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HEALTHCARE COST MANAGEMENT IN INDIA: THE WAY FORWARD

Journal of

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

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- **THE INSTITUTE OF COST ACCOUNTANTS OF INDIA** (erstwhile The Institute of Cost and Works Accountants of India) was established in 1944 as a registered company under the Companies Act with the objects of promoting, regulating and developing the profession of Cost Accountancy.
- On 28 May 1959, the Institute was established by a special Act of Parliament, namely, the Cost and Works Accountants Act 1959 as a statutory professional body for the regulation of the profession of cost and management accountancy.
- It has since been continuously contributing to the growth of the industrial and economic climate of the country.
- The Institute of Cost Accountants of India is the only recognised statutory professional organisation and licensing body in India specialising exclusively in Cost and Management Accountancy.

MISSION STATEMENT

"The CMA Professionals would ethically drive enterprises globally by creating value to stakeholders in the socio-economic context through competencies drawn from the integration of strategy, management and accounting."

VISION STATEMENT

"The Institute of Cost Accountants of India would be the preferred source of resources and professionals for the financial leadership of enterprises globally."

IDEALS THE INSTITUTE STANDS FOR

- *to develop the Cost and Management Accountancy profession*
- *to develop the body of members and properly equip them for functions*
- *to ensure sound professional ethics*
- *to keep abreast of new developments*

Behind every successful business decision, there is always a **CMA**

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Kolkata - 700016

Institute Motto

असतोमा सद्गमय
तमसोमा ज्योतिर् गमय
मृत्योर्मामृतं गमय
ॐ शान्ति शान्ति शान्तिः

From ignorance, lead me to truth
From darkness, lead me to light
From death, lead me to immortality
Peace, Peace, Peace

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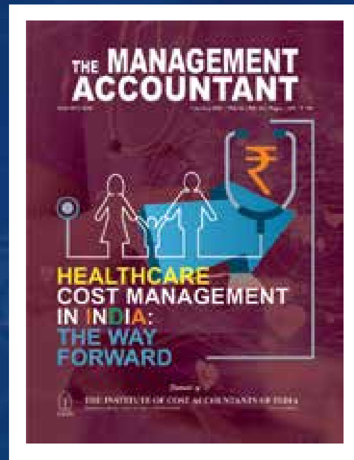

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DIGITAL TRANSFORMATION

We have expanded our Readership from **1** to **94** Countries

Afghanistan, Algeria, Argentina, Australia, Azerbaijan, Bahrain, Bangladesh, Belgium, Benin, Botswana, Brazil, British Indian Ocean Territory, Bulgaria, Cambodia, Cameroon, Canada, Chile, China, Colombia, Croatia, Czech Republic, Djibouti, Egypt, France, Gambia, Germany, Ghana, Great Britain, Greece, Honduras, Hong Kong, Hungary, Iceland, India, Indonesia, Iraq, Ireland, Italy, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Kuwait, Lebanon, Liberia, Lithuania, Malawi, Malaysia, Mauritius, Mexico, Morocco, Myanmar, Namibia, Nepal, Netherlands, New Zealand, Nigeria, Oman, Pakistan, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Portugal, Qatar, Romania, Russia, Rwanda, Saudi Arabia, Serbia, Seychelles, Singapore, Slovakia, Slovenia, South Africa, Spain, Sri Lanka, Suriname, Sweden, Switzerland, Syria, Taiwan, Tanzania, Thailand, Turkey, Uganda, Ukraine, United Arab Emirates, United Kingdom, United States of America, Vietnam, Zaire, Zimbabwe.

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EDITORIAL

Healthcare Cost Management in India: The Way Forward

Covid-19 pandemic has brought health as the focal point of our lives. The pandemic has strained the healthcare infrastructure in India. At policy level, Government of India issued telemedicine guidelines, issued notification about retail sale of drugs at door step, launched production linked incentive (PLI) schemes for domestic manufacturing of critical Key Starting Materials (KSMs), Drug Intermediaries (DIs), Active Pharmaceutical Ingredients (APIs), and Medical Devices. A scheme for creation of four Medical Device Parks was announced to increase competitiveness and improve availability and affordability of medical devices. Govt of India also announced an ambitious National Digital Health Mission (NDHM). On Jan 16, 2021, Hon'ble Prime Minister inaugurated vaccine drive for two domestically produced vaccines. The vaccines are being provided free to the most-prioritized beneficiaries including 1 crore healthcare workers and 2 crore front-line workers.

The Insurance Regulatory Authority of India (IRDAI) also announced several relaxations for customers in 2020 in view of the unprecedented situation prevailing in the country due to the coronavirus pandemic. IRDAI allowed payment of **Insurance Premiums in Instalments** and **Cashless Payment Facilities for Treatment of Coronavirus.** Insurance companies have launched two standard COVID-19 health insurance policies -- Corona Kavach and Corona Rakshak. IRDAI allowed all general and specialised health insurers to validate health insurance policy proposal forms through digital means in place of physical signatures. IRDAI asked insurance companies to include wellness and preventive features in health policies to encourage the policyholders to stay healthy and minimize the chance of falling sick. According to IRDAI's guideline, insurance companies cannot exclude diseases like mental illness, stress or psychological disorder, illness contracted due to hazardous activity, treatment like age-related disorder, internal congenital disease, genetic disease, or disorder. The definition of pre-existing disease (PED) has been modified to cater to the needs and requirements of customers.

In a year when the world was ravaged by the Covid-19 pandemic, the Government of India gives health the attention it merited. In the Budget 2021-22, Health allocation jumped by 137% to Rs 2,23,846 crore in 2021-22 compared with Rs 94,452 crore in 2020-21. The Government has assured to provide Rs 35,000 crore for the Covid-19 vaccine for the next fiscal. Government to set up 17,788 rural and 11,024 urban health and wellness centres. Rs 64,180 crore will be allocated for the new national health programme, *Atmanirbhar Swasth Bharat Yojana* – over the next six years. The government also declared to set up integrated public health labs in all districts and 3382 block public health units in 11 states; establish critical care hospital blocks in 602 districts and 12 central institutions and set up a national institution for One Health, a Regional Research Platform for WHO South East Asia Region, 9 Bio-Safety Level III laboratories and 4 regional National Institutes for Virology.

India is a land full of opportunities for players in the medical devices industry. India's competitive advantage also lies in the increased success rate of Indian companies in getting Abbreviated New Drug Application (ANDA) approvals. Yet, the healthcare industry itself needs much more support for sustainable growth. Incentives to the private sector should be provided to modernize healthcare facilities and increase investment in rural and remote areas. This will also generate employment. Public-private partnerships should be increased for make-in-India and startup-India programs.

Evaluating the costs and/or benefits of a public healthcare service, policy proposal, regulatory program, or the introduction of a new medicine is an integral process to health economics. Such evaluations must consider the effect on all stakeholders, any hidden costs and benefits, and the long-run risks due to a variety of outcomes. CMAs are equipped with intricate knowledge on cost and pricing techniques to undertake robust analysis to help evaluate stakeholder's decisions. A large number of hospitals in India are engaging in internal audit to evaluate their hospital's operational policies and risk management practices along with its financial performance. CMAs are eligible to carry out Internal Audit/ Concurrent Audit under National Health Mission (NHM) as empowered by the Ministry of Health & Family Welfare, New Delhi. CMAs, based on their techno-professional skills, can play a significant role in implementation of Hospital Management Systems, preparation of Project appraisal and reports, facilitating in Government's framing of policies, Health Insurance price certifications, Price fixation in government and state sponsored insurance schemes, etc. Under the Companies Act, 2013, companies that are into "health services, namely functioning as or running hospitals, diagnostic centres, clinical centres or test laboratories" come under the Rs 100 crore segment for the purpose of cost audit. Healthcare organizations that implement and maintain cost accounting and auditing systems experiences numerous benefits and find it to be indispensable given today's challenging and changing healthcare industry.

This issue presents a good number of articles on the cover story *"Healthcare Cost Management in India: The Way Forward"* written by distinguished experts. We look forward to constructive feedback from our readers on the articles and overall development of the Journal. Please send your emails at *editor@icmai.in*. We thank all the contributors to this important issue and hope our readers would enjoy the articles.

THE MANAGEMENT ACCOUNTANT

PAPERS INVITED

Cover Stories on the topics given below are invited for ***'The Management Accountant'*** for the four forthcoming months

Month	Theme	Subtopics
March 2021	Women in the Workplace: Stepping towards Generation Equality	⊙ Social, Political and Legal Dimension of Women Empowerment ⊙ Self Help Group (SHG): An effective approach towards Women Empowerment in India ⊙ Electronic and Print Media: A significant tool to accelerate Women Empowerment ⊙ Dynamic Role of Women in the Workforce ⊙ Factors concerning female participation in the Corporate Sector ⊙ Breaking Barriers: Women Change-makers in this era of digitization ⊙ Gender Equality Efforts by the Government ⊙ Female leaders shaping the future world: Building a New Normal ⊙ Women in Board Rooms ⊙ Women Entrepreneurs in India
April 2021	Foreign Direct Investment (FDI) and Economic Growth	⊙ Insights on India's FDI Policy ⊙ FDI: Crucial for India's post-Covid growth story ⊙ Reforms and Liberalization of foreign investment policy in Civil Aviation, Coal and Mineral Sector ⊙ FDI in Defence to enhance Self-Reliance ⊙ FDI in SMEs ⊙ Atmanirbhar Bharat Abhiyaan & FDI ⊙ FDI Inflow in the Capital Market ⊙ Foreign Direct Investment process for Startup businesses ⊙ Issues and Prospects surrounding FDI inflows in Information and Broadcasting Sector ⊙ FDI and International Trade Correlations ⊙ Foreign Direct Investment in India: Reporting & Compliance
May 2021	Telecommunication Sector: Potential Catalyst for Digital India Movement	⊙ 25 years of Mobility: Glorious Journey of Indian Telecom Industry ⊙ Focusing on Ease of Doing Business in Telecom Sector: To make India a $3 trillion Digital Economy ⊙ India's stand in Post COVID-19 Pandemic World to build a Digitally empowered Society ⊙ Atmanirbhar Bharat: 5G is heralding India's Digital Leadership ⊙ Outlook on Data Consumption, Subscriber Base and Average Revenue Per User (ARPU) ⊙ Impact of Adjusted Gross Revenue (AGR) on the Telecom Industry ⊙ Revenue, Profitability and Credit Outlook of Telecom companies ⊙ High Bandwidth, Automation and App Dependent Networks: Future of Telecommunications Industry ⊙ Cyber security: Challenges and Prospects ⊙ Indian Telecom Industry: a key towards success of Industry 4.0
June 2021	Natural Resource Accounting (NRA) for Economic Sustainability	⊙ Natural Resource Accounting: a promising tool for measuring Environmental Impact Assessment (EIA) ⊙ Sustainable Consumerism and Effective Management of Natural Resources ⊙ Sustainable Development Goals (SDGs) and NRA ⊙ Natural Resource Accounting: an aid to Environmental Auditing ⊙ Global Ecology: Time to Reboot Human v/s Nature Relationship ⊙ Significant impact of pandemic Coronavirus on Natural Resource Investors ⊙ Disclosures to Accounts - Role of GASAB ⊙ Natural Resource Accounting in India: Progress so far ⊙ Integrated Environmental and Economic Accounting (IEEA): Role of CMAs

The above subtopics are only suggestive and hence the articles may not be limited to them only.

