



Samashti

Jan. - Mar., 2022
Issue 61

in-house magazine of NCC



CHALLENGES
POLISH US TO
BRILLIANCE!

NCC



From an economic standpoint, the reality is that we are living in an interconnected world. As a result, any invasion in any part of the world will have an impact on the Indian economy in various ways - some of it indirectly as a result of global fallouts and some of it directly.



Dear Colleagues,

From an economic standpoint, the reality is that we are living in an interconnected world. As a result, any invasion in any part of the world will have an impact on the Indian economy in various ways - some of it indirectly as a result of global fallouts and some of it directly.

The Russian invasion of Ukraine which unfortunately is still on, will have long lasting and serious repercussions on the whole world., and the implications of such a war, certainly the most aggressive of the last several decades, is bound to have massive geopolitical and economic fallouts.

The war has the potential to impact India in two ways. One, the resultant spike in commodity prices (Diesel and edible oil etc) and two, trade and banking sanctions can cull India's export-import activity in the affected regions of the world until solutions are found.

The inflation has raised its ugly head across the globe on account of the ongoing war between Russia and Ukraine. The American economy reported inflation of more than 8%, the Euro zone 8.5%, UK 7.5%. The Indian economy has also reported inflation of 7.79 % for the month of April.

To tame the inflation, Central Banks across the globe have increased the policy rates drastically. The American Federal Reserve System (FED) increased their policy rate by 0.5% recently. The Bank of England increased their policy rate four times during the last one year. The RBI has increased the repo rate by 0.4%. To suck out the excess liquidity in the system, the RBI has increased the CRR (cash reserve ratio) by 0.5%, thereby taking out 87,000 crores from the Indian economy.

All the above measures are expected to increase the cost of borrowing for all stakeholders in the economy thereby resulting in slowdown of the economy.

Coming to the 4th quarter results, on a consolidated basis NCC Limited has achieved a **Total Income of ₹3492 Crore** (including other income) for the quarter ended 31.03.2022 as against ₹2842 Crore in the corresponding quarter of the previous year. The operations of the Company have resulted in an **EBIDTA of ₹269.72 Crore** and **PAT attributable to the shareholders of the Company amounted to ₹242.13 Crore** as against ₹305.69 Crore and ₹116.83 Crore respectively in the corresponding quarter of the previous year. The Company has reported **Basic EPS of ₹3.97** and **Diluted earnings per share (EPS) of ₹3.94** as against Basic earnings per share (EPS) of ₹1.92 and Diluted earnings per share (EPS) of ₹1.91 in the corresponding quarter of the previous year.

Financial Year 2021-22

The Company has achieved a **Total Income of ₹11209 Crore** (including other income) for the year ended 31.03.2022 as against ₹8065 Crore in the Previous Year. The Company posted an **EBIDTA of ₹1023.80 Crore** and **PAT attributable to the shareholders of the Company amounted to ₹482.41 Crore** for the year as against ₹919.08 Crore and ₹268.31 Crore respectively in the previous year. The Company has reported **Basic earnings per share (EPS) of ₹7.91** and **Diluted earnings per share (EPS) of ₹7.86** as against Basic earnings per share (EPS) of ₹4.40 and Diluted earnings per share (EPS) of ₹4.39 in the previous year.

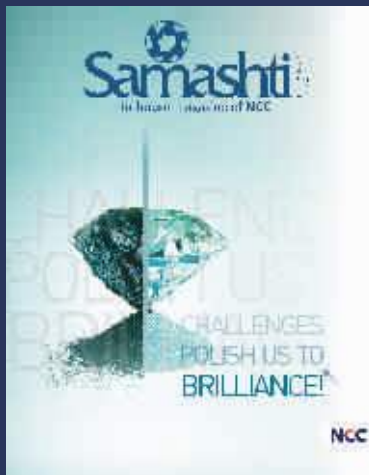
The Board of Directors at their meeting held on 11.05.2022 have recommended Equity Dividend of 100% (**₹2/- per share of ₹2/- each**) on the Paid-up Capital of ₹121.97 Crore subject to the approval of the Shareholders at their Annual General Meeting.

During the year, the Company on standalone basis secured **Orders of ₹9922 Crore** (including change in scope) and the Order Book of the Company stood at **₹36303 Crore** as of 31.03.2022. The subsidiaries Order Book stands at **₹3058 Crore** as of 31.03.2022.

Best Wishes

A R R A J U

(A Ranga Raju)



Sir Winston Churchill famously observed: *A pessimist sees the difficulty in every opportunity; an optimist sees the opportunity in every difficulty.*

True. Life is never a bed of roses. It is filled with risks and challenges – which actually, make it all the more interesting! When we see challenges see through the lens of optimism, courage, growth, curiosity, excitement, we turn them into opportunities of personal and professional growth. Be they unexpected problems, increased responsibilities, moving to an unfamiliar city, or other life-altering changes, challenges push us out of our comfort zone enabling us to learn and grow as individuals.

For instance, adversity propelled Arunima Sinha to become the first female amputee to scale Mt. Everest! On April 12, 2011, Sinha boarded the train bound for New Delhi to appear for the Central Industrial Security Force (CISF) examination. Robbers pushed her out of the train in their attempt to snatch her bag and chain. Within moments another train ran over her leg. The doctors at AIIMS had to amputate the crushed leg to save her life. As she lay on the hospital bed, Arunima resolved not to succumb to her woes but 'do something' different. She completed a basic mountaineering course before going on to scale Mount Everest with a prosthetic leg. Not stopping after the momentous feat, she also climbed Mt. Kilimanjaro, Mt. Elbrus, Mt. Kosciusko, Mt. Aconcagua, Mt. Vinson and Carstensz Pyramid. She penned the book 'Born Again on The Mountain,' an account of her life and learnings after the accident.

It is clear thus, that a change in perspective, curiosity and acceptance of the new, openness to trying, and the determination to succeed help individuals and teams thrive through change, grow and ultimately reach their fullest potential.

VISION

To be a world-class construction and infrastructure enterprise committed to quality, timely completion, customer satisfaction, continuous learning and enhancement of stakeholders' value.

MISSION

To build a strong future ensuring increased returns to shareholders and enhanced support to associates.

To adopt latest technologies in the field of engineering, construction, operation & maintenance of infrastructure projects.

To encourage innovation, professional integrity, upgradation of knowledge and skills of employees and a safe working environment.

To be a responsible corporate citizen committed to the social cause.

VALUES

- Openness and trust
- Integrity and reliability
- Teamwork and collaboration
- Commitment
- Creativity

QUALITY, ENVIRONMENTAL, HEALTH & SAFETY (QEHS) POLICY

NCC Limited strives to achieve enhanced customer satisfaction by delivering quality product and timely completion with safe working environment. We are committed to prevent Environmental Pollution and Ill-health & injury to our employees, contractors and visitors, associated with all our activities and services. We dedicate ourselves for continual improvement in all fields of our business and sustain QEHS through:

- Consistently delivering quality product by adhering to set specifications, contractual, regulatory and statutory requirements.
- Motivating and training the staff for continual improvement of QEHS standards.
- Updating and implementing the procedures complying with International standards in QEHS.
- Proactively identifying and addressing Risks and Opportunities related to business.
- Complying with applicable QEHS legal and other requirements.
- Dissemination of this QEHS policy through effective communication to personnel working for and on behalf of NCC and be made available to other interested parties as required.

INSIDE

- 02 From the Managing Director's Desk
- 04 Director Projects
- 06 HR Desk
- 08 HR Roundup
- 17 Happenings
- 21 EHS Happenings
- 25 Site Watch
- 28 One 2 One
- 28 Cookery Corner
- 29 Health Matters
- 30 Your Page
- 35 Major Orders Received
- 36 Made for Each Other
- 37 Many Many Happy Returns...
- 38 Click... Click...
- 38 Kids Corner
- 39 Chief Editor Writes



GST RETURN SCRUTINY NOTICE - REQUIREMENTS

INTRODUCTION

GST Dealer has to file GST Returns on time and comply with the GST Law. In case of any inconsistencies or errors in the data / information declared, the GST Officers will conduct the Scrutiny of these GST Returns. The GST Officer will thoroughly check the GST Return of a particular dealer based on certain risk parameters and verify its correctness by way of Scrutiny which is in addition to the GST Audit which was discussed in earlier Article. If he finds any errors, he will issue a Scrutiny Notice in Form ASMT-10 to the Assessee demanding an explanation.



COMPLIANCE TO THE SCRUTINY NOTICE

The Assessee should give reply to the Scrutiny Notice within the time limit prescribed in Form ASMT-11. In case the Assessee admits the tax demanded with interest, he has to pay it before replying to the Notice together with justification. If the Officer satisfied with the reply, he would intimate the Assessee and the proceedings can be dropped without any further action in Form ASMT-12 which is an order of acceptance of reply. Otherwise, further action can be taken by the GST Officer in the following circumstances:

- i. If the Assessee does not pay the tax or fails to provide reply / an explanation
- ii. The Assessee does not provide reply or rectify the discrepancy within 30 days of the issue of Scrutiny Notice.
- iii. The reply submitted is not satisfactory to the officer
- iv. The Officer can also take the following actions in the above cases such as:

- a. Conduct a Tax Audit under Section 65
- b. Conduct a Special Audit under Section 66
- c. Survey/ Inspection under Section 67
- d. Initiate Demand and Recovery proceedings
- e. Send Notice of outstanding demand/shortfall in case there is wilful/no wilful intention of doing fraud under Section 73/74 accordingly.

Hence the reply with necessary information is to be furnished in time so as to avoid the above adverse action by the officer.

The main objective of Scrutiny Assessment is to verify the correctness of details submitted in GST Returns such as -

- i. Eligible Input Tax Credit (ITC) as per GSTR-2A / 2B with actually claimed in GSTR-3B,
- ii. Tax payable as per GSTR-1 with tax paid as per GSTR-3B
- iii. Claiming ineligible exemptions or ineligible ITC etc.

There are risk parameters pre-defined for GST Officer to decide whether Scrutiny Notice needs to be issued or not. If these indicate a high risk of default or fraud, then GST Officer can proceed to issue Notice for Scrutiny Assessment in Form ASMT-10 intimating discrepancies in GST Return along with tax, interest and penalty. A reply should be submitted by the Assessee in Form ASMT-11. GST Officer can send the Notice through SMS or Email to the taxpayer. The Assessee should respond to such Notice within 30 days from the date of issue or request for an extension not more than 15 days. Form ASMT-10 contains the following details-

- i. Basic Details such as GSTIN, Name, Address and Tax Period.
- ii. Details of discrepancy observed if any and asking for an explanation.
- iii. Particulars of the GST Officer such as Name, Signature and Designation the Officer issuing Notice and DIN.

Proper reply to the Show Cause Notice is essential which would be helpful in getting the Notice squashed or to contest in further Appeals.

SCRUTINY NOTICE PROCEDURE

Scrutiny Notice can be viewed in GST Portal as steps given in the next page-

- a. Login to the GST Portal and select "View Additional Notices /Orders" under the 'Services' tab.
- b. On clicking 'View Additional Notices', the screen will be displayed with particulars.
- c. A taxpayer can view all the notices issued by the GST Officer by clicking on 'View'.

