi Metro’s Seelampur Metro Station (The First Station of Delhi Metro)
- Elevated Via-Duct for Delhi Metro from Connaught Place to Kirti Nagar stretch
- Central Bureau of Investigation (CBI) Headquarter, New Delhi
- Indian Institute of Corporate Affairs Building, Manesar (Haryana)
- National Institute of Food Technology Entrepreneurship Management (NIFTEM), Kundli, Sonepat (Haryana)
- Solid Waste Management Projects located across the country
- Civil Services Officers Institute, New Delhi
- Mysore Airport, Bangalore
- Central Information Commission (CIC) Headquarters, Delhi
- National Investigation Agency (NIA) Headquarter, CGO Complex, New Delhi
- Trade Facilitation Centre and Crafts Museum, Varanasi (UP)
- Dr. Ambedkar International Centre, New Delhi

Overseas Projects:
- 200 Bedded Indira Gandhi Memorial Hospital, Male, Republic of Maldives
- Meer Housing Project (3600 Dwelling Units), Turkey
- Indira Gandhi Centre for Indian Culture, Phoenix, Mauritius

FOCUS REDEVELOPMENT

Redeveloping decades-old housing projects is especially important in cases where the buildings are in a dilapidated condition and face the risk of collapsing under the stress of nature. Further, the issue of scarce availability of land, poses a major hurdle for many forms of development. Under the given circumstances, redevelopment is a sound strategy in addressing the issue by extracting more from existing land resources in a sustainable and redeveloping the structures to conform to the environment standards, thereby meeting the burgeoning urbanization demand.

Re-development of General Pool Residential Accommodation (GPRA) Complex at New Moti Bagh, Delhi, has been completed by NBCC in a phased manner from May 2009 to March 2012 at a cost of Rs. 523.41 crores, providing therein, all facilities like terrace garden, parks, club building, play school, social infrastructure such as Mother dairy, Safal outlet, ATMs, Solar heating and lighting; single and double basement parking, etc. The maintenance of the complex, certified as the largest Green Home Complex of its kind in India is also being taken care of by NBCC with an e-Sewa Kendra in place. The GPRA at New Moti Bagh, New Delhi has successfully achieved the Green Building Standards required for the IGBC Green Homes Silver Certification under the IGBC Green Homes Rating System in January 2014.
The nearly complete Rs 5298 Crore redevelopment project at East Kidwai Nagar, Delhi, is another huge GPRA Colony being executed by NBCC which involves dismantling and demolishing of the existing structures to redevelop 86 acres of land in high-rise mode. The demolition process involves generation of a huge quantity of C&D waste needing to be disposed off to a designated dumping area to recycle the same as per norms of DPCC, Delhi/NCR.

NBCC has taken the initiative to mitigate C&D Waste generated from the project at Redevelopment of Kidwai Nagar (East). An in situ 150 Ton per Day C&D waste Recycle Plant has been established with a mandate of ZERO waste. The Plant is producing 7.5 MPa Class bricks, which is being used in the project.

NBCC has been recently assigned Redevelopment works of Nauroji Nagar, Sarojini Nagar and Netaji Nagar in New Delhi valued at approx Rs 25,000 Crore. For redevelopment of this project, the Company shall commercially utilise the space at Nauroji Nagar Colony to generate Revenue for implementation.

GREEN BUILDING

NBCC has executed number of green buildings for its customers in the last few years. The Indian Institute of Corporate Affairs at Manesar, Haryana (under Ministry of Corporate Affairs) which has been one conceived and completed first by NBCC in 2012. Beginning with this, the company enshrined in its policy, to execute all its future projects incorporating Sustainable Green features. Major ones that followed thereafter are Civil Services Officers Institute, Central Bureau of Investigation Headquarter Building, Aykar Bhawan, Coal India Office Building, National Institute for Solar Energy Building, etc. NBCC is now striving its best to introduce green features and make all Govt. buildings GRIHA compliant in order to give its customers value for money.

SUSTAINABILITY- PART TO WHOLE

- Continuing with the legacy of successes and special feat achieved at New Moti Bagh, NBCC has made it mandatory to incorporate sustainability features such as Zero Waste; Dual piping; Rain Water Harvesting; Use of Solar Energy; Smart Electricity metering; LED/Energy efficient fixtures; etc. in all the future projects
• Re-development of Kidwai Nagar (East) (86 acres of redevelopment) – it will be first mega project with all sustainability feature and a mini smart city.