Articles on the above topics are invited from readers and authors along with scanned copies of their recent passport size photograph and scanned copy of declaration stating that the articles are their own original and have not been considered for anywhere else. Please send your articles by e-mail to editor@icmai.in latest by the 1st week of the previous month.

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CMA Biswarup Basu
President
The Institute of Cost Accountants of India

PRESIDENT'S COMMUNIQUÉ

"All power is within you; you can do anything and everything."

– Swami Vivekananda

My Dear Professional Colleagues,

The Institute celebrated 72nd Republic Day at the Headquarters in Kolkata wherein I hoisted the National Flag which was followed by National Anthem. The occasion was graced by CMA Balwinder Singh, Immediate Past President, CMA Ashiwin G. Dalwadi, CCM, CMA H. Padmanabhan, CCM, CMA Neeraj D. Joshi, CCM, CS Makarand Lele, Government Nominee, CMA P.V. Bhattad, Past President and CMA Kaushik Banerjee, Secretary of the Institute as well as other officials of the Institute.

Meeting with Senior Government Officials

I along with CMA Chittaranjan Chattopadhyay, Chairman of Indirect Taxation Committee and Banking, Financial Services & Insurance Committee extended greetings to Shri Novel Roy, IRS, Deputy Secretary, Central Board of Direct Taxes (CBDT), Ministry of Finance, Government of India to discuss about scope and opportunities for CMAs in the area of Transfer Pricing and International Taxation and also handed over Representation on the same on 27th January 2021. During the visit, we also presented him a copy of "Aide Memoire on Lending to Micro Small and Medium Enterprises Sector" (including restructuring of MSME credit).

CMA Chittaranjan Chattopadhyay, Chairman, Banking, Financial Services & Insurance Committee and Indirect Taxation Committee presented copy of "Aide Memoire on Lending to Micro Small and Medium Enterprises Sector" (including restructuring of MSME credit) to Shri Pankaj Jain, IAS, Additional Secretary, Department of Financial Services, Ministry of Finance, Government of India on 28th January 2021 at New Delhi.

Udyog Manthan by Ministry of Commerce & Industry

To identify issues and find solutions for promoting productivity, quality, & their inter-linkages in Indian industry, Ministry of Commerce & Industry is hosting series of Webinars during the 'Udyog Manthan' on about 45 sectors from 4th January to 2nd March, 2021. As part this, an online webinar was held on "Accounting & Financial Services" on 29th January, 2021. Shri Manoj Pandey, Joint Secretary, Ministry of Corporate Affairs set the context and deliberated on the steps needed to improve quality, competition and competitiveness in Accounting and Financial Services. The Institute was represented by CMA B.B.Goyal, Former Addl. Chief Adviser, Ministry of Finance, GOI. He emphasised on the role of Cost Accounting in the decision-making process at corporate level in this competitive environment and in achieving the Govt. Vision for 5 trillion US dollar economy in the very near future.

Concept Paper on Detecting & Preventing Cartelization and Industry Regulation

In order to address the concerns raised on certain sectors of industry indulging in possible cartelisation practices, the Institute prepared a Concept Paper on the Detecting & Preventing Cartelization and the need for Industry Regulation. I shared the Concept Paper with Shri Nitin Gadkari, Hon'ble Union Minister for Road Transport & Highways and Micro, Small and Medium Enterprises offering our services to help the Government in arriving at a structured approach that can guide its efforts to restrain unfair trade practices in any industry and install an effective regulatory mechanism. We proposed to develop Cost Models & Template of Key Lead Indicators that may be monitored to raise a 'red flag' or 'early warning signals' of the likely existence of a cartel or the behaviour of key players towards forming a cartel. We also proposed to develop a Concept Note on the proposed structure of Regulator for Infra Intermediate Products [such as cement, steel, etc.] along with its objectives, role, functions, & outcomes for ensuring an effective regulation by maintaining a balance between the interests of producers, consumers, competitors and investors, while promoting a wider 'public interest' agenda.

Formation of Multi-disciplinary Partnership (MDP) Firms

On the issue of Formation of Multi-disciplinary Partnership (MDP) Firms, the Institute of Chartered Accountants of India issued its draft Regulations, Guidelines, and Frequently Asked Questions (FAQs). After examining these documents in the context of CWA Act & Regulations, the Institute raised its observations, objections and suggestions. The Institute also requested the Ministry of Corporate Affairs to ensure that our interest is not encroached upon in any way within the framework of our CWA Act, Rules and Regulations. Meanwhile, we are also in the process of finalizing relevant rules, regulations and guidelines applicable to MDPs of our Members.

PCS Project for Indian Railways

I wish to inform that the ICWAI Management Accounting Research Foundation has submitted following reports to the Ministry of Railways. Our study reports have been well received & highly appreciated.

- Final Report (Part-I & II) on Performance Costing System in Indian Railways
- Pilot Study Report on the Carriage & Wagon Workshop of Northern Railways
- Pilot Study Report on Cost of Social Cost Obligations in Indian Railways
- Pilot Study Report on the Activity Cost Centres of Delhi Division of Northern Railways

Representation to SEBI

I wish to inform the members that the Institute has submitted its representation to the Chairman, Securities and Exchange Board of India (SEBI) for inclusion of Cost Accountants for Audit and Certification under Securities and Exchange Board of India (Depositories and Participants) Regulations, 2018.

Inauguration of London Overseas Centre of Cost Accountants

I am delighted to share that the Institute has inaugurated its London Overseas Centre of Cost Accountants (LOCCA) on 23rd January 2021, which is 11th Overseas Centre of the Institute and the only one in Europe to cover UK, Ireland and Mainland Europe. The Institute decided to inaugurate the London Overseas Centre on the auspicious occasion of 125th birth anniversary of Netaji Subhas Chandra Bose as a mark of gratitude to the colossal contribution Netaji made to India's freedom struggle.

Shri Anurag Singh Thakur, Hon'ble Union Minister of State for Finance & Corporate Affairs was the 'Chief Guest' of inaugural ceremony of London Overseas Centre of Cost Accountants and the Institute is grateful to him for providing his valuable video message and giving views & encouragement to the CMA fraternity. He congratulated the Institute for increasing its footprint even in a pandemic-hit year and called for its continued participation in the Atmanirbhar Bharat (Self-Reliant India) initiative. Lord Kamlesh Kumar Patel (Baron Patel of Bradford), OBE, Chair of Social Work England, Mr. Nick Low, British Deputy High Commission, Kolkata, Mr. Kevin McCole, Managing Director, UK India Business Council, Prof Nora Colton, Director, Global Business School for Health graced the occasion as the Guests of Honour.

Mr. Nick Low, British Deputy High Commission, Kolkata graced the occasion with his physical presence and also inaugurated the 'Research Lounge' at the Headquarters of the Institute. I along with CMA P Raju Iyer, Vice President, CMA Balwinder Singh, Immediate Past President, CMA Vijender Sharma, Chairman International Affairs Committee and PD & CPD Committee, CMA Debasish Mitra, Chairman, Board of Advanced Studies & Research and MI Committee, CMA H. Padmanabhan, Chairman CAT and AAT Board and CMA Chittaranjan Chattopadhyay, Chairman of Indirect Taxation Committee and Banking, Financial Services & Insurance Committee participated in the inaugural event. I congratulate CMA Anirban Mukhopadhyay, Chairman, CMA Udayan Guha, Secretary and other members of first managing committee of LOCCA for all their sincere efforts and support in the inauguration event. I am sincerely grateful to all honoured guests and participants for making the inaugural ceremony a grand success. I am sure that the London Overseas Centre will take care of the interest of members and support the development of CMA profession in the UK and firmly believe that this expansion of our network shall definitely open new doors of opportunities for Cost Accountants.

Insolvency Law Committee (ILC) Meeting

I wish to inform that I attended the ILC meeting on 28th January 2021 through Video Conferencing (VC) on Pre-packaged Insolvency Resolution Process (PIRP). The Institute has submitted a note covering its views/suggestions on the proposed Special Insolvency Resolution Process (SIRP) for MSMEs for the consideration of the Ministry.

Support to ICMAB for Webinar Workshops on "COST AUDIT"

I am pleased to inform that the Institute has provided the technical support to the Institute of Cost and Management Accountants of Bangladesh (ICMAB) in organizing a series of four webinar workshops on Cost Audit held in January 2021. Workshop on Cost Audit in Garments Sector was taken by CMA P Raju Iyer, Vice President, Cost Audit in Pharmaceutical by CMA (Dr.) Ashish P. Thatte, CCM, Cost Audit in Textile Industry by CMA Neeraj D. Joshi, CCM and Final workshop on Cost Audit in Fertilizer Industry was taken by CMA B.B. Goyal, Former Addl. Chief Adviser (Cost), Ministry of Finance, GoI. I am delighted to share that all four workshops were highly appreciated by members of ICMA Bangladesh.

Webinar by Indian Chamber of Commerce

I was invited to deliver welcome address at the Webinar organised jointly by the Indian Chamber of Commerce (ICC) and Pension Fund Regulatory and Development Authority (PFRDA) on the topic 'Understanding the impact of pandemic on Retirement Benefits Planning' on 27th January 2021. Key speakers were Shri Supratim Bandyopadhyay, Chairman, PFRDA, Mr. Suranjan Banerjee, Associate Director - Retirement, Willis Towers Watson, Shri Mono Phukon, General Manager, PFRDA and Ms. Bahroze Kamdin, Partner, Deloitte Haskins & Sells LLP.