The following are the status updates on the GST Portal regarding the Scrutiny of a GST Return-

- i. Pending for action by the Officer
- ii. Closed by the Officer
- iii. Pending for reply by the taxpayer
- iv. Reply furnished; pending for order by the Officer
- v. Reply not furnished; pending for order
- vi. An order issued for dropping proceedings
- vii. Recommended for action under Section 73
- viii. Recommended for action under Section 74
- ix. Recommended for audit under Section 65
- x. Recommended for special audit under Section 66
- xi. Recommended for survey/inspection under Section 67
- xii. Pending for order by the Officer

Before submitting a reply to the GST officer, the Assessee should check for the correctness of the particulars. Defects in the notice are to be disputed in the initial reply itself since it cannot be raised in subsequent proceedings. If any tax liability needs to be paid and the Assessee agrees to pay the liability raised in the Notice, he must pay it and thereafter reply to the Notice in ASMT-11. The following two possibilities would arise:

- i. Agrees/admits the tax due as per the notice and already paid it: In such situation tax payer will declare the payment particulars while replying in ASMT-11, or
- ii. Agrees/admits the tax due as per the notice, but yet to pay it: In such situation he will pay by either of the following options and thereafter reply in ASMT-11:
 - a. Pay tax in Form DRC-03
 - b. Furnish supply invoice/debit note/amended invoice/amended debit note in GSTR-1
 - c. Pays tax or reverse ITC while filing GSTR-3B

The following steps are required to be taken for reply to the Scrutiny Notice-

- i. Select the 'Replies' tab on the case details page to view all the replies filed with the GST Department. To add a reply click on 'Notice'.
- ii. The look of the reply page
- iii. Enter the reply and payment details if any
- iv. Click 'ADD' to add more details.
- v. Choose a file to upload with the reply if any
- vi. Select the verification check-box and the authorised signatory

- vii. Enter the place and click on 'Preview'.
- viii. Check if all the information provided is correct and click on 'File'.
- ix. The submit application page will be displayed
- x. Submit using DSC or EVC. A message indicating a successful reply will be displayed. The replies tab will get updated and will show the status as 'Reply furnished, pending with tax officer'.

After submitting a reply, if the tax officer is satisfied with the reply, he will drop the proceeding by issuing an order intimating the same to the taxpayer. But, if the tax officer is unsatisfied, he will issue an Order demanding tax, penalty and interest as the case may be. A taxpayer can view all the orders issued by the tax officer by following these steps.

- A. Click on the 'Orders' tab on the case details page.
- B. Click on the attachments link to view the order

If the taxpayer does not respond to the Scrutiny Notice, then the GST officer will take action under section 73 (non-fraudulent) and 74 (fraudulent). He can issue a Show Cause Notice in form DRC-1 demanding the tax dues together with interest and penalty. The amount of penalty will vary depending upon the grounds of the discrepancy found. Alternatively, the Officer can recommend Audits under section 65, 66 or 67. Hence it is once again reiterated that timely reply to Scrutiny Notice with all relevant details and timely submission of required documents would avoid unwanted litigation.

CONCLUSION

During the course of Scrutiny as well as Audit the relevant documents such as copies of invoices, purchase/work orders and other documents are to be submitted to the Officer with short notice. In order to avoid delay in submission of the documents to the Officer, DMS (Document Management System) is to be used invariably and the documents are to be uploaded as when generated. Sometimes the Officer may warrant for submission of Original Invoices / documents in respect of specific transactions. In such situation proper upkeep tracking of Original Documents is essential. Divisions in coordination with Tax Team should strive to avert the unwanted litigation by complying with the requirements of Scrutiny Notice.





Mr. N Sudhakara Moorthy
Sr. Vice President (HR)

MULTIPLIER LEADERS - BUILDING COLLECTIVE INTELLIGENCE

Today the need of the hour is - 'Doing More with Less'; 'Value-multiplication not just Value-addition' and creating Synergy. Synergy is where the whole is greater than the simple sum of its parts. It is working together in harmony where the Collective output is many times the sum of the Individual output. In short, we are in a world with New Demands and Insufficient Resources, where Organizations do not have the luxury of adding resources to tackle major challenges, they must find the capabilities within their current ranks.

There is more intelligence inside the organization than we are utilising. Leadership is clearly the critical force for leveraging the full capability of the organization. The role of leaders has shifted, too - moving away from a model where the Manager knows, directs and tells and toward one where the Leader

sees, provokes, asks, and unleashes the capability of his members. These Leaders are 'Multipliers' - who see, utilise, and grow the intelligence of their members and are able to get the best out of their teams. The other type of leaders are 'Diminishers' - who achieve results but do not tap into the intelligence of their members and decrease their members thinking and capability, thus affecting the organization's collective capability.

The differences between Multiplier leaders and Diminisher leaders in terms of their founding belief, their approach and the resulting impact on the organization is presented below.

	MULTIPLIER LEADERS	DIMINISHER LEADERS
Fundamental Belief	"Members are smart and will figure it out"	"Members won't figure it out without me"
Approach to Talent	Are Genius Makers . Utilise & develop talent and increase employability - unleash maximum potential of members	Are Genius . Hoard and use talent leading to decrease in members employability - suppress the potential of members
Approach to Mistakes	Explore - Ask the question Why? rather than 'who?' or 'what?'	Blame - fix it on people or circumstances
Approach to Direction Setting	Challenge members with stretch goals - necessitating members to think deep and utilise and develop their intellect	Instruct - Command & Control - "do what I say" limiting the thinking and capability of members
Approach to Decision Making	Adopt a Consultative process - decide along with team	Adopt an Autocratic Process - decides on his own
Organizational Impact	Increase collective intelligence of the organization	Deplete organization of crucial intelligence and capability

The key Dimensions of Leadership are dealing with Talent, creating a Work Environment, setting Targets/Goals, process of Decision making, and instilling Ownership and Accountability. The behaviour of 'Multiplier' and 'Diminisher' leaders on these dimensions of leadership is contrasted in the table below.



KEY LEADERSHIP DIMENSIONS	MULTIPLIER LEADERS OPERATE AS	DIMINISHER LEADERS OPERATE AS
1. Talent	Talent Magnets - Attract and deploy talent to the fullest, people flock to work with them because they know they will grow and be successful	Empire Builders - Acquire talent and then waste them
2. Work Environment	Liberators - Establish a work environment where people have permission to think and the space to do their best work; remove fear and create safety; and create an intense environment demanding best efforts of people	Tyrants - Creates a stressful environment by introducing judgement and a fear of judgement. They demand everyone's best thinking, yet they don't get it
3. Targets and Goals	Challengers - Define targets/ goals that causes people to stretch ; challenge people to go beyond what they know how to do	Know-it-all's - Give directives based on their own knowledge; limit what their organization can achieve to what they themselves know how to do
4. Decision Making Process	Debate Makers - Drive sound decisions through rigorous debate involving all members through a Consultative Process	Autocratic Decision Makers - Make decisions on their own; members are in the dark and invest time in debating the soundness of the decision instead of executing it.
5. Ownership and Accountability	Investors - Gives other people ownership for results and accountability to produce results independent of the leader.	Micro-managers - Drive results through their personal involvement; manage every detail in a way that creates dependence on the leader

It is important that each one of us develop ourselves as a Multiplier Leader and increase the thinking and capability of our members, leverage their intelligence to build collective intelligence of our organization in order to meet the new demands and tackle challenges with the available Resources/Capabilities within the organization.

By unleashing people's full capability, Multipliers get 2X results

BRIEF ABOUT L&D INITIATIVES

TRAINING PROGRAMS - JAN - MAR'2022

LEARNING PROGRAMMES ▼ JAN'22

05 th	IMS Internal Auditor Training Program
06 th	IMS Internal Auditor Training Program
07 th	IMS Internal Auditor Training Program
08 th	Mediation - Where Both Parties Win
08 th	Need for Integration of people and process for effective Project Management
08 th	Self Healing Concrete: Promising new development in Concrete Technology
11 th	Omicron: Risk & Prevention
15 th	Performance Evaluation of Concrete Road
17 th	Durability and Sustainability are the keys to High Performance Structures.
18 th	Yoga and Wellness during Omicron
18 th	Application of Vehicle Load on Bridges as per IRC Standards using #Staad. Pro & Geometric Design of Roadways as per IRC Specifications using #Openroads
19 th	Artificial Intelligence (AI) for making Smart Buildings
22 nd	Electrical Fires in Buildings - Recommended mitigation techniques and building classifications
22 nd	Sustainability of Heritage Structures, Issues and Challenges-Case Study.
24 th	Net Zero Waste in Buildings
28 th	Budget Expectations 2022 for the Construction Infrastructure and allied industries
29 th	Structural Audit, Repair, Rehabilitation & Retrofitting of Buildings: Process & Methodologies
29 th	Fire Safety for Buildings: An Overview from perspective of Structural Engineer

LEARNING PROGRAMMES ▼ FEB'22

03 rd	Jal Jeevan Mission
05 th	Sustainable Materials for Construction: Opportunities & Challenges
07 th	Roads & Bridges - Modernizing Equipment, Design and Efficiency
10 th	Obesity: An Impact of COVID-19 Pandemic
12 th	Managing Values in Life
17 th	Durability and Sustainability are the keys to High Performance Concrete Structures
17 th	Managing Liver Care.
19 th	Bridges with External Pre-stressing: Future of Bridge Construction in India
19 th	Achieving Comfort for all-Without Energy Depletion.
21 st	Safety Precautions & Safe functioning after Covid.
22 nd	Indian Construction Sector
23 rd	Managing Eye Care
26 th	Inside Story of Autoclaved Aerated Concrete Blocks

LEARNING PROGRAMMES ▼ MAR'22

05 th	Positive Safety Culture - An Important Pivot of A Sustainable Governance
05 th	Developing Sustainable & Durable Concrete with Plastic Waste
06 th	Quantification and Presentation of EOT and associated Cost Claims in Construction Contract
09 th	Infrastructure Sector ready for Disruption
09 th	Escape and Rescue in the Construction Industry
09 th	Kidney Care: Preventive and Curative Actions
12 th	Role of Admixtures in Modern Concrete Construction
15 th	DFI India Groundwork Webinar
17 th	Digital Transformation of Water Supply Schemes & Projects
21 st	MG Setu with Choice of Steel in Superstructure Vs. Replacement in Concrete"
23 rd	Seismic Safety of Non-Structural Elements
25 th	Choosing the right cement based on application
26 th	Prefabricated Volumetric Construction
28 th - 30 th	One Drive& MS Teams Training Programs.
29 th	Obstructive Sleep Snoring: Symptoms, Causes & Treatment
31 st	Geometric Design of Roundabouts using Openroads



Mr. TARRA RAMESH BABU

Sr. General Manager (Designs), Corp. Office

Mr. Ramesh Babu has joined as Sr. General Manager (Designs) at Head Office. He completed M.E (Structures) from Andhra University, Visakhapatnam & B.E (Civil) from Osmania University, Hyderabad. He was previously associated with M/s. KDM Engineers and Consultants Pvt Ltd., Hyderabad as Chief Executive Officer; Vasuprada Consultants LLP, Hyderabad as Dy. CEO/Principal Engineer (HoD-Bridges); EGIS India Consulting Engineers Pvt Ltd., Hyderabad as Project Manager/Associate General Manager (HoD-Bridges); Gayatri Projects Ltd., Hyderabad as Dy. General Manager (Bridges); Scott Wilson Ltd, Basingstoke, United Kingdom as Bridge Engineer (Design); O'Connor Sutton Cronin and Associates Ltd., Dublin, Ireland as Bridge Engineer (Design); Rites Ltd., New Delhi as Asst. Manager (Civil); Ircon International Ltd., New Delhi as Asst. Manager (Const.); Hindustan Construction Co. Ltd., Mumbai as Sr. Engineer (Const.) and JD Constructions, Visakhapatnam as Design Engineer.

He has 22 Years of experience in Design/Design Implementation and Execution/Construction of Road/Rail/Metro.



Mr. CHITTELLA VENKATA RAMAMURTY

Sr. General Manager (Tech.), Buildings Division

Mr. Chittella Venkata Ramamurthy has joined as Sr. General Manager (Tech.), Buildings Division. He completed M.Tech (Transportation) & B.Tech (Civil) from Jawaharlal Nehru Technological University, Hyderabad. He was associated with Consulting Engineers Group India Ltd., Mumbai, as Vice President (Metro Rail); Larsen & Toubro Metro Rail (Hyderabad) Ltd., as Dy. General Manager (Contracts); EGIS India Consulting Engineers Pvt Ltd., (Chennai Metro Rail Ltd.), Chennai as Dy. General Manager (Contracts & Cost Control); Nagarjuna Construction Company Ltd., as Sr. Manager (Tech.); East Coast Railway (Indian Railways), Visakhapatnam as Head-Contracts; South Eastern Railway (Indian Railways), Bobbili & Koraput, as Jr. Engineer - Works and Build Tech, Visakhapatnam as Site Engineer.