• Re-development of 3 colonies at Sarojni Nagar (288.12 acres), Netaji Nagar (110.88 acres) and Nauroji Nagar (25 acres).

• Commercial-cum-Residential towers at Karkadooma (75 acres) and Lake view residential towers at Sanjay Lake (25.2 acres).

• Re-development of 2 residential colonies for AIIMS at Ayurvigyan Nagar (49 acres) and Western Campus, Safdarjung (28.03 acres).

• Re-development of IIPA campus, IP Estate (6.92 acres).

OVERSEAS OUTLOOK

NBCC ventured into Overseas Operations in the year 1977, executing projects of diverse nature in countries such as Libya, Iraq, Yemen, Nepal, Maldives, Mauritius, Turkey, Botswana. Presently, the Company has its presence in Oman, Mauritius and Maldives, implementing various projects and earning consistent revenue.

Of late, the Company has opened an office in Oman and also signed an MoU with Al Naba Services LLC in Oman in order to jointly explore and secure infrastructure projects in Sultanate of Oman & neighbouring countries. To further its prospects overseas, the Company has also entered into MoUs with Construction Industry Development Board Holdings, Malaysia and Form Yapi Malzemeleri Insaat Samayi Ticaret Ltd., Turkey.

A few notable overseas ongoing projects by the Company include:

• New Supreme Court Building at Mauritius
• Social Housing Projects, Mauritius
• Institute For Security & Law Enforcement Studies (Isles) at Addu, Maldives.

Looking to further expand its global footprint, NBCC is executing order worth Rs 2000 Crores approx. to build Mahatma Gandhi International Convention Centres (MGCC) in 9 African countries of countries of Niger, Uganda, Malawi, Zambia, Liberia, Gambia, Burkina Faso, Togo & Gabon entrusted by Ministry of External Affairs, Govt. of India. The company has also been tasked with the designing & construction of the 'India Pavilion' at the World Expo 2020 to be held in Dubai. Overall, NBCC is executing overseas projects worth Rs 3200 cr in different countries.

RECENT INITIATIVES

Research and Development:
‘Centre for Innovation and R & D’, set up in association with IIT Roorkee, is engaged in providing a comprehensive framework to nurture a strong organizational research culture, to ensure a high-quality technology output, to improve the quality of work for durability and sustainability, to assist in the creation of wealth and the wellbeing of the construction sector and to lend support to the organization’s aspiration of being recognized as a world-class construction company. Some of the core projects undertaken in association with such reputed institutions as the IITs include a project encompassing the reduction of water consumption in construction; economization of pre-fabricated structures; better risk assessment and mitigation across infrastructure projects; development of TOT frameworks for facility management and study on mechanical properties of nano silica-based high-performance concrete.
NEW TECHNOLOGY AND INNOVATION:

- A noteworthy recent project worth mentioning is the National Museum of Indian Cinemas (NMIC), Mumbai. This structure is the first Steel Building Structure adopted by NBCC for facilitating faster construction.

- Process innovation in recycling of treated water has been implemented in General Pool Residential Accommodation (GPRA) Complex at New Moti Bagh, Delhi.

- NBCC has signed an MoU with Hungary based Gremound Engineering Limited for adoption of a non-tectonic system that employs a unique concrete technology for faster construction of mass housing projects. This is facilitated by the establishment of a factory that produces modules suitable for building housing units of any category and shape.

- Very recently, the Company has taken an initiative towards exploring the suitability of 3D Printers for its adoption in Low Cost Housing Schemes which if implemented, shall be a game changer in the construction sector.

- In the month of April, 2017, NBCC has also signed an MoBE with a Polish Firm named Bolix SA in order to bring in highly energy efficient ETICS Technology solution to India and its neighbouring Countries for its adoption in construction of Green Buildings.

- In the month of June, 2017, the Company has signed an MoU with Rail Land Development Authority for Integrated Smart Redevelopment of 10 Railway Stations of Indian Railway Network. The Stations are Tirupathi, Puducherry, Ernakulam, Nellore, Madgaon, Thane, Lucknow, Kota, Gomti Nagar (Lucknow) and Sarai Rohilla (Delhi).

Winner of number of awards because of its extraordinary performance, the company has been receiving “Excellent” rating from Govt. of India consistently since 2004.

With the foundation of its rich heritage, NBCC today is etching a refulgent future.