ICC Conference at Kolkata

I was invited to address as the Chief Guest of the Conference organized by the Indian Chamber of Commerce (ICC) on 'Visionary Corporate Governance to avoid Industrial Stress' on 29th January 2021 at ICC Auditorium, Kolkata. Dr. Tirthankar Nag, Professor & Dean of Studies, IMI, Kolkata, Shri Alok Kumar Chattopadhyay, DD & Advisor (F&Admin), ICC, Shri Arun Kumar Gupta, Insolvency Professional, Mr. Sudip Datta, Partner, Advisory Government & Public Sector, Price water house Coopers Pvt Ltd., CS Rajesh Chua and CS Rupanjana De, Practising Company Secretary presented their views on the topic. The conference highlighted various aspects under Effective Reporting on Compliance and raising the alert so as to take any corrective measure beforehand.

I now present a brief summary of the activities of various Departments/Committees/ Boards of the Institute, in addition to those detailed above:

AGRICULTURE TASK FORCE

Webinar on "Current Scenario of Agriculture Sector" was organized by the Agriculture Task Force of the Institute in association with Nagpur Chapter of Cost Accountants on 30th January 2021. Dr. Vinayak Deshpande, Ex Pro VC, RTMNU addressed as Keynote speaker. The Webinar was graced by CMA P. Raju Iyer, Vice President and Chairman, Agriculture Task Force, CMA Chittaranjan Chattopadhyay, Chairman, Banking, Financial Services & Insurance Committee and Indirect Taxation Committee, CMA (Dr.) Sreehari Chava, Member, Agriculture Task Force, CMA Shriram Mahankaliwar, RCM of WIRC, CMA Anil Verma, Chairman, Nagpur Chapter of Cost Accountants, and CMA VVS Murthy, Secretary, Nagpur Chapter of Cost Accountants.

BANKING, FINANCIAL SERVICES AND INSURANCE COMMITTEE

- **Launch of the 2nd Batch of Certificate Course on Concurrent Audit of Banks and Certificate Course on Treasury and International Banking:**

The 2nd batch of the Certificate Course on Concurrent Audit of Banks was launched on 9th January, 2021. The 2nd batch of the Certificate Course on Treasury and International Banking was launched on 16th January, 2021 by Shri Arun Bansal, General Manager & CFO, Indian Bank. The courses are being attended by CMAs both in practice and in industry, Bankers and other professionals. The admission for the 3rd batch of BFSI courses have started and we request members and students take the opportunity for their skill development and knowledge enhancement.

- **Certificate Course on Investment Management in joint collaboration with NISM**:

BFSI in collaboration with NISM have started the 1st batch of Investment Management (Level 2)- Technical Analysis and Mutual Funds on 16th January, 2021. The 2nd batch of Investment Management (Level 1) had started from 12th December, 2020 and was concluded on 2nd January, 2021. We have declared the results and issued the Certificates to the successful candidates. We are very happy to state that the 3rd batch admission for the Investment Management (Level1) had already started. We hope that the members and the students would enroll for the course as seats are very limited.

- **Spreading awareness about the Certificate Courses of BFSI Committee**

The Committee has written to various Small Payment Banks/ Small Finance Banks requesting them to recommend their Bank Officials to peruse the three Professional Certification Courses launched by the BFSI Committee of the Institute to improve their Knowledge and Skills in the Vital Functions of the Bank and also include these Certification Course while giving advertisements of 'Recruitment Process' of their respective Bank (i.e., Lateral Recruitment) like Credit Analysts, Treasury Operations Specialists, Risk Management Specialists etc.

- **Publication of the Guidance Note on "Aide Memoire" on Lending to Micro, Small and Medium Enterprises Sector:**

We are proud to state that the publication on "Aide Memoire" on Lending to Micro, Small and Medium Enterprises Sector" was released in the auspicious hands of by Shri Anurag Thakur, Hon'ble Minister of State for Finance, Government of India on 30th December, 2020 at New Delhi. It is now available as a priced publication and members and others are requested to collect a copy ordering it online. Please check the BFSI portal for an update on the matter.

- **WEBINT & WEBINAR:**

The BFSI Committee organized a WEBINT on the topic of Banking Analytics for Strategic Growth on 20th January, 2021 from 5 to 7 pm. The event was graced by Dr. Nethra Sambamoorthi, Founder, Promoter and Managing Director, Institute of Analytics (USA) and CRM portals Inc, USA, CMA (Dr.) S. Vasudevan, Director-Business Development, Institute of Analytics (USA) and Shri Utpal Chakraborty, Head of Artificial Intelligence, Yes Bank. The event was attended globally by members and others and was a very successful event. The WEBINT had generated great interest among the audience and it evoked the necessity of analytics and understanding of the application in the banking arena at present. The WEBINT evoked food for thought on the futuristic vision of the analytics in making the lives of the citizens of the country easier and better which would enable them to cope in the modern world.

The BFSI Department had organized 5 webinars on Forex and Financial Services in the month of January, 2021. We acknowledge and appreciate CMA Nijay Gupta, Forex Expert and CMA Soumit Das, Chief Mentor - Financial Goal Achievers for presenting their sessions which were streamed live every Saturday from 10 am to 12 pm in the month of January, 2021. We are happy to state that it was attended by members in large numbers.

- **Memorandum of Understanding with National Insurance Academy:**

The Institute has entered a Memorandum of Understanding (MoU) with the National Insurance Academy (NIA) and it was ceremoniously celebrated by a WEBINT which was held on 25th January, 2021 where digital signing of MOU was done in my presence along with CMA P. Raju Iyer, Vice-President, ICAI, CMA Chittaranjan Chattopadhyay, Chairman, BFSI Committee of ICAI. CMA G. Srinivasan, Director, NIA graced the occasion along with CMA Ramana Rao A, General Manager (F & A, Life Department). The MOU would enable both the organizations to have mutually beneficial activities in the launch of certificate courses in the insurance sector along with joint research activities and publications in the domain of insurance. I hope that the syllabi of the joint collaborative course would be soon framed and the course would be launched for the benefit of the members and the students for their skill development and knowledge enhancement in the Insurance domain.

Representation to RBI Services Board:

We have made a representation to the Chairman, Reserve Bank of India Services Board for Inclusion of Cost Accountants in Advertisement for Vacancy for Officers in Gr. B (DR) – General at Reserve Bank of India.

I congratulate the BFSI committee under the leadership of CMA Chittaranjan Chattopadhyay as Chairman of the committee and the BFSI department for their continuous efforts in the BFSI sector activities.

BOARD OF ADVANCED STUDIES & RESEARCH

I am pleased to share that Board of Advanced Studies & Research has started the following career-oriented courses successfully and in a befitting way:

- SAP Finance Power User Course – 2nd Batch (250 participants)
- Data Analytics for Finance Professionals – 3rd & 4th Batch (130 participants)

I urge the members and students to join these courses to shape their professional careers with new dimension.

COST AUDITING AND ASSURANCE STANDARDS BOARD

- **Exposure Draft of Standard on Quality Control (ED SQC)**

You are aware that the Cost Auditing and Assurance Standards Board (CAASB) has finalised and released the Exposure Draft of Standard on Quality Control (ED SQC) seeking views of all stakeholders. The ED SQC is available at *https://icmai.in/icmai/caasb/Exposure_Draft.php*

The SQC deals with a firm's responsibilities for its system of quality control for audits and reviews of cost statements, cost records and other related documents, and other assurance and related services engagements and applies to all firms of Cost Accountants.

The SQC shall be finalised by the CAASB in the light of the suggestions/ comments received from the stakeholders. I urge the members to offer their views / comments / suggestions on the ED SQC latest by 15th February, 2021.

- **FAQs on the Standards on Cost Auditing (SCAs 101–104)**

I am happy to note that the Cost Auditing and Assurance Standards Board (CAASB) has released the Frequently Asked Questions (FAQs) on the Standards on Cost Auditing (SCAs 101–104). This is the second tranche of the FAQs containing the standard wise FAQs. I hope that the members will find these FAQs fulfilling and knowledge enhancing. FAQs are available at *https://icmai.in/upload/CAASB/FAQs_Cost_Auditing_14_Jan_21.pdf*

CORPORATE LAWS COMMITTEE

I am pleased to share that the Committee organized two webinars during the month. Further, we are pleased to share that February 2021 shall be celebrated as National Corporate Law Month on a PAN India basis. The Regional Councils and Chapters are requested to participate in this initiative.

DIRECTORATE OF CAT

- **CAT Examination: January 2021 Term**

The result of Foundation Course (Entry level) Part- I January 2021 Examination of CAT Course was declared after the examination was successfully concluded on 17th January, 2021. I would like to congratulate all the students who have passed the examination. I would also like to inform that by virtue of passing the CAT examination they are now eligible to take direct admission in the Intermediate Course of the Institute.

It would be worthy to mention and place on records the efforts of team CAT for successfully conducting the examination in home based online mode.

- **WEBINT**

The CAT Directorate continued to provide virtual learning through the webinars on vivid topics for the benefit of not only young CAT & CMA students but also for Members of the Institute.

The concluding session of Webinar Series "Youngsters - Be Entrepreneurs", organised jointly with T&EF Committee every Saturday, was held on 30th January, 2021.

The weekly WEBINT series on IND AS was also concluded on 31st January, 2021. I am pleased to see your positive response to this series. I would like to thank CMA (Dr.) Gopalakrishna Raju, resource person of this series for his continuous support and making this series a grand success.

I congratulate CMA H Padmanabhan for helping Members and Institute in getting continuous education through the Webinars on vivid topics he conducted.

- **CAT Meetings and Development**

I am glad to know that team CAT had a wonderful start of the New Year. The delegation of CAT held a Meeting with Shri Kapil Dev Agarwal, Hon'ble Minister of State (Independent Charge) of Department of Vocational Education and Skill Development, Government of Uttar Pradesh (UP) and Shri Kunal Silku, IAS, Mission Director, Uttar Pradesh Skill Development Mission on 5th January, 2021 at Lucknow (UP). The delegation submitted a proposal for recognition and implementation of CAT under the Skill Development scheme of the state of UP. If the proposal gets implemented, a big number of youth population of the state of UP will be immensely benefited with the quality learning provided through the CAT course. I congratulate CMA H. Padmanabhan and the officials of team CAT for their continuous efforts in promotion of CAT course.

- **New ROCC**

The first month of the New Year has been promising for the CAT Directorate as it has continued to extend its family: I again congratulate CMA H. Padmanabhan, Chairman CAT for establishment of a new ROCC at Kochi, Kerala(S-218). The aspirants of CAT course from Kochi and nearby areas would be surely benefitted by this new ROCC. I wish that the CAT family may grow by leaps and bounds.