He has more than 30 Years of expertise in Project Management, Procurement, Contract Administration, Program Management, Project Monitoring & Control, Client Management and completed many infrastructure projects such as Railways, Metro Rail and Irrigation.



Dr. PRABHAKHAR VARMA PENUMETSA

General Manager (Corporate Communications), Corp. Office

Dr. Prabhakar Varma Penumetsa has joined as General Manager (Corporate Communications & Liaison) in our Organization at Corp. Office. He obtained M.Sc. (Economics), Specialization in Social Development Planning and Management from University of Wales, Swansea, United Kingdom; M.A. (Social Anthropology) from Andhra University, Visakhapatnam. Prior to his joining in NCC, He was an advisor to Govt. of Karnataka on Sustainable Development Goals Coordination Committee (SDGCC), United Nations Development Programme (UNDP). He was associated with Sembcorp Energy India Limited (SEIL) as Head Sustainability & Liaison; KSK Energy Ventures Limited as Head-CSR & Liaison; PSS Universe, Hyderabad as Country Director; India HIV/AIDS Alliance, Hyderabad as Executive Director; Child Fund International (Formerly Christian Children's Fund) India as Director (Networking and Strategic Alliance); Plan International India, Hyderabad as Zonal Manager; Action Aid Regional Office, Hyderabad as Regional Manager; SEARCH (Internationally Recognized Support Institution), Bangalore as Evaluator; Integrated Micro Project Appraisal Consultancy and Training Centre, Hyderabad as Program Director; Council for Social Development and EIDAWN Consultancy Services, Swansea, Wales, U.K. as Research Officer. In our Organization he is going to take care of all the initiatives under Corporate Communications, Brand Building, Skill Development and Liaison with Government Officials.

He has more than 35 Years of experience in Managing Social Development Sectors and Corporate Sectors with focus on Resettlement & Rehabilitation projects, CSR, Liaison, permits and clearances, Government relations, Community engagement and Management.



Mr. PRASANNA DAS

Dy. General Manager (Tech.), Buildings Division, Bengaluru

Mr. Prasanna Das has joined as Dy. General Manager (Tech.) at RO Bangalore. He obtained Bachelor of Engineering B.E (Civil) from Jalpaiguri Government Engineering College, West Bengal. Previously he was associated with Larsen & Toubro Limited High Speed Rail Project based at Baroda as Head-Planning and M/S. Simplex Infrastructure Limited as Chief Manager (Projects).

He has an overall experience of 16 Years in the field of Elevated Metro Construction & Flyover Projects.



Mr. NAGARAJU MARISETTI

Dy. General Manager (HR), PEMI Division - Corp. Office

Mr. Nagaraju Mariseti has joined as Dy. General Manager (HR). He obtained B.Sc from Nagarjuna University, PG Diploma in HRM from Andhra University and Executive Certificate in Management Program, from McIntire School of Commerce at the University of Virginia. He was associated with M/S. Jairaj Ispat Limited (Jairaj Steels) as General Manager - HR & Admin; GVPR Engineers Limited, Hyderabad as AGM- HR; SEW Infrastructure Limited, Hyderabad as Asst. General Manager - HR; China State Construction (HK) Limited & Soma Enterprise Limited, Hyderabad as Dy. Manager - HR & Admin and Punj Lloyd Limited, New Delhi as Sr. Executive (Personnel & Administration).

He has 24 years of experience in Talent Acquisition, Talent Management, Compensation & Benefit Management, Policy and Process Management, Employee Relations, Employee engagement, Statutory Compliance and Operations.



Mr. NAGARAJ CHELLAPPAN

Dy. General Manager (Planning), Buildings Division, Bengaluru

Mr. Nagaraj Chellappan has joined as Dy. General Manager (Planning) for BMRCL Project at RO Bangalore. He obtained B.E (Civil Engineering) from Madras University, Chennai. He was associated with Afcons Infrastructure Limited, Mumbai as Asst. General Manager (Planning); L&T Infrastructure Development Projects Ltd., Chennai as Asst. General Manager (Planning); GMR Pochanpalli Expressways Pvt Ltd., Bangalore as Planning Manager; and again Afcons Infrastructure Limited, Mumbai as Planning Manager and Sr. Engineer; Wade Adams Middle East - Gulf Consolidated Contractors - JV, State of Qatar as Planning Engineer; Hochtief (India) Private Limited, Chennai as Planning Engineer and National Asphalt Products and Construction Company, Chennai as Site Engineer.

He has an overall experience of 31 Years, in Project Planning & Management, Road Construction including bituminous and quality concrete pavement.



Mr. SWARUP BISWAS

Asst. General Manager (Tech.), Buildings Division, Bengaluru

Mr. Swarup Biswas has joined as Asst. General Manager (Tech.) at RO Bangalore. He obtained Diploma in Civil Engineering from West Bengal State Council of Technical Education. He was associated with M/s. Simplex Infrastructure Limited as Chief Manager (Projects); M/s. Supreme Infra Limited as Sr. Project Manager; M/s. Technopower Construction Pvt Ltd., as Project Coordinator; M/s. GPT Infra Projects Limited as Manager Project. M/s. Simplex Infrastructure Limited as Asst. Manager (Construction) and also as Construction Engineer; Samsung Corporation as Site Engineer; Shapoorji Pallonji Co Ltd., as Asst. Engineer; Nagarjuna Construction Company Ltd., as Jr. Engineer during the period 2004-2005 and Sun Construction as Jr. Engineer.

He has 21 Years of experience in Metro Rail (Viaduct and Station Building), Underground Tunnel (Cut and Cover), Cable Stay Bridge and Building Projects.



Mr. RAJASEKHAR PAPPALA

Asst. General Manager (Designs), Corp. Office

Mr. Rajasekhar Pappala has joined as Asst. General Manager (Designs) at Head Office. He obtained M.Tech (Structural Engineering) from National Institute of Technology, Allahabad & B.Tech (Civil Engineering) from Nagarjuna University. He was previously associated with Tecton Engineering and Construction India (Pvt) Ltd., Chennai as Assistant General Manager; GVPR Engineers Limited., Hyderabad as Senior Manager; IVRCL Limited., Hyderabad as Manager; Candid Designers, Hyderabad as Sr. Structural Design Engineer and Aster private Ltd., Hyderabad as Sr. Structural Design Engineer and Project Coordinator.

He has 15 Years of experience as Structural Designer in the fields of Irrigation Projects, Water Treatment Plant Structural designing, Industrial Structure's, Residential Buildings, Telecom Towers and Poles designing.



Mr. NIMMAGADDA KIRAN

Asst. General Manager (Designs), Corp. Office

Mr. Nimmagadda Kiran has joined as Asst. General Manager (Designs) at Head Office. He obtained M.Tech (Civil Engineering) from Indian Institute of Technology, Roorkee and B.Tech (Civil Engineering) from N B K R Institute of Science & Technology, Nellore affiliated to Sri Venkateswara University, Andhra Pradesh. He was associated with Consulting Engineers Group Limited, Jaipur as Dy. General Manager (Structures); Larsen & Toubro Construction Limited (Heavy Civil Infrastructure IC), Chennai as Engineering Manager (Civil); Aarvee Associates Architects Engineering & Consultants Pvt Ltd., Hyderabad as Manager (Designs) and RITES Limited, Gurgaon (RCED Division) as Asst. Manager (Designs).

He has 15 Years of experience in Designs: Design of Substructure part which includes RCC Box Culverts, MCC & RCC Retaining Walls, Design of Steel Foot Over Bridges, Design of Normal and Cantilever type pier caps for Metro Projects and Design of Steel Composite Girders.



Mr. SOUMENDRA PATNAIK

Asst. General Manager, Buildings Division, Cuttack

Mr. Soumendra Patnaik has joined as Asst. General Manager in our Organization, Buildings Division, SCB Project, Cuttack. He obtained M.Arch from Indian Institute of Technology, Roorkee and B.Arch from Utkal University, Orissa. He was associated with Ormsby Design Group, Mumbai as Director (Business Development); Design Worldwide Partnership, Mumbai & Gurgaon as Business Development Manager; Bharat Infratech Private Limited, Hyderabad as Senior Manager; Trammell Crow Meghraj, Hyderabad as Senior Architect; United Projects Engineering Services, Delhi as Site Architect and S.K.Das Associated Architects, New Delhi as Junior Architect.

He has more than 18 Years of experience in Business Consulting, Design Audit/Management and Project Management.

Congratulations

35 years in NCC



Mr. V Radhakrishna, Director (Projects), being felicitated by Mr. A Ranga Raju, Managing Director



Mr. A Suri Babu, General Manager (Accounts), W&E Divn., being felicitated by Mr. A Ranga Raju, Managing Director



Mr. AVRS Srinivasa Raju, Asst. General Manager (Stores), Central Workshop

30 years in NCC



Mr. K Suryanarayana Raju, AGM (Stores), AIB-VSKP Phase II Pkg, being felicitated by Mr. A Ranga Raju, Managing Director



Mr. MSANB Srinivas, CGM (Tech.) Corp. Office, being felicitated by Mr. ASN Raju, Director



Mr. M Anil Kumar, Asst. Manager (Admin), Corp. Office, being felicitated by Mr. AGK Raju, Executive Director



Mr. A Ramesh Babu, Chief General Manager (Tech.), Corp. Office, being felicitated by Mr. NR Alluri, MD, NCC Urban



Mr. Bidyadhar Mahapatra, Manager (Accounts), NIPPER, Guwahati



Mr. BSS Mallikarjuna, Project Manager, SWSMUP Lakhimpur Kheri, being felicitated by Mr. Uddaraju Sunil, Director (Projects)



Mr. Y Ramesh Reddy, Project Manager (P&M), Corp. Office, being felicitated by **Mr. Harsha Varma**, Director (Projects)

Mr. A Sivaji, AGM (Real Estate), being felicitated by **Mr. AGK Raju**, Executive Director

25 years in NCC - Mr. YV Krishna Prasad, AGM (Accounts), RO-Patna



Mr. A Srinivas, Manager (Accounts), ADB Moradabad, being felicitated by **Mr. Ramula Hari Krishna** (SPM)



Mr. GVK Raju, Sr. GM (Personnel), Corp. Office, being felicitated by **Mr. AGK Raju**, ED



Mr. Narayan Kumar, AGM (Contract & Claims), Corp. Office, being felicitated by **Mr. Raghu Alluri**, Director (Operations)



Ms. M Latha, Sr. Manager (Designs), being felicitated by **Mr. Ravindra Bhupathi Raju**, Director (P&E)



Mr. Mrinal Banerjee, Manager (Admin), RO-Kolkata (W&E Div.), being felicitated by **Mr. N Dutta** (CGM) RO-Kolkata, W&E Divn.



Mr. Satish Kumar, Dy. Manager (Accounts), RO Patna, being felicitated by **Mr. Rajasekhar Bellapu**, GM (Tech.)



Mr. A Hara Kumar, Dy. Project Manager (Electrical), Corp. Office, being felicitated by **Mr. GRK Raju**, SGM

- Mr. S Uthira Kumaran**, Dy. Manager (EDP), AIIB Nellore-Pkg 1
- Mr. Rajendra Mahakud**, Dy. Project Manager, RVNL-Angul-Sukinda
- Mr. Jayanta Nayak**, Dy. Project Manager (Electrical), IIT Patna
- Mr. B Krishna Kumar**, Dy. Manager (Accounts), RVNL-Angul-Sukinda
- Mr. Enamul Hassan**, Dy. Manager (Stores), IIT Ropar 1C
- Mr. Kher Rajendra Kumar Dhiraj Lal**, Manager (EDP), RO Mumbai

- Mr. TRN Vara Prasad**, Dy. Manager (EDP), RPWS -Sukinda block Proj 2
- Mr. Sanjeev Kumar Jha**, Manager (Stores), Chandini Chowk-Pune
- Mr. P Veerabhadra Raju**, Asst. Manager (Stores), Adani International Airport, Lucknow
- Mr. Reddy Deva Raju**, Asst. Manager (Stores), SWSM-Hardoi
- Mr. Rajesh Singh**, Asst. Manager (Stores), Ramsar-Sheo Water
- Mr. Y Gopala Krishna**, Asst. Manager (Stores), BDA-Bhubaneswar



Mr. P Prem Kumar, Dy. Manager (Taxation), Corp. Office, being felicitated by **Mr. M Sriram**, Sr. General Manager (Taxation)



Mr. P Venkata Narayana, Dy. Manager (Admin), Seabird, Phase 2A, Karwar, being felicitated by **Mr. GRK Reddy**, Sr. VP (Tech.)



Mr. K Raja Ramesh, Asst. Engineer (Elec.), TANGEDCO-Adyar project, being felicitated by Project Managers **Mr. V Srithar & Mr. S Sathish Kumar**



Mr. B Nageshwar Rao, Chief Manager (Taxation), Corp. Office, being felicitated by **Mr. M Sriram**, Sr. General Manager (Taxation)



Mr. T Tirumaleswara Rao, Manager (Systems Admin), Corp. Office, being felicitated by **Mr. Sudhakar James**, Sr. GM



Mr. SL Praveen Kumar, Manager (Autocad), Corp. Office, being felicitated by **Mr. Surya Srinivas Nistala**, VP



Mr. S Nagaprakash, DM (Materials), MES- INS Arakkonam site, Chennai, being felicitated by **Mr. P Narasimhan**, VP (Accounts)



Mr. Manoj Kumar Mohanty, Sr. Asst. (Stores), JBPC/Shree Setu Project & **Mr. J Subrahmanyam Raju**, Asst. Manager (Stores), JBPC/Shree Setu Project, being felicitated by **Mr. P Dilip Kumar Subudhi**, GM(Tech.), **Mr. A Ramachandra Rao**, JGM (Tech.) & **Mr. Sambit Patnaik**, AGM (Tech.)



Mr. AVVNK Durga Rao, Manager (Accounts), Chennai Trade Centre Project, being felicitated by **Mr. P Ramakrishnaiah**, JGM (T)



Mr. V Harikrishna, JGM (Designs), Corp. Office, being felicitated by **Mr. Ravindra Bhupathi Raju**, Director (P&E)



Mr. V Harikrishna, JGM (Designs), Corp. Office, being felicitated by **Mr. Ravindra Bhupathi Raju**, Director (P&E)

Mr. Suri Gireesh, Sr. Engineer, TS Transco, Yellimpally
Mr. Sudipta Kumar Pandey, Sr. Project Manager, JBPC Puri
Mr. Anirudha Kumar, Asst. Manager, EDP IIT Patna

Mr. Ravi Kumar, Asst. Manager (Safety), Pune Metro Rail Project (P2)
Mr. Duggineni Venkatesh Babu, Asst. Engineer, SPAG-Shar-Sriharikota
Mr. G Dinesh Kumar, Asst. Engineer (Mech), Seabird Phase DB02 Karwar
Mr. Jaldi Ananda Mohan Kumar, Project Manager, AIIB-VSKB Phase II Pkg
Mr. Gondesi V Satish Reddy, Asst. Engineer (Mech.), AIIB VSKB Phase IIPkg
Mr. Ajit Kumar Nayak, Sr. Asst. (Admin), Silchar Medical College & Hospital
Mr. Gubbala Ramudu, Dy. Project Manager, Samruddhi (NMSCW), Pkg 3-S3
Mr. Shashi Prakash, Sr. Engineer (Mech.), Adani International Airport, Lucknow
Mr. Palavlasa Srinivasa Rao, Dy. Project Manager, RPWS -Sukinda Block proj-2



Mr. Rajesh Kumar, Sr. Assistant (Stores), Pune Metro Rail Project, Reach-01 being felicitated by **Mr. Vijay Narasimha Raju KAL**, DGM (Tech.)



Mr. Premal Biswas, Asst. Engineer (Mech), AWS-Durgapur, being felicitated by **Mr. PVSSN Raju**, Project Manager (P&M)



Mr. Tapas Roy, Officer (Resource Mobilisation), AIIMS Guwahati, being felicitated by **Mr. Biswajit Sarma**, DGM (Tech.)



Mr. Pradeep Kumar, Officer (Safety), AIIMS Guwahati, being felicitated by **Mr. Biswajit Sarma**, DGM (Tech.)



Mr. Jamir Ali Mia, Sr. Asst (R&M), CTC Project-Chennai, being felicitated by **Mr. P. Narasimhan**, VP (Accounts)



Mr. Kalluri Surya Narayana, Officer (R&M), AIIMS Guwahati, being felicitated by **Mr. Biswajit Sarma**, DGM (Tech.)



Mr. Annamreddy Prasad, Asst. Manager (EDP), SVSM Kushinagar, being felicitated by **Mr. Manish Saini**, Sr. Project Manager & **Mr. Donthula Venkata Ramana**, Sr. Project Manager



Mr. G Mohan Rao, Jr. Foreman, Biswa Bangla, Biswabidyalay, Bolpur site, being felicitated by **Mr. Kamallesh Talukdar**, Asst. General Manager (Tech.)



Mr. Deepak Kumar Varma, (DPM), Samruddhi (NMSCEW) Pkg-3, Section-3, Amravati (Maharashtra), being felicitated by **Mr. ASN Raju**, Director



Mr. Isukapalli Balarama Raju, Dy. Manager (Accounts), Electrical Divn., Corp. Office, being felicitated by **Mr. RL Narasimha Raju**, SGM



Mr. NVL Srinivas, Sr. Manager (PR), being felicitated by **Mr. Raghu Alluri**, Director (Operations)



Mr. Kethavath Deshya, Officer (EDP), being felicitated by **Mr. Sudhakar James**, Sr. General Manager



Mr. GVVD Gangadhar, Officer (Stores), Chennai Trade Centre Project, being felicitated by **Mr. P Ramakrishnaiah**, JGM (T)



Mr. Dantuluru VSPV Varma, Manager (Resource Mob), Chandani Chowk Flyover, Pune, being felicitated by **Mr. Kavln Raju**, DGM (T)



Mr. Kota Naresh, Officer (A/c's), RG OC-II Project, Mining Division, being felicitated by **Mr. GGV Prabhakara Rao**, Project Incharge



Mr. Malireddy Raja Gopal Reddy, Manager (Stores), Jabalpur Flyover, being felicitated by **Mr. Srihari Raju V**, GM (Tech.)



Mr. S Ravi Kumar, Asst. Engineer (Mech.), Central Workshop, being felicitated by **Mr. Janaki Ramudu**, GM (Tech.) & **Mr. Ramesh**, JGM (Tech.)



Mr. P Shivaram, AGM (Legal), Corp. Office, being felicitated by **Mr. Sreenivasa Murthy**, Executive Vice President (Legal) & CS



Mr. Satish Kumar Mahadevu, Asst. Manager (Accounts), AIIMS Guwahati, being felicitated by **Mr. Biswajit Sarma**, DGM (Tech.)

Happenings



Mr. AVN Raju, Director, visited SWSM Raebareli Project



Mr. ASN Raju, Director, visited JBPC - Puri Project



Mr. ASN Raju, Director, visited SWSMUP-Shahjahanpur Project



Mr. Sanjoy Kishan, Honourable Minister, Labour Welfare Dept. Govt of Assam, visited TMCH-Tinsukia site



AIIMS-Guwahati - visit by Dr. Bharati Pravin Pawar, Honourable Union Minister of State for Health & Family Welfare & Mr. Keshab Mahanta, Minister of Health & Family Welfare, Science and Technology, Information Technology, Govt. of Assam



AIIMS-Guwahati - visit of Prof. Ramji Singh, Executive Director, AIIMS & Ms. Kalyani, Addl. Charge of Director, AIIMS



Double Decker Flyover Bridge (NAL Stop area) Inaugurated - Pune Metro Rail Project NCC Reach 02
by Mr. Chandrakant Dada Patil, MLA and Mr. Murlidhar Anna Mohol, Mayor of the Pune City

MMRDA METRO CA-03 INAUGURATION



Mr. Suhas Eklahare, Executive Vice President, Mr. PNVS Murthy, Sr. VP, seen with Mr. Uddhav Thackeray, Honourable Chief Minister of Maharashtra



IMS Internal Auditors Training Program - Corp. Office - 5th to 7th January 2022. Participants were from Corp. Office, INS Rajali Arakkonam, AIIMS Guwahati, Adani International Airport Lucknow, AIIMS Bilaspur, Jabalpur Flyover, AIIMS Bathinda and Chennai Trade Centre C&E.

Certificate presentation by Mr. Sudhakar Moorthy, SVP (HR) to Mr. Ravi Krishna Kumar Saripally, AGM (HR Dept.)



Badminton Court inauguration - SWSMUP - Mainpuri, UP

Insurance training - Banda site, UP by Mr. Chandra Sekhar Reddy, AGM, Insurance dept.,

REPUBLIC DAY



AWS-Durgapur, West Bengal



AIIMS Bathinda, Punjab



SWSMUP - Mainpuri, Uttar Pradesh



SWSM Bareilly - Central Office, Uttar Pradesh



MRTS Project - Patna, Bihar



WTP, RWS&S-Keonjhar, Odisha



UP - Mahadev WSS, Mirzapur, U.P. & UP - Ahugi Kala WSS, Mirzapur, U.P.



Nalanda University - Rajgir, Bihar



Chennai Trade Centre Project - Chennai

Congratulations



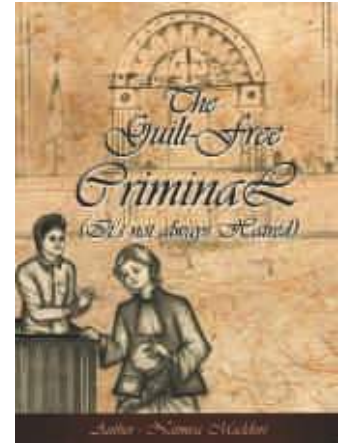
Mr. M Venu Gopal, Chief Manager (Secretarial & Legal) department, Corp. Office. He has recently completed his **Company Secretary course** conducted by Institute of Company Secretaries of India, New Delhi.



Ms. CV Lakshmi Teja, younger d/o Mr. CTV Chandra Sekhar, Manager (Stores), Electrical division, TANGEDCO-Adyar, Chennai, Tamil Nadu, successfully completed her CA. seen is the Convocation Program



Ms. Naimisa Madduri, d/o Mr. Sriram M, SGM (Taxation), Corp. Office, is a second year BBA LLB student at Symbiosis law school, Hyderabad. She has interned under various senior advocates of High Court striving to keep herself abreast with the best legal skills and knowledge. She has a strong passion for music and writing and for the same reason has taken a step forward in publishing the book **'the guilt-free criminal.'**



INTERNATIONAL WOMEN'S DAY-2022 celebrated with gaiety at NCC House.