DIRECTORATE OF STUDIES

- **World Class Employability and Techno-Skills Training facilities for the CMA Intermediate Students**

As a long-term vision of the Institute and professional social responsibility towards the society and being an organisation under the administrative control of the Ministry of Corporate Affairs, Government of India, the Institute needs to ensure that the students pursuing the CMA Course should possess and acquire robust employability skills to cope with the global challenges and become a future-ready professional. Hence, the Institute has introduced mandatory SAP Finance Power User Training & Certification, Microsoft Office Training & Certification, Cambridge University Press Soft Skill Training & Certification and E-filing Training & Certification as a bouquet of World Class Employability and Techno-Skill Training facilities for CMA Intermediate Students w.e.f. 11th August 2020.

I am pleased to inform you that the Directorate of Studies (Training & Placement) has already started batches of Online Skills Training sessions from 22nd January 2021 for the Intermediate Students on a regular basis. Students are requested to follow Skills Training Portal of the Institute regularly for more updates. I am confident that students will be immensely benefited with this historical and path-breaking initiative of the Institute to nurture the budding CMA towards developing them as an accomplished professional of the future.

INTERNATIONAL AFFAIRS COMMITTEE

I am happy to inform that the International Affairs Committee under the Chairmanship of CMA Vijender Sharma organized the SAFA International Webinar on the topic 'Characteristics of a Global Leader' on 27th January, 2021. H.E. Dr. Roger Gopaul, High Commissioner of Trinidad and Tobago in India graced this Webinar with his benign presence as 'Chief Guest' and by sharing his inspirational thoughts on Characteristics of a Global Leader by presenting examples of various influential and successful leaders across the globe. Mr. A.K.M. Delwer Hussain, FCMA, President, SAFA graced the occasion as Guest of Honour. I delivered my Presidential address and CMA P. Raju Iyer, Vice President, CMA Vijender Sharma, Chairman International Affairs Committee also shared their valuable thoughts on the topic. The session was moderated by CMA B.B. Goyal, Former Addl. Chief Adviser (Cost), MoF, GoI. I am sure that the deliberation taken place during the webinar will immensely benefit the participants from SAFA member bodies in improving their leadership skills in order to be able to perform in a better manner.

MEMBERS FACILITIES COMMITTEE

I congratulate and welcome all the new 100 Associate members who were granted new membership and 18 Associate members who were upgraded to Fellowship during the month of January 2021.

Members holding Certificate of Practice (CoP) are kindly aware that their current CoP is valid till 31st March 2021 and falls due for renewal from 1st April 2021 onwards. I would request all members holding CoP to apply for renewal of their CoP for the Financial Year 2021-22 well in advance for which an advisory to this effect will be uploaded on the Institute's website under the "Members" section on the "Forms" and "Guidelines/Circulars" link very shortly. For ready reference and guidance, the said advisory will also be published in the next edition of the journal. Members would be able to apply for renewal of CoP for 2021-22 as soon as the advisory is published later during this month. CEP requirements for CoP renewals are also available on the website and members are requested to ensure that they meet CEP requirements.

CoP holders who have taken new CoP on and from 1st February 2019 are required to undertake a compulsory training programme, namely, Mandatory Capacity Building Training (MCBT). All such CoP holders will be required to complete MCBT to become eligible for CoP renewal of 2021-22. For details of MCBT, members may please refer to the Notification F. No. CWA/21/2019 dated 1st February 2019 [https://icmai.in/icmai/news/5435.php]. Registration of MCBT may be availed of from the link *https://eicmai.in/MCBT/CEPApplicationForm.aspx*

I am happy to note that under the leadership of CMA (Dr) V Murali, Chairman of the Members Facilities Committee, the membership department is continuously working towards excellence in all areas of membership online services.

PROFESSIONAL DEVELOPMENT & CPD COMMITTEE

I am glad to inform you that the Professional Development & CPD Directorate is going to commence the 2nd batch of online Mandatory Capacity Building Training (e-MCBT) for new CoP holders in the first week of February 2021. We are confident that this training will give further impetus to our young professionals and will be a booster towards the practice.

I am pleased to inform you that on Institute's representation, Stem water distribution and infrastructure company private limited has considered our request for inclusion of Cost Accountants Firm for Internal Audit for future tenders.

PD Directorate submitted representations to various organizations for inclusion of Cost Accountants for providing professional services.

Please visit the PD Portal for Tenders/EOIs during the month of January 2021, where Cost Accountants are required in City and Industrial Development Corporation of Maharashtra Ltd. (CIDCO), HIL (India) Limited, District Health & Family Welfare Society Panchkula, District Health & Family Welfare

Society Hisar, District Health & Family Welfare Society Nuh, Bharat Electronics Limited, Chhattisgarh State Power Holding Company Limited (CSPHCL), National Health Mission Uttar Pradesh, Karnataka State Seeds Corporation Ltd., National Health Mission Uttar Pradesh, Karnataka State Industrial And Infrastructure Development Corporation Limited, National textile Corporation Limited, West Bengal State Electricity Distribution Company Limited, Mahanagar Telephone Nigam Limited, Engineering Projects (India) Limited, Western Coalfields Limited, The Central Tax, Audit-II Commissionerate, Kolkata, Metal Scrap Trading Corporation (MSTC) Limited, Bureau of Indian Standards, Airport Authority of India New Delhi, Jaipur Vidyut Vitran Nigam Limited, Airport Authority of India Guwahati, Brahmaputra Valley Fertilizer Corporation Ltd., PFC Consulting Ltd., Madhya Pradesh Paschim Kshetra Vidyut Vitran Corporation Limited, Jaipur Development Authority, The Maharashtra State Co-operative Marketing Federation Limited, Mazagon Dock Shipbuilders Limited (MDL), Punjab State Transmission Corporation Limited etc.

PD & CPD Committee associated with the PHD Chamber of Commerce and Industry organised webinar on "Valuation of Goods/Services-Intricacies, Disputes and Resolutions" on 22^{nd} January 2021.

During the month around sixty webinars were organised by the different committees of the Institute, Regional Councils and Chapters of the Institute on topics of professional relevance and importance. We are sure our members are immensely benefited with the deliberations in the sessions.

REGIONAL COUNCIL & CHAPTERS COORDINATION COMMITTEE

The Committee under the Chairmanship of CMA (Dr.) K Ch A V S N Murthy in coordination with the Information Technology department of the Institute under the guidance of CMA Ashwinkumar G. Dalwadi, Chairman Information Technology Committee, is working together to make IT enabled dashboard and other IT facilities more streamlined and robust across the Regions and Chapters.

I am happy to announce that the Patna Sahib Chapter of Cost Accountants under EIRC in the state of Bihar has been approved by the Council of the Institute.

TAX RESEARCH DEPARTMENT

The Tax Research Department has conducted a grand Webinar in the month of January, 2021 on Anti-Dumping - An Insight, which was graced by luminaries like Shri Mithileshwar Thakur, Additional Director General – DGTR, Ministry of Commerce and Industry, Government of India, CMA B.B.Goyal, Former Addl. Chief Adviser (Cost), Ministry of Finance, Government of India, Shri Sanjeev Nandwani, Consultant, International Trade & Former Civil Servant, Government of India, CMA M K Anand, Director General, Forum for Trade Remedies and Shri A K Gupta, Founder and Managing Director, TPM. It was an interactive and enriching session and members were highly benefitted. Webinars were also conducted on the topics like Transfer Pricing and Corporate Tax Planning perspective.

The department forwarded a follow-up representation to state GST Commissionarate to include Cost Accountants as members in the state GST Grievance Redressal Committees. It was sent to state capitals like Kolkata, Delhi, Chennai, Mumbai, Agartala, Ahmedabad, Bhopal, Dehradun, Goa, Jammu, Lucknow, Patna, Jaipur, Raipur, Ranchi and Trivandrum.

ICMAI REGISTERED VALUERS ORGANISATION (RVO)

I am pleased to share that ICMAI RVO has organized the 7^{th} COP Programme for Registered Valuers on 2^{nd} January 2021, 11^{th} Online Batch for Securities or Financial Assets from 22^{nd} January to 31^{st} January 2021, Master Class on Valuation on 8^{th} to 10^{th} January 2021 & 23^{rd} to 25^{th} January, 2021, Certificate Course on Valuation from 15^{th} January to 17^{th} January 2021. 6^{th} Online batch of 50 hours Valuation course on Land & Building and Plant & Machinery Asset Class also started on 29^{th} January 2021.

INSOLVENCY PROFESSIONAL AGENCY (IPA) OF THE INSTITUTE

Insolvency Professional Agency of the Institute has organized Interactive meet on Challenges faced by Insolvency Professionals on 5^{th} January 2021, 37^{th} Batch of Pre – Registration Educational Course from 6^{th} to 12^{th} January 2021, Master Class on Avoidance Transaction on 9^{th} & 10^{th} January 2021, Master Class on Evaluation Matrix from 15^{th} to 17^{th} January 2021, Roundtable on Pre- Packaged Insolvency Resolution Process on 16^{th} January 2021 and 38^{th} Batch of Pre – Registration Educational Course from 18^{th} to 24^{th} January 2021 for the professional development of its members.

I wish prosperity and happiness to members, students and their family on the occasion of Saraswati Puja, Basant Panchami, Shivaji Jayanti & Hazarat Ali's Birthday and pray for the success in all of their endeavours.

Stay safe and healthy!

With warm regards,

Biswarup Basu

CMA Biswarup Basu

February 1, 2021

INAUGURATION OF LONDON OVERSEAS CENTRE OF COST ACCOUNTANTS ON 23rd JANUARY 2021

On the auspicious occasion of 125th birth anniversary of Netaji Subhas Chandra Bose on 23rd January or 'Parakram Diwas' this year, The Institute of Cost Accountants of India added a feather in its cap through the grand opening of London Overseas Centre of Cost Accountants (LOCCA), the first ever European centre in the heart of London. It was highly supported by British Deputy High Commission, Kolkata, India Business Group and UK India Business Council.

With the launch of London Overseas Centre, the Institute will be able to develop more collaborative efforts with the reputed International organizations to make the courses and research highly contemporary, vibrant and meaningful, and bridge the gap between the academia and the industry and be a catalyst to develop a conducive environment for industry and business.

The inauguration programme had an august presence of dignitaries from both the British and Indian Governments and eminent speakers from academia and industries. The Minister of State for Finance and Corporate Affairs, Govt. of India, **Shri Anurag Singh Thakur** was the hon'ble **Chief Guest**.