The Program commenced with Mr. PVS Ravindra Varma, Sr. GM (HR) initiating the proceedings and briefing about the concept of Women's Day. He was the Quiz Master for Women's Day Quiz, which covered a gamut of questions. Mr. N Sudhakara Moorthy, SVP (HR) who gave the Valedictory address explained the theme of this year's International Women's Day





Pune Metro Rail project, Reach 02 site, Maharashtra



TMCH Tinsukia Medical College & Hospital, Assam



Jabalpur Flyover project - Madhya Pradesh



Falgu River Rubber Dam project - Gaya, Bihar



SMCH-Silchar project, West Bengal



INS Rajali site - Arakkonam, Tamil Nadu



Power Tools Training by Bosch Trainer - Seabird, Karwar, Karnataka

Safety kit with 13 items - distribution by Mr. Neeraj Kumar, Sr. GM (Tech.), under BOCW (Maharashtra Govt.) for labour welfare at NMSCEW Pkg-3 CY camp, Amravati, Maharashtra



NMRCL - Jaisthambh Chowk Project, Nagpur, Maharashtra



SCB Medical Hospital - Cuttack project, Odisha



SWSMUP - Mainpuri



Warangal Projects, Telangana



BMRCL PHASE 2B PKG-II, Project-Bangalore, Karnataka



SWSM Bareilly - Central Office - Uttar Pradesh



Defensive Driving Training - Seabird, Karwar, Karnataka



Power tools training - Seabird, Karwar, Karnataka



Valedictory day - Seabird, Karwar, Karnataka



SWSM - Shahjahanpur, Uttar Pradesh



SWSMUP - Gorakhpur, Uttar Pradesh



Airport Project - Patna, Bihar



Chennai Trade Centre, Tamil Nadu



Fire Fighting Training - Seabird Project, Karwar, Karnataka



Tree Plantation, Seabird Project, Karwar, Karnataka



World Aids Day Awareness Program - Pune Metro Rail Project, Reach 02 site, Maharashtra





MAGATHANE STATION

SALIENT FEATURES



DEVIPADA STATION



OVERIPADA STATION



NATIONAL PARK

- 1 Name of employer : Metropolitan Region Development Authority
- 2 Name of Contractor : NCC Limited,
- 3 Name of Work : MMRDA/MMRP/CA-03: Part Design and Construction of Elevated Viaduct and 4 Elevated Station viz. Magathane, Devipada, National Park and Overipada [Excluding Architectural Finishing & Pre-Engineered Steel Roof Structure of Stations] from Chainage 11664.600 to 15440.000M of Andheri (East) - Dahisar (East) Corridor of Mumbai Metro Rail Project of MMRDA
- 4 General Consultant : AICA Consortium (GC)
- 5 LOA : Metro - PIU/LINE 7 /LOA.CA-03 Dt. 09.05.2016
- 6 Start Date of Project : 01.06.2016
- 7 Completion Date of Project : 30.11.2018 (30 Months)
- 8 Revised Completion Date of Project : 31.03.2022
- 9 Original Contract Value (Inclusive of taxes) : Rs. 249.85 Cr
- 10 Revised Contract Value (Inclusive of taxes and price variation) : Rs. 376.38 Crs
- 11 Length of Viaduct (Incl.Stations) : 3.7754 KM
- 12 Number of Stations : 4 Nos (185 X 18.90 M Each)
- 13 Number of Spans : 163 Nos
(1 spans of RCC BOX Girder - 55 m Span & 10 spans of Steel Girders Qty. 1090.46MT)
- 14 Number of Pile Foundations and Pile Caps : 164 Nos
- 15 Number of Piles of 1000 dia : 654 Nos
(3/4/6 Nos. of Piles in Group)
- A Viaduct : 462 Nos
- B Stations : 192 Nos
- 16 Size of the Pile Caps (6 Pile Group) : 6.30 x 3.80 x 1.50 M
- 17 Size of the Pile Caps (4 Pile Group) : 3.80 x 3.80 x 1.50 M
- 18 Size of the Pile Caps (3 Pile Group) : Trapezoid (4.30 x 4.3/1.3 x 1.50 M)
- 19 Viaduct Piers : 116 Nos
- 20 Stations Piers : 48 Nos
- 21 Number of Pier caps Precast Post Tensioned (Viaduct)
 - A Type - 1 (Standard Pier Cap) : 116 Nos
 - B Type - 2 (Cast in Situ Pier cap) : 31 Nos
- 22 Number of Pier caps Cast in Situ Post Tensioned (Station) : 96 Nos
 - A Type - 1 (Station concourse Pier arm) : 48 Nos
 - B Type - 1 (Station Platform Pier arm) : 48 Nos
- 20 Number of U-Girders : 316 Nos
 - A Viaduct 25m Length : 228 Nos
 - B Stations 17m Length : 72 Nos
 - C Stations 16m Length : 16 Nos

ANGUL DISTRICT, ODISHA

ON GOING PROJECT



Water & Environment Divn.

“Execution of 02 No of Individual Rural Piped Water Supply Project pertaining to mining affected villages of Angul District including five years of Operation & Maintenance” on EPC mode.

BACKGROUND OF THE PROJECT

Angul district is located in the center of the state of Odisha. It is bounded by Dhenkanal and Cuttack district in the east, Deogarh, Kendujarh and Sundergarh district in north, Sambalpur and Sonepur in west and Boudh & Nayagarh in the south side.

The total geographical area of Angul is 6232 sq.km, thus it is the largest district among 30 districts of Odisha.

Angul is a mineral rich district. Coal mines play major role in the district, there are around 20 coal mines operating in the Talcher- Kaniha and Chhendipada block. Due to mining operations, people have lost their natural resources, water resources and connectivity. Coal mine surrounding villages are greatly affected by air, water and noise pollution. Untreated water is discharged into river without adequate treatment.

This led to an immediate attention towards treated drinking water supply to individuals from surface source. This project is awarded to NCC limited by Rural Water Supply & Sanitation department (RWS&S), Govt. of Odisha under the funding of District Mineral Foundation (DMF)

CONCEPT OF THE PROJECT

The Project is designed and executed by W&E Division of NCC

The Project aims at providing water supply to 205 villages of Talcher block and 172 villages of Chhendipada block along with provision of clear water for Urban area of Talcher municipality, 70% population of Banarpal block, 30% population of Chhendipada block, Sumps at Deulebeda and Anandbazar @ 5500 KL per day.

The feasible source of water is surface water of River Brahmani from upstream side of Samal Barrage at Samal village. The water is tested and is found suitable for Raw water as per standard norms. The project is the combination of two schemes i.e., 1. Talcher- Kaniha Block having 49.72 MLD water treatment plant and 2. Chhendipada block having 23.76 MLD water treatment plant.

Firstly, population projection and demand has been arrived based on the population details provided in the bid document. Growth rate has been considered as 14% with base year as 2020, Intermediate design year as 2035 and Ultimate design year as 2050.

Per capita water supply: 70 lpcd including wastages and institutional demand.

RWS&S - TALCHER

49.72 MLD WATER TREATMENT PLANT



Intake Well Cum Pump House

Intake Substation

Over Head Reservoir

MAIN COMPONENTS OF THE PROJECT:

- 1) Project value (CAPEX) : 668.43 Cr's
(Talcher-Kaniha: 316.60 Cr's, Chendipada: 351.83 Cr's)
- 2) Project value (O&M) : 33.43 Cr's
(Talcher-Kaniha: 16.33 Cr's, Chendipada: 17.10 Cr's)
- 3) Villages covered : 377 Villages
- 4) Population covered (2020) : 5,34,895
- 5) Intake Details : Pump capacity – Units
Talcher-kaniha: 1081 Cum / HR (2W+1S)
Chendipada: 507Cum / HR (2W+1S)
: Substation – 1600kVA
- 6) RWPM : 30.25 DI (100mm-900mm dia)
- 7) WTP Details : Capacities -
Talcher-Kaniha: 49.72MLD, Chendipada: 23.76MLD
: Pump capacity – Talcher-kaniha: 345 Cum / HR (6W+3S)
Chendipada: 70 Cum / HR (2W+1S), 280 Cum / HR (3W+2S), 240 Cum / HR (1W+1S)
- 8) CWRM : 426 DI Pipeline
- 9) IBS : 4 No's Talcher-kaniha, 3 No's Chendipada
- 10) OHR's : 72 No's (100 KL to 1375 KL)
- 11) Distribution Network : 1524 KM (HDPE & DI Pipeline)
(Talcher-Kaniha: 671 KM, Chendipada: 853 KM)
- 12) House Service Connection :
43250 No's -Talcher-kaniha, 39305 No's - Chendipada

TOTAL VALUE OF THE PROJECT

Project value:	701.86 Crs.
Contractual start date:	27.02.2019
Contractual completion date:	31.03.2022

ADDITIONAL INFORMATION

Note: Commissioning is in progress. Inhabitants within command area are getting water supply through household taps. Villagers are very pleased with water supply and we are working hard to provide the water supply to the remaining villages by this summer.

As per population census 2020, 5,34,895 people will be benefitted after completion of the project. NCC Limited is committed to complete the project and to provide clear water to each and every household within project area.



RWS&S- CHHENDIPADA



23.76 MLD Water Treatment Plant



Clariflocculator



Pump House



Over Head Reservoir



House connections



Chemical House



Chlorine House



CWR



Filter House



Road works

IN WHICH YEAR DID YOU JOIN NCC?

My association with NCC is 30 years as of now, I have joined in NCC on 22nd May 1992 and started my career as Purchase Officer at Regional Office, Bangalore. Now I am working as General Manager (Materials)

UNFORGETTABLE INCIDENTS IN NCC AND YOUR LIFE AND WHY?

Initiated my career as Purchase Officer and with encouragement from the management, slowly and steadily my career has progressed in ten years and became Head of the department for which is a remarkable and unforgettable experience.

BRIEFLY DESCRIBE YOUR AREA OF WORK?

Materials procurement for different types of projects especially MetProjects in Karnataka region which involves in identifying specialized items based on technological development in the industry.

YOUR STRENGTH?

My strength is honesty, hard work and sincerity and accomplishment the results on time.

AREAS IN WHICH YOU WANT TO DEVELOP YOURSELF?

Involvement in execution of a specialized project to make NCC as a Centre of Excellence in the field of Infra Industry.

YOUR CONCEPT OF HAPPINESS?

My concept of happiness is job satisfaction and achievement of desired results on time and to maintain balance in work and family life.



Mr. DVNS VARMA
General Manager (Materials),
RO-Bangalore, shares with
Samashti a slice of his life

SUCCESS MEANS?

Overcoming all hurdles which come along with the way to test our mental and physical strength and capability.

PLEASE SHARE YOUR FAMILY DETAILS?

My wife: Smt. Madhavi is a homemaker.

My elder son: Mr. Anudeep Varma is working in Google, USA.

My younger son: Mr. Abhinav Varma is working in Capgemini, Bangalore

YOUR MESSAGE TO NCCIANS BASED ON YOUR EXPERIENCE?

Hard work, sincerity and dedication to the work will help to reach higher goals with a positive mindset.



VEG SABJI BESAN PATWADI RECIPE



INGREDIENTS

1 ¼ cup	Besan
2 cup	Water
1 tablespoon	Oil
1 teaspoon	Sesame seeds (til)
1 teaspoon	Jeera
2 teaspoon	Red chili powder
2 teaspoon	Coriander powder
1 teaspoon	Turmeric powder
1 pinch	Asafoetida (Hing)
1 teaspoon	Salt

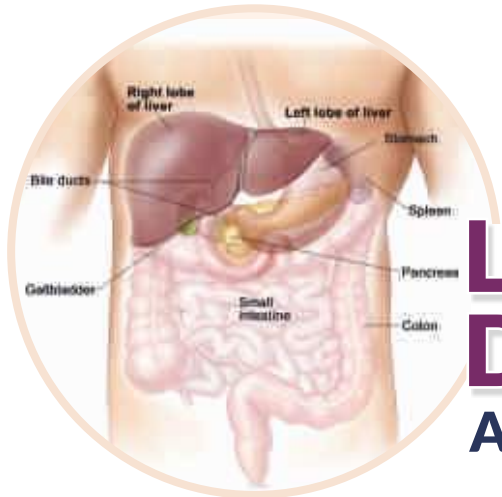
METHOD

1) Heat 1 tablespoon oil in a pan **2)** Add asafoetida, cumin seeds and sesame seeds to it. **3)** When the seeds start fluttering, add red chilli powder, coriander powder and turmeric powder to it. **4)** Add 2 cups of water and let it boil. **5)** When it starts boiling, slowly add besan while stirring it with perforated spoon (jhara). **6)** Try to remove the lumps with perforated spoon (jhara). **7)** Batter of Patodi shouldn't be smooth. It should have small granules of besan in it. **8)** Cover the lid and let it cook for 3-4 minutes. Open the lid, stir it and again let it cook with covered lid for another 3-4 minutes on low flames. **9)** Grease 1 plate with oil and sprinkle some grated coconut on it. Spread cooked Patodi batter on it. **10)** Let it cool down **11)** Cut it into desired shape. I have cut it into diamond shape. Patodi is ready.

Directions to make Patodi (Gravy/Rassa): **1)** Heat a pan with 1teaspoon oil and roast onion in it. When it becomes light brownish add grated dry coconut and roast both onion and coconut to brown colour. **2)** If you want to add khas -khas, roast it separately for 2 minutes on low flames add it in roasted coconut onion. **3)** Take roasted onion (khas - khas if you wants to use) and coconut in mixer jar and add ginger and garlic to it. Make a fine paste of it. **4)** Heat 1 tablespoon oil in a big pan. Add bay leaf (Tejpaan) and cumin seeds (jeera) to it. If you want tari (oil floating on gravy/rassa) add more oil according to your taste. **5)** Add onion coconut paste to it and sauté it until oil starts coming out of it **6)** Add red chili powder, coriander powder, turmeric powder and garam masala powder. **7)** Mix it properly and sauté it for 1-2 minutes. Add 3 cups of water and let it boil. **8)** When it starts boiling keep it on low flames for another 3-4 minutes. **9)** Add Patodi pieces in the gravy and let it cook for 2 minutes. Cover it and remove it from flames. **10)** After 10-12 minutes patodis are nicely mixed with gravy/rasa. Garnish it with coriander. **11)** Serve it hot with chapatis, bhakris or phulkis. Don't forget to serve onion and lemon slices with this meal. **12)** Now Patwadi is ready to serve & enjoy the Delicious/yummy dish.



Ms. Harshu R. Patil
Asst. Engineer (Contracts),
RO-Mumbai



LIVER DISORDERS - AYURVEDIC MANAGEMENT

The Ayurvedic treatment of liver disease is based on Rogi (Patient), Dosha (Body Humor) and Srothas (Channels) involvement with proper diagnosis. Lifestyle modification, stopping of alcohol, losing body weight, proper diet and exercises are very important along with careful monitoring of liver function.

The herbal formulations which are having anti inflammatory, immunoregulatory, antioxidant and hepato protective actions can be judiciously administered to the patients in various stages of liver disorders. Symptoms such as Jaundice (Yellow discoloration of skin, mucous membrane and sclera), itching all over the body, fatigue and pain may be relieved by using such Ayurvedic formulations.

Treatment for complications like excess fluid retention in the body, portal hypertension, infection, upper and lower GI bleeding, renal and hepatic failure, hyponatremia (low level of sodium) should be undertaken to reduce mortality.

Ayurvedic treatment targets the liver cells to slow down the process of fibrosis (normal liver cells are replaced by fibrotic cells) and make the liver more healthy and functional.

Certain Ayurvedic formulations have various biological actions like hepatic protection, cholestasis elevation, liver fibrosis attenuation, carcinoma inhibition, by their hepatoprotective, anti inflammatory and immune modulatory mechanisms.

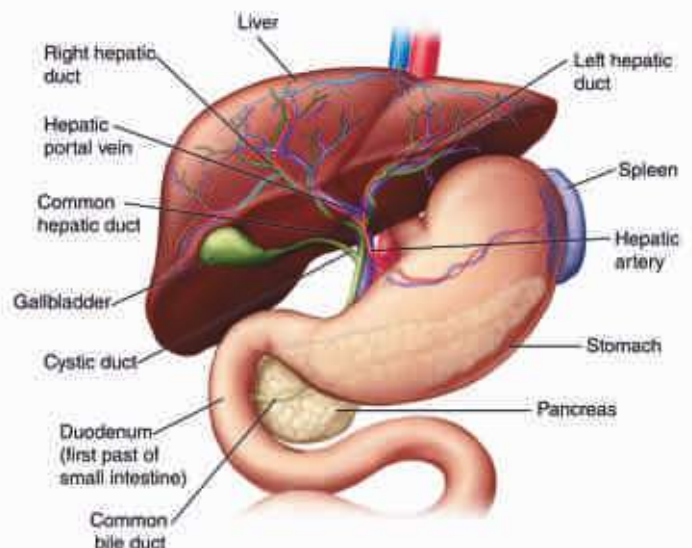
Various procedures including Panchakarma, Rasayana (rejuvenative) treatments are found very effective in different types of liver diseases.

Virechana-one of the panchakarma procedure is a wonderful treatment method for various kinds of liver damages if administered with close observation and strict electrolyte evaluation.

Diet has an important role in the management of liver diseases as per ayurveda. According to the patients digestive fire (appetite level) diet can include more fruits and vegetables. Carrot, beetroot, tomato, cabbage, apple and garlic are some of the excellent foods for detoxifying the liver.

Cow ghee which reduces Pitta Dosha (humor) and increases agni is an excellent choice. Salt, sour food items, Bakery items, fried food, red meat, alcohol, fast food, soft drinks can aggravate the existing conditions/problems.

Proper exercise and yoga are also important in the management of liver disorders. Yogic practices with their unique characteristics have an important impact on physical and mental health of patients. The practice of Pranayama, Dhanurasana, Surya namaskara, Kapalabhati etc offers improvement of overall health and related outlook of life by making life peaceful and happy with better liver function.





SMALL ACTIONS MAKE BIG DIFFERENCE

Dear Project Managers,

Generally Project Managers are extremely occupied in facing day to day challenges of execution, co-ordination, dealing with external agencies, client, consultants etc. Your aim is to perform for achieving desired quality and progress of the project.

This inadvertently leads to loss of focus or non-awareness of some advance actions required to be taken for faster submission of Final bill, Handing over of site, systematically vacating the site or obtaining completion certificate for the work, improving from past experience etc.

Such actions are more desirable considering the fact that many a times key staff are transferred as soon as their designated works are nearing completion and/or they are required on a new/more critical project. Thus they are unable to oversee completion of required and desirable documentations.

In case of EPC contracts it is desirable to start preparing as built drawings (ABD) as early as possible. This reduces huge work load and loss of time while submitting final bill. Similarly compilation of guarantees, test certificates, Royalty receipts etc. in original and keeping in sequential manner and in safe custody is required. Royalty receipts should match the excavation quantities claimed. In general final bill submission check list may be monitored well in advance and all data, documentation must be compiled and kept ready for faster processing of final payment.

Cleaning of areas being handed over, cleaning surroundings of unwanted materials, having internal check lists to avoid multiple punch lists from client helps increase efficiency. This will avoid delays in handing over when project is in last phases of completion or execution of any major items is nearing completion.

The indent quantities of items must be closely monitored to avoid excess stock and wastage especially in last stages. For example reinforcement bars may be ordered in diameter wise numbers instead of tonnage at the very end of RCC works.

While vacating rental accommodations, check for damages, fix responsibilities for the same, repair if required to avoid disputes and loss of deposits given to owners.

In case of some extra stock of finishing items like tiles, fixtures, sanitary items etc. they may be handed over to client at a price as they will need them for future maintenance.

While final dismantling of any assets like launchers, specialized formwork, special structures etc.- it is required to number/mark matching components and provide the assembly guidelines to make it easy for the receiving site to assemble them without any unnecessary modifications and resulting damage.

Similarly while transferring machinery it is must to send data about guarantee validity, servicing status, machine working conditions/efficiency, contact details of servicing agency etc.

For transfer of smaller quantities of material consider use of railway transport instead of part load transfer by vehicle- which takes lot of time.



**Small Actions.
Big Difference.**

The time of inauguration is the right time when we should prepare a draft completion certificate in consultation with contracts department and adding all special features of the project and get the same signed from senior most authority.

Getting a good performance certificate or letter of appreciation also helps in long term.

Early start to prepare winding up report covers many actions which are required for efficient closure of the project.

It is much desirable to write methodology and work plan before start of any activity during project. Similarly it is essential to prepare a detail note specifying experiences to learn/improve, problem faced and how they were tackled, what improvements you would have made if you were to execute the same project again etc. Such note should be shared with the coordinator.

All these small steps will help us improve our efficiency as an organization.



COVID-19 IMPACT ON ENVIRONMENTAL HEALTH

Every coin has two sides in this modern world. Similarly, Covid-19 brings certain positive signs (relax to the mother nature) from modern human life styles which created environmental crisis. It also added negative impact which human race finds a way to do in every aspect of lifestyle.

By indiscriminately using natural resources, so called humans polluting the environment with hazardous manufactured chemicals. To feed ever growing human population abnormal use of fertilizers and pesticides polluted water resources and many species became extinct.

The pollution of the natural environment with garbage generation, we are a long way to go in progressing the environmental quality. There are many laws and acts established to prevent different pollutions such as Water (Prevention and Control of Pollution) Act of 1974, the Forest (Conservation) Act of 1980, and the Air (Prevention and Control of Pollution) Act of 1981 and the Environment Protection Act of 1986 was enacted by India but little progress was made.

The world has changed in the last couple of years: thanks from the CHINA originated corona vires which has resulted in the large number of human lives and put the global travel in a never seen lockdown. Life styles changed due to the global lockdowns and social distancing laws impacted our environment in myriad ways. It is noticed that there is a sudden reduction of Green House Gases emissions as industries, transportation, social/cultural activities and campaigns have shut down. Air pollution reduced that nearly 50% reduction of N₂O and CO due to the shutdown of heavy industries, construction activities and stalled transportation. High GDP countries such as USA, Canada, China, India, UK, France, Brazil, etc. drastically reduced which is the key pointer of global economic activities. Acid rain is basically caused by NO₂ and mixing with O₂ and H₂O for which several respiratory diseases occur. It is an enormous help from Covid-19 to withstand global climate change for the less consumption of fossil fuels.

Furthermore, water pollution is reached disaster levels in countries like India, and Bangladesh where industrial, and household wastes (Garbage) are dumped into water ways/drains/rivers without any procedural controls. One of

the most polluted rivers in the world, like Ganges and Yamuna have reached a significant level of purity along with there was also a sharp decrease of noise pollution and many beaches were cleaned around the world; also the animals/birds were seen in routine life.

On the other side of the coin, the negative consequences are medical waste generation, which was a threat to public health and the environment. Managing the bio-waste such as masks, gowns, sanitizer bottles/pouches became a challenge for the local waste management authorities to tackle the situation. In a country like India, most people dump these in open places, causing harmful effects to the surroundings. There are direct effects on air, water, and soil pollution by increasing the rate of municipal waste (both organic and inorganic), and MSW management authorities did not react to contain the situation.

ECONOMIC IMPACT

Covid -19 should be an eye opener; it is the beginning of many more complicated issues will be presented by nature where human activity destroying the ecological balance. A Gross reminder to indicate the relations and delicate balance between human beings and the environment. To prevent future outbreaks, we must address the threats to ecosystems, pollution, MSW management and climate change. It is expected that a severe situation may arise in a very near future in the area of food security , if containment measure are not taken.



JIDDU KRISHNAMURTI: THE WORLD TEACHER

Mr. YD Murthy
Executive Vice President
(Finance)



Fired by the sun, sculptured rocks, amongst the oldest in the world, cradled the village of Madanapalle in the Chittoor district of Andhra Pradesh. From the sacred site of Tirupati through Rishi Valley to Anantpur stretched hills, topped with rocky boulders, interspersed with small valleys. Rainfall was minimal, population sparse. Tamarind and gul mohar trees provided shade and exploding color. It was sacred earth, punyasthal, where mystics and saints had lived and taught for centuries, their bodies buried there to sanctify the soil. Here, on May 11, 1895, at thirty minutes after midnight, a son was born to Sanjeevamma, the wife of Jiddu Narianiah, a minor civil servant.

The ancestors of Jiddu Krishnamurti, a Brahmin of the Velanadu subcaste, originally came from Giddu or Jiddu, a village that lies in the midst of the fertile paddy fields of coastal Andhra. Krishnamurti's paternal grandfather, Gurumurti, was also a minor civil servant; but his grandfather, Ramakrishna, renowned for his great learning, his knowledge of Sanskrit and the Vedas, held a responsible position in the judicial department of the British East India Company.