The **Guests of Honour** were: **Lord Kamlesh Kumar Patel**, Baron of Bradford, (OBE); **Mr. Nick Low**, British Deputy High Commission, Kolkata; **Prof. Nora Ann Colton**, Director, UCL Global Business School of Health; **Mr. Kevin McCole**, Managing Director, UKIBC (UK India Business Council); **CMA Anirban Mukhopadhyay**, Chairman, LOCCA and **CMA Udayan Guha**, Secretary, Research, Advanced Studies and Industry, LOCCA.

Other honourable dignitaries who graced the occasion were: **CMA Biswarup Basu**, President of the Institute; **CMA P Raju Iyer**, Vice President of the Institute; **CMA Balwinder Singh**, Council Member and Immediate Past President of the Institute, **CMA Vijender Sharma**, Council Member and Chairman, PD & International Affairs Committee of the Institute; **CMA Debasish Mitra,** Council Member and Chairman - Board of Advanced Studies & Research and Members in Industry Committee of the Institute; **CMA Chittaranjan Chattapadhyay**, Council Member and Chairman, BFSI & IDT Committee; **CMA H. Padmanabhan**, Council Member and

Chairman, CAT & AAT Board of the Institute; **CMA Dinesh Chowdhary**, Vice Chairman, LOCCA; **CMA Nitin Ajmera**, Treasurer, LOCCA and **CMA Aheli Mukherjee**, Secretary, Admin, Members and CIMA Relationship, LOCCA, **CMA Rajesh Falak,** Journal, LOCCA, **CMA Sudha Chawla**, External Relationships, LOCCA, **CMA Arun Pothapragada**, Events, LOCCA.

CMA Kaushik Banerjee, Secretary, **CMA (Dr.) Debaprosanna Nandy**, Senior Director (Studies & Advanced Studies) and **CMA Arnab Chakraborty**, Director (Finance) of the Institute were also present in this grand international event.

The programme started with the cake-cutting ceremony jointly by the President of The Institute of Cost Accountants of India, **Shri Biswarup Basu** and the British Deputy High Commissioner, Kolkata, **Mr. Nick Low**. This was followed by a fact-full deliberation from Mr. Low, wherein he congratulated LOCCA for the inauguration on the auspicious 125th birth anniversary of Subhas Chandra Bose and aptly pointed out that the London Overseas Centre was the 'right project at the right place at the right time'.

Continuing with the positive vibes, Mr. Low spoke about the prospect of the Indian Government expediting the free trade agreement (FTA) with UK which would possibly open up an 'enhanced trade partnership', with both the country's Prime Ministers likely to announce a 10-year roadmap for UK-India trade relations when British premier would be visiting India next. In this context he also talked about the warmth of the social environment in Kolkata and the best of people-to-people relationship and network connects.

Mr. Low harped on the joint collaboration between Oxford University, Astra-Zeneca and Serum Institute to develop COVISHIELD and applauded India's efforts to supply vaccines to other nations. He spoke on the education front and highlighted that the friendly visa regime from 2018 onwards has fostered 93% growth in students opting to UK for higher education during 2019. On Brexit, he reiterated that the immediate profound economic shock and catastrophe as was predicted never happened and UK continued to maintain the closest possible economic, political and security ties with EU. Post Brexit he observed that Fintech attracted more investments and 60% of UK trade was happening outside EU with 7 companies turning unicorns during these testing times. In this context Dy. High Commissioner also talked about the fall in the vocational skills in the large service sectors in UK and mentioned that this is where LOCCA would likely to play a significant role.

Hon'ble Chief Guest of the event**, Shri Anurag Singh Thakur** had sent his recorded speech in which he congratulated the Institute for setting up LOCCA and expanding its horizon in spite of pandemic. He observed that post covid the world would likely to experience more disruptive changes which would require an individual to adapt new technologies in far more spheres. Also over this period the nature of global economy has changed from multi-lateral collaborations to bilateral deals which would require a strong and reliable partner. He recapitulated the fact that covid pandemic has shown India's great resilience and remarkable capability to stride towards resurgence and 'Atmanirbhar Bharat', which is not only an economic strategy for a self-reliant and sustainable India but would also open up huge opportunities for investments in private sectors in areas of renewable energy, technology, AI and other niche segments, thus making India a reliable partner to the world.

M.D. of UK India Business Council, Mr. Kevin McCole was the first Overseas Speaker and he reminisced about his 3 years tenure at British Deputy High Commission Kolkata and lauded the leadership team engaged in setting up LOCCA. He reiterated that the Centre would play an exciting role and partnership in the UK- India business relationship with the Institute's over 80,000 member affiliates globally.

He highlighted broadly on the UK India Enhanced Trade Pact (ETP) which is aimed at removing trade barriers, IP and technology transfer along with facilitating digital services to foster sustainability, since change in business dynamics during pandemic forced global manufacturing supply chain to become regional. He observed that sincere efforts from both Governments would help drive this ambitious trade and investment partnership.

Mr. McCole talked about the upcoming G10 summit which Indian Prime Minister is likely to visit the Commonwealth Head of States meeting at Rwanda and the UN Climate conference in November with the proposed visit of British

LOCCA Chairman, CMA Anirban Mukhopadhyay and Secretary for Advanced Studies, Research and Industry, CMA Udayan Guha at the London Centre

CMA Biswarup Basu, President of the Institute; CMA Debasish Mitra, Council Member and Chairman, Board of Advanced Studies & Research and Members in Industry Committee of the Institute; CMA Chittaranjan Chattapadhyay, Council Member and Chairman, Indirect Taxation & BFSI Committee; CMA H. Padmanabhan, Council Member and Chairman, CAT & AAT Board of the Institute; CMA Kaushik Banerjee, Secretary; CMA (Dr.) Debaprosanna Nandy, Senior Director (Studies, Training & Education Facilities and Placement & Career Counselling, Advanced Studies) and CMA Arnab Chakraborty, Director (Finance) of the Institute welcoming Mr. Nick Low, British Deputy High Commission, Kolkata at Headquarters of the Institute on the Grand Opening of London Overseas Centre of Cost Accountants (LOCCA).

premier to India in the next few months. These visits would likely to boost and help in taking the trade pact forward. He also mentioned about the Environment, Social and Governance (ESG) projects with distinct possibilities on research collaborations between Indian and UK Universities wherein LOCCA might play an important role in association with UKIBC.

Lord Kamlesh Kumar Patel, Baron of Bradford (OBE), spoke about opportunities of collaboration between ICMAI and the British Institutes / Universities in areas of new age technology and data science which could possibly be taken forward by LOCCA. He also offered to facilitate in high quality training-education and research through his vast network of professional connects where he envisaged huge potential to harness, which would lead to up-skilling of students to be job-ready. He suggested the areas of business studies and health management amongst the sectors for academic research where LOCCA might help to facilitate engagement of matching institutions at both ends. He also spoke about the India Business Group (IBG) and informed that the next India award event would be held in New Delhi at an appropriate time after pandemic.

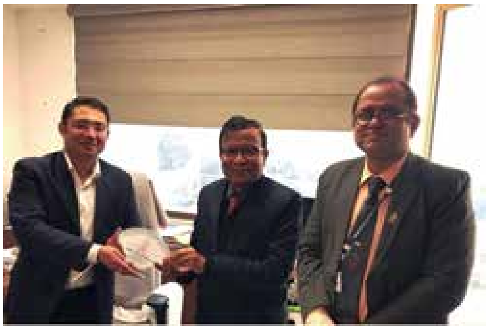
Professor Nora Colton, Director of Global Business School of Health, University College of London in her brief speech praised the management team of the Institute and LOCCA for such a torch-bearing endeavour and spoke about research in the area of health and real world science focusing on healthcare and public health services. She talked about the right balance of technology and industry best practices and suggested that the members of LOCCA might become financial enablers to derive data driven cost model necessary in healthcare for better and effective services delivery. She also spoke about a private-public collaborative association for development of education, training and research facilities for students of both UK and India with assistance from LOCCA.

The whole event with its august presence of luminary speakers and honoured guests along with the perspectives drawn up by each of them in their speeches were appropriately summarized by **CMA Biswarup Basu**, President of ICAI in his concluding remarks, with rendition from Kobiguru Rabindranath Tagore's *'Where the mind is without fear'* to sum up the proceedings.

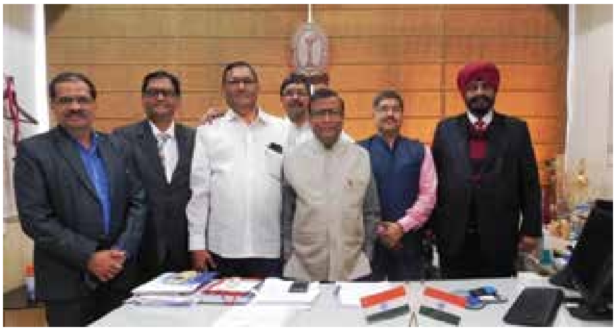
The whole programme was moderated by **CMA Udayan Guha**, Secretary of LOCCA for Advanced Studies, Research and Industry from London.

Dignitaries and honoured guests on a single web-frame during the programme

CMA Biswarup Basu, President and CMA Chittaranjan Chattopadhyay, Chairman of Indirect Taxation Committee Chairman as well as Banking, Financial Services & Insurance Committee presented copy of "Aide Memoire on Lending to Micro Small and Medium Enterprises Sector" (including restructuring of MSME credits) to Novel Roy, IRS, Central Board of Direct Taxes, New Delhi, Ministry of Finance, Government of India on 27th January 2021 at his office in New Delhi.



CMA Biswarup Basu, President and CMA Chittaranjan Chattopadhyay, Chairman of Indirect Taxation Committee Chairman as well as Banking, Financial Services & Insurance Committee extending greetings to Novel Roy, IRS, Central Board of Direct Taxes, New Delhi, Ministry of Finance, Government of India and also handed over Representation on Transfer Pricing in Income Tax on 27th January 2021 at his office in New Delhi.



Republic Day Celebrations at the Institute Headquarters

CMA Chittaranjan Chattopadhyay, Chairman, Banking, Financial Services & Insurance Committee and Indirect Taxation Committee presented copy of "Aide Memoire on Lending to Micro Small and Medium Enterprises Sector" (including restructuring of MSME credits) to Shri Pankaj Jain, IAS, Additional Secretary, Department of Financial Services, Ministry of Finance, Government of India on 27th January 2021 at his office in New Delhi.

GLOBAL RECOGNITION OF CMA QUALIFICATION

Benchmarking of Intermediate and Final Course of The Institute of Cost Accountants of India by UK NARIC

With the objective of enhancing the recognition and professional opportunities for its students and members across the globe, the **International Affairs Committee** and **Professional Development & CPD Committee** of the Institute had engaged UK NARIC (National Recognition Information Centre in United Kingdom) to conduct an independent benchmarking study for evaluating the comparability of the CMA Intermediate and Final Course in the context of the UK and UAE education systems.

UK NARIC is the designated national agency in the United Kingdom for the recognition of international qualifications and professional skills. As the National Agency, managed on behalf of the UK Government, UK NARIC is the internationally respected voice in qualification recognition offering impartial, trusted judgement on international qualifications. UK NARIC has the largest database of international qualifications in the world, with over 5,000 qualifications from more than 200 countries.

UK NARIC has made the following comparability levels recommendations in the context of the UK & UAE education system:

Course	UK Qualifications	UAE Qualifications
CMA Intermediate Course	RQF Level 6 (Bachelor's Degree Standard)	QF Emirates Level 7 (Bachelor's Degree Standard)
CMA Final Course	RQF Level 7 (Master's Degree Standard)	QF Emirates Level 9 (Master's Degree Standard)

Link to the benchmarking results of CMA qualification published in UK NARIC website:
http://www.ecctis.co.uk/news.aspx?NewsId=1138

This independent benchmarking of the CMA qualification would ensure widespread, international acceptance of CMA qualification. The benchmarking results would strengthen the position of CMA members and help corporates gain a better understanding on the relevance and standing of the CMA qualification. It would also provide opportunities for higher studies and enhanced professional opportunities for CMA members/ semi qualified professionals in UK, Middle East and other foreign jurisdictions accepting NARIC evaluation.

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

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UNVEILING DIGITAL HEALTH AND ELECTRONIC HEALTH RECORD - THE IMPENDING MECHANISMS TO AMELIORATE HEALTHCARE EFFICACY IN INDIA

Abstract

With sustainable economic growth potential and foreseeable improvement in public service delivery, India needs instruments to improve sectoral productivity in healthcare. In the modern world of technological advancements, digital intervention is inevitable to increase healthcare effectiveness. Digital health includes multiple digital care mediations ensuring the convergence of digital technologies with wellness, treatment, healthcare, and society to improve the efficacy of service delivery and make medicines more explicit and user-specific.

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While mulling over the health of the healthcare sector in India, a number of hindrances are often ruminated. These include, inter-alia, higher cost of services, social inequality, shortages of medical personnel, inadequate medical research, and overdependence on private establishments. These bottlenecks are prevailing since time immemorial and difficult to surpass with a population of more than 1.35 Billion. With sustainable economic growth potential and foreseeable improvement in public service delivery, India needs instruments to improve sectoral productivity. In the modern world of technological advancements, digital intervention is inevitable to increase healthcare effectiveness. The data repository of healthcare records of individuals acts as a lead to the practitioners, whereas the improvised usage of telemedicine may help to overcome staff shortages. Electronic Health Record (EHR) helps future research with a strong data pool, whereas a wide range of wearable devices develop healthy practices. In a developing country like India with limited resources to cater to the need of the growing population, the path-breaking emergence of digital interference in healthcare is imminent.

Future of Healthcare Investment in India

Various market research projections estimated a significant growth in the healthcare sector in India. The market size is expected to reach $372 billion by 2022, whereas the Indian medical tourism market is expected to reach US$ 9 billion by 2020 growing at 18% y-o-y. Health insurance, on the other hand, is attaining significant momentum in India. Gross direct premium income underwritten by health insurance grew nearly 17% to Rs 51,637.84 crore (US$ 7.39 billion) in FY20. Government's contribution in the healthcare sector in India has also witnessed sustainable growth for last two decades. Various policies have been framed to increase the expenditure outlay in the healthcare sector. Union Budget 2020-21 outlaid Rs. 69,000 crore for the healthcare sector, and Rs 35,600 crore in various nutrition-related policies. National Nutrition Mission (NNM), Pradhan Mantri Jan Arogya Yojana (PMJAY), Mission Indradhanush, and last but not least Ayushman Bharat-National Health Protection Mission had broadly indicated the unidirectional aim of the policy makers to have a well-organized healthcare framework with significant policy intervention. The data depicted in Table 1 represents healthcare spending (out of pocket and public) of SAARC countries as % of GDP. Although India has a spending trend lesser than the SAARC average (Figure 1), there is a large potential for further spending in sync with a foreseeable increase in market volume.

	Afghanistan	Bangladesh	Bhutan	India	Maldives	Nepal	Pakistan	Sri Lanka	SAARC Average
2011	8.6	2.6	3.3	3.2	7.9	5.1	2.3	3.7	4.6
2012	7.9	2.6	3.5	3.3	8.7	5.2	2.4	3.4	4.6
2013	8.8	2.5	3.6	3.7	8.1	5.3	2.6	3.8	4.8
2014	9.5	2.5	3.5	3.6	7.9	5.8	2.7	3.6	4.9
2015	10.1	2.5	3.7	3.6	8.7	6.2	2.7	3.9	5.2
2016	11.0	2.3	3.5	3.5	10.2	6.3	2.9	3.9	5.4
2017	11.8	2.3	3.2	3.5	9.0	5.5	2.9	3.8	5.3
2018	9.4	2.3	3.1	3.5	9.4	5.8	3.2	3.8	5.1

Table1: Healthcare spending (as % of GDP)

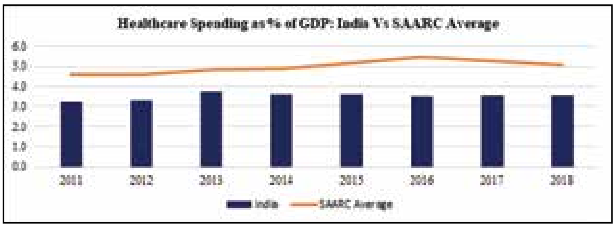

Figure 1: Healthcare spending as % of GDP (India Vs SAARC countries)

Considering the prospect of the sector as a whole, it is evident that Digital Health in its various forms is going to be a game-changer. On top of this, the digital record keeping (Electronic Health Record or EHR) of the millions of users would be of immense importance in defining the fate of future research and development, user-specific medication and effective disposal of healthcare services.

What is Digital Health?

The all-encompassing definition of digital health published by HIMSS (parent company of MobiHealthNews) says: 'Digital health connects and empowers people and populations to manage health and wellness, augmented by accessible and supportive provider teams working within flexible, integrated, interoperable, and digitally-enabled care environments that strategically leverage digital tools, technologies and services to transform care delivery'. It includes multiple digital care mediations ensuring the convergence of digital technologies with wellness, treatment, healthcare, and society to improve the efficacy of service delivery and make medicines more explicit and user-specific. Figure 2 explicitly elaborated the components and core essence of digital health, its interoperability, and governance. Data democratization is an essential pillar of the digital health matrix, and it is maintained in most countries in the form of Electronic Health Record (EHR).

Digital health concepts emanated from the convergence of information and communication technology with the health and mental wellness of people.

Figure 2: Digital Health Structure (Source: mobihealthnews)

Digital Health and its relation with Data Science

Digital health concepts emanated from the convergence of information and communication technology with the health and mental wellness of people. In the last few years, we have witnessed a manifold increase of data science application in the healthcare sector like:

i. Use of deep learning technology for medical imaging (MRI) that can help in the detection of microscopic deformities
ii. Analysis of genomic data for genetic disease
iii. Discovery of drugs using data science –application of data science to derive the information from the patient profile helping in identifying the efficacy and trial of medicine
iv. Predictive Analytics for focused implementation of government health schemes
v. Use of wearable technology to monitor health statistics
vi. Tracking and prevention of disease
vii. Provision of virtual assistance

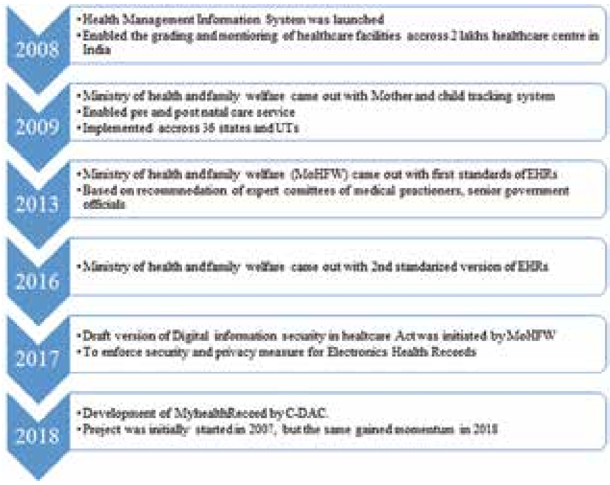

Figure 4: Evolution of initiatives for digital health record maintenance in India

EHR and its evolution in India

An electronic health record (EHR) is a digital representation of a patient's health chart. These records are dynamic, real-time, patient-specific that make comprehensive information readily available to licensed users. Hence, EHR is a combination of digital elaboration containing a series of patient-centric data namely patient's medical history, diagnoses, medications, treatment plans, immunization dates, allergies, radiology images, and laboratory and test results. This data repository, along with the authorized transmission of information, integrates the three facets of digital health- governance, interoperability, and outcome traceability.

An electronic health record (EHR) is a digital representation of a patient's health chart.

Source: Electronic Health Records: A Manual for Developing Countries by WHO

Figure 3: Major tenets of EHR

The adoption of universal EHR, backed up by a well-devised data protection strategy, can ideally be a revolutionary intervention for providing more effective healthcare access to the citizens of India. Insights from integrated data obtained from multiple sources like hospitals, healthcare, and diagnostics centers can be helpful in providing better healthcare services to the people. India has gradually adopted digital record keeping of patients since it launched the Health Management Information System in 2008. Ministry of health and family welfare (MoHFW) announced the first standard of EHR in 2013. Among SAARC countries, Sri Lanka adopted a similar standard in 2010, whereas Nepal, Bhutan, and Afghanistan prescribed it in 2017. Figure 4 elaborated the timeline of the evolution of maintaining digital health records in India.

Prevailing Policy Bottlenecks and future Roadmap

There are inherent problems that acted as major hindrances to implement EHR successfully in India. Some of those are:

i. Lack of basic information technology infrastructure in public healthcare facilities

ii. Provision of secure internet network to avoid pilferage of data

iii. Storage of billions of data of healthcare and the associated exchange infrastructure

iv. As per the latest estimate of MoHFW around 75% of outpatients and 60% of inpatients are treated in private healthcare facilities. Onboarding of private healthcare facilities will be a continuing challenge for the government

v. Interoperability of data among the healthcare facilities

vi. Development and training of human resources

vii. Adoption of unique patient identity

Srivastava (2016) in his paper had identified four key pillars that would be essential for the effective and successful implementation of EHR. The pillars and their relevant suggestions are tabulated in Table 2.