Madame Helena Petrovna Blavatsky (1831-1891), often called H.P.B., was by all accounts an extraordinary woman. With her psychic vision and piercing mesmeric eyes, and with a personality that provoked controversy, she had appeared on the Indian scene in 1879. A Russian by birth, she claimed to have lived in Tibet for several years in close contact with the Mahatmas or Masters of the occult brotherhood. It was there that she learned from her guru, her teacher, the will-guarded doctrines of the Tibetan sages. While she was in Europe in 1873 her Masters asked her to seek out Colonel Henry Steele Olcott, a fellow psychic researcher in the United States. Obediently, she went there, met Colonel Olcott, and by 1875 the Theosophical Society had been conceived. They were soon to travel together—first to Bombay and then to Ceylon, where they took Buddhist initiation, and later to Madras. By 1882 the Theosophical Society's Headquarters had been established at Adyar, Madras.

The Theosophical Society was based on the tenets of a Universal Brotherhood of humanity, which sought to study ancient wisdom and to explore the hidden mysteries of nature and the latent powers of man. It established an occult hierarchy drawing from the Hindu and Buddhist traditions, in particular the Tibetan tantric texts and teachings.

Toward the end of the nineteenth century whispers of the coming of the Messaiah or the World Teacher had spread

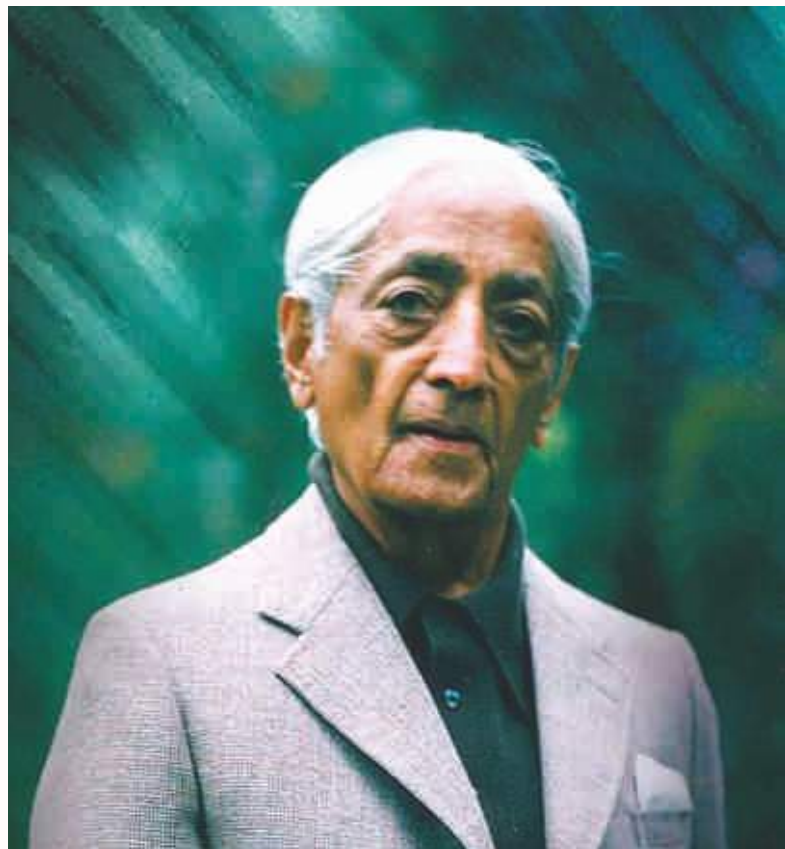
amongst occult communities. H.P.B. had written before her death in 1891 that the real purpose of the Theosophical Society was to prepare for the advent of the World Teacher.

In 1889 Annie Besant (1847-1933) chanced to read Blavatsky's Secret Doctrine, and later met the founder of the Theosophical Society. Besant, or A.B., had been a rebel, a free thinker, a fierce fighter for the causes she held to be right. Eloquent and dedicated, she had an organizational capacity of a very high order. She was a passionate crusader for freedom of thought, women's rights, trade unionism, Fabian socialism, and birth control. But Blavatsky's work transformed her completely. She turned her enormous energies from materialism and atheism to the pursuit of the occult and sacred.

With her arrival in India in 1893 at the age of forty-six, the passionate dialogue and involvement with India that was to continue throughout her life had commenced.

She sensed the lack of interest in India for what she felt was its true mission in the world—the country's genius for religions and spiritual knowledge.

Annie Besant studied the sacred books of India, learned Sanskrit, held discussions with the religious leaders of the



land. Inspired by the passion of her words, many intellectuals and young aspirants flocked to her and joined the Theosophical Society. Listening with rapt attention and fired by her eloquence was a young boy, twelve-year-old Jawaharlal Nehru. He had come to hear Mrs. Besant under the influence of his Belgian-Irish tutor, Ferdand T. Brooks, an ardent Theosophist.

Fascinated by the doctrine and by Besant's eloquence, he had gone to his father, Motilal Nehru (the nationalist and flourishing lawyer who would later form the Congress party), and asked for permission to join the Theosophical Society, Motilal Nehru laughed. He had also been member of the Theosophical Society in the days of Madame Blavatsky. Permission was given, and at thirteen Jawaharlal Nehru became a member and was initiated by Mrs. Besant herself. He attended a convention in Varanasi and saw Colonel Olcott with his white beard. With the young Nehru's departure for Harrow, Theosophy promptly faded from his consciousness. But the three years of his contact with it would leave an impression on him and his character, which he would later acknowledge in his admiration for Annie Besant.

With the death of Colonel Olcott in 1907, Annie Besant became president of the Theosophical Society. A web of intrigue and a fierce division of forces within the Theosophical Society had preceded this event. Soon after Mrs. Besant took over, she came into close contact with Charles Webster Leadbeater or C.W.L. (1847-1934), an ex-Anglican clergyman with reputed powers of clairvoyance.

Narianiah retired from government service in 1908. He managed to get a job in Theosophical Society in Adayar as assistant secretary. He took a tiny house outside the Adayar Compound of Theosophical Society and shifted his family to Adayar. Krishna and his brother Nitya had to walk every day to attend school at Mylapore, where Krishna's inattention resulted in severe punishment. He remained vague and uninterested in his studies; his teacher considered him half-demented.

What happened on an evening in February 1909 was myth-making, to say the least. The Jiddu brothers-Nityananda and Krishnamurti-were playing in the waves of the Bay of Bengal near the mouth of the Adyar River on the Society's beach as they often did. Nearby swimming and observing them was Charles Webster Leadbeater, the close associate of Annie Besant. The taller, older Krishnamurti was skinny, weak, sickly, and, according to some, 'somewhat moronic'. Leadbeater reported to Annie Besant and others that the boy he saw 'with a most wonderful aura, without a particle of selfishness in it' was quite extraordinary and perhaps the vehicle for the expected World Teacher. Later, Besant herself, on hearing the teenager Krishnamurti speak to a large crowd under a banyan tree, stated that the World Teacher has arrived.

Even though born in India, Krishnamurti said he was not an Indian or a Hindu. He eschewed nationalistic labels, not

identifying himself with any particular country, religion, or community.

The 20th century will perhaps be known for the extremes of human endeavor: global scale warfare and the emergence of spirituality. Central to the latter was the humble, global minded teacher, J. Krishnamurti. For almost seven decades, he travelled to all continents stating eternal truths about human existence and boldly took on contemporary issues such as violence, corruption, conflict in personal relationships, collapse of moral values, and the hollowness of living in a society that is being rapidly enslaved by technology and the entertainment industry.

Krishnamurti was one of the most original thinkers of our time who investigated fundamental questions about the purpose of life, the true meaning of love, religion, time, and death without seeking answers in any books or scriptures and without accepting any belief, organized religion or system of thought. Like the Buddha, he sought the answers to these questions through observation, inquiry and self-knowledge and arrived at a direct perception of truth which lies beyond intellectual concepts, theories and descriptions. He was not a scholar or an intellectual; he did not deal with theories and concepts, he spoke only from his own investigations and observations. What he has said may have been said earlier by others but he came upon the truth of it for himself. In an age dominated by science and the intellect, he has pointed out the fundamental limitations of thought and knowledge as a means of real change.

There was an unusual power of presence in Krishnamurti which manifested on the platform through his delivery of the teachings and off the platform to those in his vicinity. Yet there is no explanation for this-even by him. Ordinary words like 'spiritual' or 'divine' fail to describe his presence;

Rather than trying to understand the teacher and his teachings, Krishnamurti urged his listeners and readers to understand themselves by being sensitive, alert, caring, and loving human beings. After a single-purpose life of teaching 'to set men absolutely, unconditionally free', Krishnamurti died in California (1986), leaving vast well-documented teachings that offered no belief system, no spiritual organization, no methods, but only the exhortation, 'Truth is a pathless land, and you cannot approach it by any path whatsoever, by any religion, by any sect'.

References:

1. J. Krishnamurti - A Biography by PUPUL JAYAKAR.
2. World Teacher - by MARK LEE.
3. A Jewel on a silver platter - by PADMANABHAN KRISHNA.

Further reading - Books written by J. KRISHNAMURTI.

1. Freedom from the known
2. Awakening of intelligence
3. Urgency of Change
4. Choiceless awareness



COMPOSITE MATERIALS APPLICATIONS IN MARITIME INDUSTRY

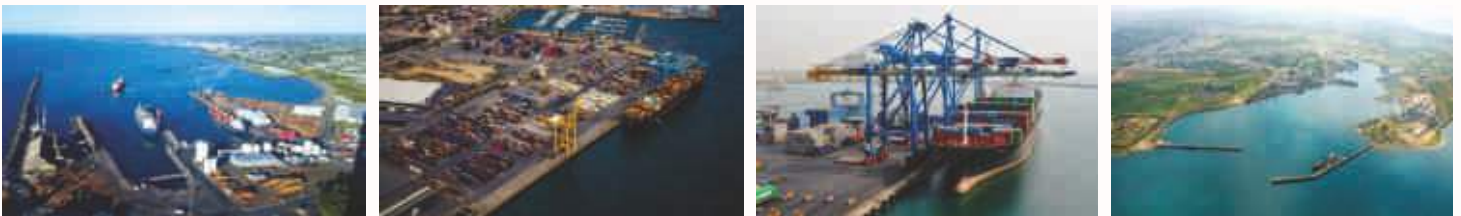
INTRODUCTION

The Sagarmala Programme (transl. garland of the sea) is an initiative by the government of India which aims to modernize India's Ports along 7,517 km long coastline, so that port-led development can be augmented, coastlines can be developed to contribute to India's growth and it envisages unlocking the potential of waterways and the coastline to minimize infrastructural investments and to enhance the performance of the country's logistics sector.

Maritime India Vision 2030 (MIV 2030) was formulated by the Ministry of Ports, Shipping and Waterways with the objective of propelling India to the forefront of the global maritime sector in the next decade. Over 150 initiatives covering 515 key activities across 10 themes encompassing all the facets of maritime sector have been identified to form the building blocks for future of the Indian Maritime sector.

MIV 2030 envisions an overall investment of INR 3,00,000 – 3,50,000 Cr across ports, shipping, and inland waterways categories.