Sl. No	Components	Suggestions
1.	ICT infrastructure	Use of Aadhaar based infrastructure for implementation of EHR system
2.	Policy and regulations	Draft policy on Digital information security on healthcare should be put up through the legislation for faster implementation of the same as law
3.	Standards and interoperability	Standard Free and open source software should be designed with various level access

4.	Research Development and Education	Establishment of separate health care professional training institute along with constitution of statutory body for implementation of EHR will help us in bridging the knowledge gap

Table 2: Components and Policy Suggestions for effective EHR implementation

Conclusion

In an evolving world of increasing digital dependence, a higher degree of technological intervention in public service delivery is a must to improve its gross productivity. The Healthcare sector in India requires greater attention to improve its effectiveness through the incorporation of various innovative measures. Multiple policy level steps have been initiated to mobilize the sector to be equipped with the benefits of digitalization. Indian government launched the digital economy project in 2015 with an aim to facilitate the delivery of government services with digitally enabled secured platforms. Aadhaar, having extended digital identity to 99% of the population, had enabled the public service delivery and provision of digital payments in the last four years. Maintaining a digital health record has also been intended to prepare a consolidated health-data repository for inclusive bottom-up benefits. The higher usage of digital health and strong policy-level push to maintain Electronic Health Record, both at public and private institutions, are expected to be the game-changers in the ever-increasing world of digital intervention. MA

***The views expressed in this article are purely personal views and not those of the Reserve Bank of India*

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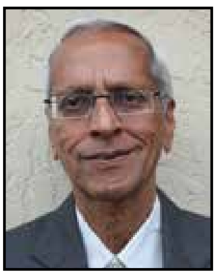
IMPLEMENTING AN INTEGRATED HOSPITAL COST MANAGEMENT SYSTEM

Abstract

The unique features of Healthcare Sector and their Business Process Flow are a big challenge to implement an Integrated Cost Management Solution. Even though a Hospital may have an effective Medical Information System of Patients and an ERP, they still struggle with implementing a Costing System; this is because the information is in different Silos. To implement an effective Costing System, the cost structure should be either inbuilt in the ERP or should have information flowing in from the Accounting and Patient Information. Identifying the Cost Elements and their classification, defining Cost Objects and their hierarchy and mapping the flow of information from Accounting and Medical Information System are pre-requisite for an Integrated Cost Management Solution. With the rapid development in information technology many IT firms/ERP use Data Connectivity for seamless integration. An integrated Costing System will facilitate online reporting and help Management in decision making on Pricing, Profitability and Cost Control.



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Unique Features of Healthcare Sector

The process of implementing Costing Module starts with understanding the unique features of Healthcare Sector and the process flow of the business

1. About Patient
   - In a Hospital, Patient is the Customer and their number is large.
   - Nowadays payments on behalf of Patients are done through Medi-claim policies also.
   - Patients undergo different tests and treatments for which they have to be charged for various services utilized.
   - No two patients can be compared; even though they may have similar diagnosis. Because of age and health of the patients are different, the treatment will vary in terms of time and cost.
2. Different Specialties which are Revenue Streams independently and are also bundled,
3. Infrastructure Cost, Non-Technical, Support Service Costs are independent cost centers which are mostly fixed in nature.

Difficulties faced in implementing Costing System in Hospitals

- Invoicing is done for the patient which may be identifiable with the Specialties but in the case of bundling it loses its identity.
- Accounting Packages and also Finance module in ERP focus on transaction and report expenses to suit the requirement of Accounting Standards. Unless at the time of implementing ERP if Costing requirements are not defined according to Business requirements , integration becomes difficult.
- Information is available in Silos and implementing a Costing system becomes difficult. Therefore most of the Hospitals struggle with computing the cost of products and services provided by them.
- The inter-related and interdependency of processes makes cost management difficult.
- Further the cost of stand-by facilities such as. Generator,

backup operation theatre, and extra trained staff complicates the system of cost management

Lack of proper costing system has adverse influence on pricing, profitability and finally on sustainability of business. Therefore it calls for an integrated Costing System

Need for integrating Costing System

The ultimate solution to overcome the above difficulties is to have an integrated Costing System. The objective of the Integrated Costing System is to analyze, summarize, and evaluate cost data, so that management can evaluate Profitability by Product/ Activity and take decisions on price, compare with budgets and implement cost control measures

An effective Cost Management in Hospital is possible, only when the following three key areas are integrated.

1) Medical information on patients,

2) Financial and accounting system,

3) Costing System

The Medical Information on Patients is provided by the EMR (Electronic Medical Record) which is capable of providing minute information of a Patient, the history and the treatment to the Patient.

A Financial and Accounting System, which may be a Finance Module in an ERP, or a standalone Accounting Package, fulfills all the requirements of Financial Reporting for Management and Statutory.

But to have an effective and efficient Cost Management it has to be integrated with Medical Information System and also Financial and Accounting System.

PROCESS OF IMPLEMENTATION OF AN INTEGRATED COSTING SYSTEM

All reputed ERP Packages have Costing Accounting as an independent Module which is integrated with the Finance and other Modules, but not with Electronic Medical Records of the patient, but nowadays there are Data Connector Tools which can be used to import Patient Information

The Integrated Costing System will

All reputed ERP Packages have Costing Accounting as an independent Module which is integrated with the Finance and other Modules, but not with Electronic Medical Records of the patient, but nowadays there are Data Connector Tools which can be used to import Patient Information

collect data from various sources, such as the general ledger, sub-ledgers, budgets, and statistical information and define the following terms

Cost element

A Cost Element is the lowest level in Cost Module, Its counterpart in Finance Module is Account Codes in Chart of Accounts. By default all the Account Heads of Profit and Loss expenses and revenue will be converted to Cost elements

A Cost Element is the lowest level in Cost Module, Its counterpart in Finance Module is Account Codes in Chart of Accounts.

Two types of cost elements

There are two types of cost elements: primary cost elements and secondary cost elements.

Primary cost elements

The primary cost elements represent the flow of costs from financial accounting to cost accounting. The cost element structure corresponds to the profit and loss account structure in the general ledger, where a cost element can correspond to a main account. Not all main accounts may necessarily be represented as cost elements depending on the business reporting needs.

In the Cost Audit CRA-4 Format, the following are the primary cost elements

- Material Cost
- Indirect material costs
- Direct Expenses
- Personnel costs
- Energy costs
- Finance Cost
- Depreciation

Secondary cost elements

The secondary cost elements represent the flow of costs internally because these are created and used only in Cost accounting. These cost elements are used in cost allocations and overhead calculations. Examples of secondary cost elements include:

- Production costs
- Administrative and marketing overheads

Cost elements represent the lowest level of cost details and are required for statutory and managerial reporting purpose, therefore it has to be decided at the time of implementation. Having thousands of cost elements can make it difficult to control each cost element. As an alternative cost element can be grouped for the purpose of cost control and reporting. This doesn't stop from analyzing expenses in detail by using tools like drill down facilities. However identifying and categorizing at the source will help in effective analysis and control

In a Hospital the following are some of the Cost elements

a. Medicines

b. Medical consumables and implants

c. Direct utilities such as
   - Oxygen
   - Nitrogen
   - Nitrous oxide gas
   - Others life saving gases

d. Power and fuel

e. Salaries (further categorised as Surgeons, Drs, Nurses, Para medical staffs, workers, helpers etc)

f. All other direct cost elements (one account head for each cost element)

g. All indirect costs/overheads

(one account head for each cost element)

Cost object

A Cost Object is an object identified in an Organization to assign costs for the purpose of analyzing, controlling and reporting.

- Inpatient
- Outpatient
- Ward
- Doctor
- Specialties

Management uses cost objects to quantify cost and also derive profitability analysis.

Cost Centers

There are many nomenclatures used to define the Groups of Cost or Revenue Centers, for the purpose of uniformity this has been adopted in the Guidance Note issued by our institute.

(i) Medical departments.

(ii) Medical support departments.

(iii) Non-medical (service) departments.

This helps in understanding the nature of the cost and its allocation

Medical departments

The Cost Centers grouped under this are also Profit Centers because they generate income directly from the patients. Some of the major Cost Centers are

i. Cardiology
ii. ENT
iii. Coronary care
iv. Pediatrics
v. Neurology
vi. Gynecology
vii. Pathology

Medical support departments

These departments generally support medical departments. Some of these generate

Revenue from patients.

i. Pharmacy
ii. Laboratory
iii. Wards
iv. Imaging
v. Blood bank
vi. Operation theatre
vii. CSSD (central sterile services deptt.)
viii. Nursing

Non Medical (Service) departments

Department which do not generate income directly but supports the Medical

and Medical support departments to do their services effectively

- Investigation
- Transport (patient/non patient)
- Laundry
- Patient catering
- Records management
- Mortuary
- Charity services
- Bio-Medical Engineering
- Maintenance
- House Keeping
- Purchase
- Stores
- HR
- Costing/Accounts /IT etc

Cost distribution

The distribution of cost of the Primary cost element, which we normally refer to as Primary Cost Distribution. Here there is no allocation from one cost object to another or reciprocal processing

The following are some of the basis of distribution

- Actual
- Technical estimates
- the number of employees
- power consumption in kwh
- square meters for a cost center.

Cost Classification

- **By traceability** – Direct Costs and Indirect Costs- Direct costs are directly traceable to Cost Objects, whereas Indirect costs are not directly traceable to Cost Objects but shall be allocated.
- **By Behavior** – Based on the behavior Costs are classified as Fixed, Variable and Semi-variable.

Most of the cost in Healthcare is of fixed nature and it would be advisable to determine the capacity and allocate on actual capacity.

Cost Structure

This shows how the cost flows between cost objects and their hierarchy.

Cost allocation

Is used to allocate the balance of a Cost Center or cost object to other cost objects by applying an allocation base, including reciprocal allocation

- Patient Hours
- Total Hrs utilized & std hrs required for each

- Procedure
- No. of Tests done
- No. of Patients (IPD and OPD separately)

Cost roll-up

The purpose of cost roll-up rules is to aggregate costs and assign. If cost roll-up is not used, every element of a cost is allocated from one cost object to another.