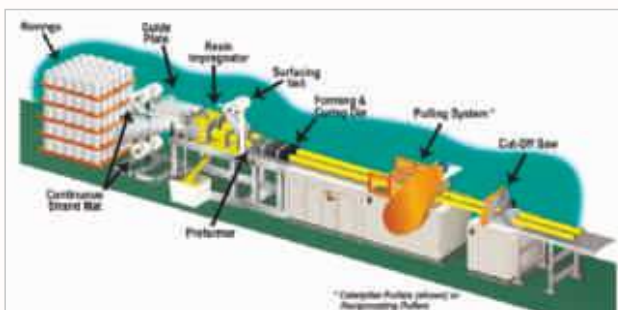
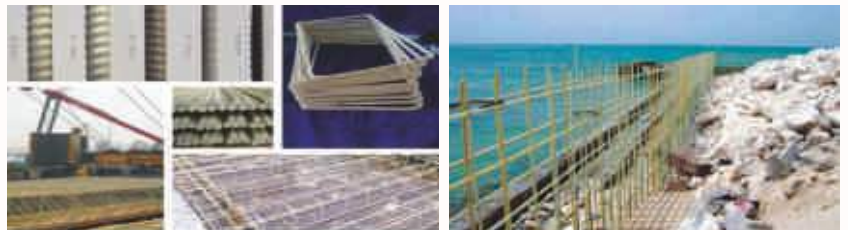
When building your concrete structure in marine or chemical projects, there can often be deterioration caused by the migration of chloride ions that lead to steel corrosion in marine environments such as for coastal, harbor and offshore applications. The effects of such corrosion include the possibly serious impairment of structural capacity, unacceptable visual impact, high repair and maintenance costs and associated undesirable environmental impacts. Composites science and technology are developing rapidly, providing new material solutions, addressing the requirement for high performance. Emerging as a viable alternative for a variety of infrastructure and building projects is a composite material known as fiber reinforced polymer (FRP) or fiberglass.



Applications of Composite Materials In Maritime Industry

WHAT IS GLASS FIBER REINFORCED POLYMER (GFRP) REBAR?

GFRP Rebar is a structural ribbed reinforcing bar made of high strength and corrosion resistant glass fibers that are impregnated and bound by an extremely durable polymeric Thermoset resin.



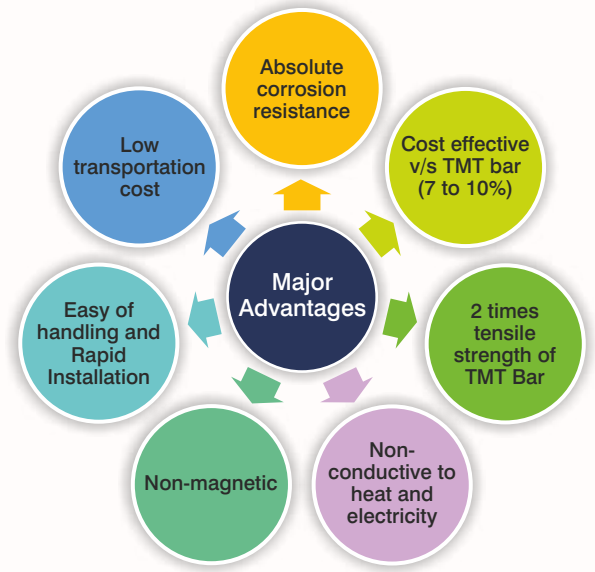
Pultrusion Process

PULTRUSION PROCESS

FRP composite profiles are made in a pultrusion process. Pultrusion is an uninterrupted process of using fiber reinforcements or other resin matrices to produce cross-sectional materials. In GFRP pultrusion, fibers (the glass material) are pulled from spools through a device that coats them with a polymer resin. They are then heat-treated and cut to length. GFRP reinforcement bars produced this way can be made in variety of diameters, shapes and tensile strengths.

Cost, Performance & Characteristics Comparison	Steel Rebar	GFRP Rebar
Cost Comparison		
Life cycle cost advantage	No	Structures last 4-25 times longer
Unlimited custom lengths	No	Yes, any length available
Labour savings during installation	No	Yes
Transport savings	No	Yes
Concrete cover savings	No	Possible
Work related injuries	High	Low
Corrosion resistance		
Need for crack control	High	Low
Corrosion risk profile	High	Low
Cathodic protection needed	Susceptible	Not Susceptible
Rust expansion/ rust staining	Susceptible	Not Susceptible
Alkali in concrete	Susceptible	Not Susceptible
Chloride stress corrosion	Susceptible	Not Susceptible
Corrosion at bends	Susceptible	Not Susceptible
Fatigue Performance		
In concrete slabs compared to steel rebar result	Nil	-2.5 times less cracking -20 times longer life prior to ultimate failure

KEY REASONS WHY COMPOSITES SHOULD BE EMPLOYED IN CONSTRUCTION



AREAS OF APPLICATION

- RCC Roads, Pavements
- Chemical plants - RCC Floorings, RCC Drain out, etc.
- Water & Waste-water treatment Plants
- RCC Floorings built in or close to sea water, concrete floating docks
- Coastal construction exposed to salt spray like Sea walls, Wharfs & Docks, Desalination Intakes etc.
- Highway Construction
- Bridge deck slabs
- Reinforcement of underground RCC tanks
- Swimming pools
- Radio frequency sensitive areas
- Hospital MRI areas
- Tunnel Boring Machine (TBM) 'Soft eye' Openings in Metro rail

DESIGN GUIDELINES FOR GFRP BARS

- **ACI (2015):** ACI 440.1R-15- Guide for the design and construction of structural concrete reinforced with Fiber-Reinforced Polymer Bars.
- **CNR-DT (2007):** Guide for design and construction of Concrete Structures Reinforced with Fiber-Reinforced Polymer Bars.
- **AASHTO LFRD-01:** Bridge Design Guide Specifications for GFRP Reinforced Concrete Bridge Decks & Traffic Railings.
- **FIB (2007):** Fib Bulletin 40-FRP Reinforcement in RC Structures.
- **CSA-S6-14 (2014):** Canadian Highway Bridge Design Codes, Section-16: Fiber Reinforced Structures.

MAJOR ORDERS RECEIVED

January - March 2022

Sl. No.	Name of Work	Client	Amount in Rs. In Crores	Division
1	Construction of Flyover from Mahatma Phule Junction Sector-17, Vashi to Kopri Bridge, Vashi, Navi Mumbai on Engineering, Procurement & Construction (EPC) Mode	City Engineer Navi Mumbai Municipal Corporation, Navi Mumbai	323.65	 ROADS



Mr. Bonala Shankar, Office Asst. (Administration), Central Workshop, married **Ms. Sagarika** on 06 Feb'22



Mr. Ashish Kumar Manna, Asst. Engineer (Electrical), ADB-Bulandshahr, married **Ms. Pushpa Lata Manna** on 23 Jan'22



Mr. Rajendra Prasad Parida, Officer Accounts, MMRDA Mumbai Metro CA-03 project, married **Ms. Sasmita Mallick** on 04 Feb'22



Mr. Vilasagaram Mahesh, Asst. (Stores), Central Workshop, married **Ms. Kanya** on 10 Feb'22



Mr. YV Satyanarayana, Officer (Stores), Bridges Jabalpur, married **Ms. Hema** on 11 Feb'22



Mr. Akhila Nath Pradhan, JE (E&M) RPWS - Kusumi site, married **Ms. Seema Das** on 4 Mar'22



Iksha Tiwari, d/o Mr. Devendra Prasad Tiwari
Surveyor, SWSM-Mahadev Project, Mirzapur, UP,
celebrated her **7th birthday** on 10 Jan'22



Suraj s/o Rajeev Kumar, Dy. Project Manager
(Survey), Pune Metro Rail Project, Reach-2,
celebrated his **3rd birthday** on 09 Feb'22

Many many
**HAPPY
RETURNS...**



Aashvika, d/o Mr. K Sateesh Reddy, Asst. Engineer
(Elect.), Tangedco-Adyar project, Chennai,
celebrated her **1st birthday** on 23 Mar'22



Dayyan, s/o Shaik Fakruddin, DPM(QS) TDWSP
Warangal site, celebrated his **5th birthday** on
10 Mar'22



Bhavika, d/o Mr. B Venkatesh, Supervisor (Mech.),
GVMC-ADB 24x7 WSP Project, celebrated her
birthday on 08 Mar'22



Dhanvika Tatta, d/o Sreekrishna D.
Tatta, AGM (Electro Mech), RNNL-
ANGL-SKND-PKG1 Railway
Project, Odisha, celebrated her
1st birthday on 18 Jan'22



Challa Hanya Sri,
d/o. Ch. Nagarjuna, Asst. Engineer,
Samruddhi S3 Pkg-3, celebrated
her **5th birthday** on 31 Jan'22



Aksh Mishra, s/o Gaurav Mishra,
AM (EDP), AIIMS project, Bathinda,
celebrated his **birthday**



Bidusha Nayak, d/o Himansu
Kumar Nayak, Asst. Manager,
(Stores), RWSS-Odisha-Keonjhar
site, celebrated her **6th birthday**



CLICK..
CLICK...



View of snow-capped East-Himalayan mountains from Lachung, Sikkim, clicked by Ms. Chandana Suram, AGM (Internal Audit)

Clicked by CA Mulagala S. Srinivas, Sr. GM (Accounts), Corp. Office



Knob Billed duck - Manjeera Sanctuary



Lesser-Whistling ducks - Manjeera Sanctuary



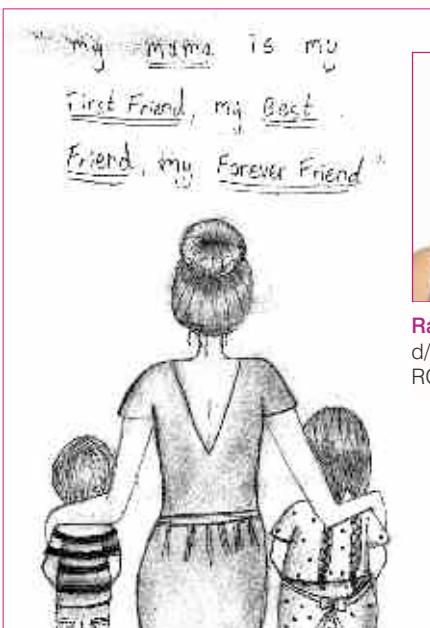
The gaur (Indian Bison) - Tadoba Tiger Reserve, Maharashtra



Barking Deer (Pair) - Tadoba Tiger Reserve, Maharashtra



CANVAS PAINTING:
Chinmayee Behera,
d/o Raghunath Behera,
Dy. Project Manager (Electrical),
AIIMS - Guwahati



Raginee Hota
d/o Jitendra Hota, DM (EDP),
RO-BBSR (W&E)



PAINTING WORK: **Sai Teja Surathu** s/o Mr. S Hema Sankar,
Officer (Accounts), Samruddhi Pkg3 CY, Sultanpur, Amravati,
Maharashtra





“

**kindness is doing
what you can, where
you are, with what
you have.**

”

Share Kindness

Dear Colleagues,

Give yourself a little extra kindness each day, be kind to yourself, then let your kindness fill the world. **“The world is full of kind people. If you cannot find one, be one.”**

You deserve it. Spread that kindness to those around you, be it family, friends, peers! They need it, and you deserve the pleasant experience of sharing. Give your life a unique and positive experience. Expand your understanding of what it means to be you, of how good it is to be alive and move on.

Remind yourself of all you can be thankful. Deepen your appreciation for everything that is with you. You put a great amount of effort and commitment to put goodness into action. Be sure to fully enjoy and share the fruits of all that dedication, with all those around you.

When you give goodness, it involves the practice of many of the most important virtues. It does not mean spending time merely pursuing one's own pleasure; It means devoting a certain amount of time to activities that benefit others, through engagement with family, friends, and peers or through work, or through various voluntary passionate and creative activities.

So, give goodness to yourself, to others. **“Kindness is doing what you can, where you are, with what you have.”** So that everyone around you feel elated.

Best Wishes

(AGK Raju)

ENGINEERING MARVELS



ETIHAD MUSEUM DUBAI, UAE

The Etihad Museum historically called the Union House, is a museum in Dubai that collects, preserves, and displays the heritage of the United Arab Emirates in the areas of social, political, cultural, scientific, and military history. It holds everything from old passports to personal artifacts of the rulers of United Arab Emirates. The historic signing of the Constitution of the United Arab Emirates, the raising of the first UAE flag, and the formation of the United Arab Emirates as a country on 2 December 1971 took place within the area that forms the museum today. The museum is designed as a document to signify the signing of the UAE constitution.