Cost rate Policy

Defines the rate at which the Cost Object is to be allocated, it may be planned or actual. This is useful for working out Activity or Process cost for the final cost object.

REPORTS

ERPs create lot of flexibility in reporting if the Cost Structure and Cost Objects are defined as per the requirement of the company.

Reports on Profitability, Comparison of Cost with Budget etc can be generated for the following.

- Report by Doctor: If Management wants Profitability per Doctor then it has to be defined as a Cost Object
- Report by Revenue/Cost Center: If the required revenue/cost centers are defined as cost objects
- Profitability of different types of patients and ward

Time Driven Activity Based Costing in Hospital

TDABC requires two key parameters to work out the capacity cost rate (CCR), the cost of delivering the Service and time required to perform activity. The CCR is the cost of capacity-supplying resources divided by the practical capacity of those resources.

Robert Kaplan and Michael Porter presented a seven-step approach to the application of TDABC in health care, they are as follows

- Select the medical condition
- Define the care delivery value chain, i.e. chart all key activities performed within the entire care cycle
- Develop process maps that include each activity in patient care delivery, and incorporate all direct and indirect capacity-supplying resources
- Obtain time estimates for each process, i.e. obtain time estimates for activities and resources used
- Estimate the cost of supplying patient care resources, i.e. the cost of all direct and indirect resources involved in care delivery
- Estimate the capacity of each resource and calculate the capacity cost rate
- Calculate the total cost of patient care

Implementing Time Driven Activity Based Costing is easier said than done, the above integrated cost management suggested can be modified to suit the requirements of TDABC, but it may be premature in most of the Hospitals. Gary Cokins in "A Costing Levels Continuum Maturity Model" describes the maturity level at which TDABC can be implemented. Most of the Hospitals haven't reached that level and therefore it is suggested that they follow Gary Cokins Rapid Proto-typing Model before attempting to implement TDABC in ERP. MA

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A SYSTEM DYNAMICS APPROACH TO STRATEGIC PLANNING AND PERFORMANCE IN HEALTHCARE: DYNAMIC BALANCED SCORECARD LEVERAGED WITH CORPORATE SOCIAL RESPONSIBILITY

Abstract

The balance scorecard (hereinafter called BSC) is a powerful concept for performance measurement. However, it suffers from some drawbacks regarding quality of the BSC. System dynamics overcomes these shortcomings with a Dynamic Balanced scorecard (DBS). In this article we elaborate how a Dynamic Balanced scorecard can be used in the healthcare sector including its connectivity with Corporate Social Responsibility as a strategy in the changed regulatory regime in India particularly after enactment of Companies Act 2013, and section 135 and schedule VII in particular. The pandemic of 2020 has challenged us to look into CSR not only for a facelift for the stock market but to make the core of organizations strong. Healthcare specially will be the center of focus for coming days and reason why our article has special focus on this sector. Sustainability measures have been researched by scholars and it has been found that companies who factor in sustainability measures in their performance do better (Nidumoli, 2013) than those who do not. The DBS technique is a powerful tool to capture the CSR and sustainability measures. Our article aims at presenting a framework to implement this in organizations in health care.

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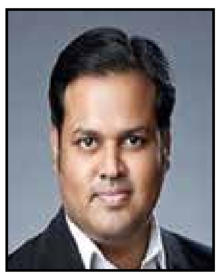

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Literature Survey:

(Nielsen, 2009) shows how return on capital is influenced by skill, customer and work in progress. It uses a system dynamics framework to overcome the difficulty of BSC to foresee the time lag dimension of various indicators. (Oorschot) shows the limitations of BSC and how system dynamics overcomes this drawback. (Ting Lin Lee1) apply the dynamic BSC to the Taiwan pharma industry. It amends the policy direction for enhancing future performance.

(TRI GUNARSIH1, 2015, April (2016)) explains a hybrid system dynamics and balance scorecard technique for health sector. (LINARD) explains the dynamic interrelationships in organization design, in particular, the interrelationships between an organization's profitability, internal structure , relationship building measures with customers and investment in people competence. (Jackson, The Balanced Scorecard In Healthcare) explains how a BSC is strategic to healthcare and what harm it is for not having a strategic plan. (Robert S. Kaplan) elaborates healthcare M&A integration.

The balanced score card

A balanced scorecard is a framework or strategy map to implement and manage strategy. It links vision to strategic objectives, measures and initiatives. An example given below by Albert Einstein (Grout, 2013):

"Any intelligent fool can make things bigger and more complex. It takes a touch of genius – and a lot of courage – to move in the opposite direction"

It is a tool with which a company can create value through 4 major perspectives of Financial, Customer Internal processes and organizational capacity. These perspectives are both financial and non-financial as is evident from their description.

Healthcare Sector:

The healthcare sector is a closely associated with human interactions and the non-financial perspective take a front seat. The goal created by a healthcare group is better organized using a BSC (Jackson, The Balanced Scorecard In Healthcare). In India the BSC technique is acknowledged by (Srinivasan, 2009) in Dr. Reddy Labs, BM Birla , TATA medical , Arvind Eye Care and identification of KPIs are critical. It is still to take –off fully in India

Performance Management and BSC

Kaplan and Norton introduced the concept of balance score card in 2001 (Kaplan, 2001). They informed that only financial parameters are inadequate to measure performance of a business. A BSC is a tool easy to understand and instead of dealing with numerous parameters now managers focus on 5 perspectives instead. It has a systemic perspective. However, BSC is unable to distinguish delays between action and impact on performance as it focusses on unidirectional causality. To overcome this we use the System Dynamics approach. (Oorschot) undertake a case study in an insurance company and we propose a similar approach to the healthcare sector.

System Dynamics

JW Forester introduced System Dynamics in 1950's at MIT Sloan. Since then it has found applications in policy making in energy, health, project management and strategy. However, the subject is still not extensively used in industry. It is a very powerful tool and we explain how it can be utilized in building a Dynamic Balance Score Card. Furthermore, we extend this to corporate social responsibility and how a dynamic balance scorecard can be implemented as a strategic planning.

Causal Loops

System dynamics approach uses stock and flows and causal loops to analyze a system interaction.

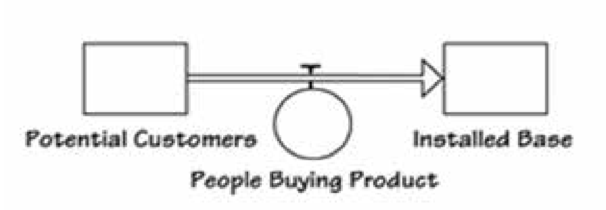

Figure 1: Source;https://thesystemsthinker.com/step-by-step-stocks-and-flows-converting-from-causal-loop-diagrams/

The example shows if Buying increases, Installed base increases. Such CLDs can be linked to get a stock flow diagram:

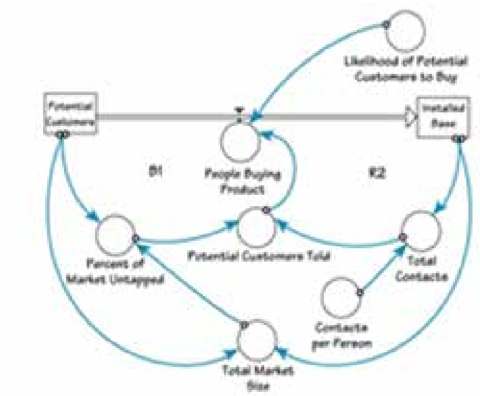

Figure 2: https://thesystemsthinker.com/step-by-step-stocks-and-flows-converting-from-causal-loop-diagrams/

The final CLD is obtained with the step-by-step approach;

1. Units assignment for variables (eg nos., m3/hr etc.)
2. Identify and create stocks (potential customers/ installed base)
3. Identify the flows (these are variables that add or subtract the stock) (People buying products)
4. Connect the stock and flows where required.
5. Include auxiliary variables for calculation or constants.
6. Specify equations
7. Include additional variables where required.

The Dynamic Balance Score Card:

The balance score card suffers from some drawbacks. It ignores time delay and studies static performance management. The BSC introduces non-financial perspectives and compensates from shortage of myopic financial measures only. With the strategic map managers can focus on critical factors of performance which may not be only financial. However, the static measures have a drawback and to overcome this the dynamic score card is useful. The system dynamics perspective is used to develop the dynamic balanced score card.

Size of Healthcare sector and Prospects in India:

Niti Aayog has in its 2022 put up the healthcare strategy in which priority is to public healthcare system revamp and implement preventive healthcare (Gopal, 2019). The healthcare market is expected to reach USD 372 Billion by 2022 (IBEF, 2020). Government has taken initiatives of AYUSH,PPP model and National health policy to address the healthcare industry needs.

Balanced Scorecard & Corporate Social Responsibility:

CSR has come a long way from philanthropy to a very vital business and corporate strategy which is now used as a synergy in almost all the business round the globe.

Corporate social responsibility (hereinafter called CSR) is a strategy in international businesses that aims to contribute to social needs, goals and objectives of a philanthropic, activist, or charitable nature by engaging in or supporting volunteering or ethically-oriented practices. CSR has come a long way from philanthropy to a very vital business and corporate strategy which is now used as a synergy in almost all the business round the globe. It is now not only a business strategy around the world but also a mandatory requirement for certain class of industries particularly in a developing country like India, where only the Government cannot contribute in all development and social development activities. What is required is a partnership of the public and private sector in the hitherto unattended or vital sector/areas of the economy and the society.

In India, and in most of the countries it has been observed that the CSR activities has been mostly concentrated in few areas only. Healthcare and health sector has been one of the most sectors which has received a major chunk of the CSR expenditure in the last six to seven years. In India, CSR expenditure includes education, healthcare, environment and rural development. After India got liberalized, the healthcare sector (services and facilities) has accelerated over last 20 years. Several drawbacks inflict the health sector like lack of funding cost, asymmetry in infrastructure, lack of human resources, absenteeism amongst doctors, deficiency in hiring contractual staff, lack of training, low outreach, underdeveloped and crowded hospitals, low purchasing power by the client, lack of holistic approach and reactive than preventive functions. (Shashi Lata Yadav, 2019) In this context of institutional reforms, corporate level CSR function is being given more importance by the Government O to generate better outcomes and mitigate suffering. The TATA group is the pioneer in this area and has been providing assistance to NGOs in education, health care and employment sectors. The Birla Group has developed an exemplary case in education, health care and family welfare. The Infosys Science Foundation is supporting cultural, rural development and health related programmes. Mahindra & Mahindra supports education of over 75,000 underprivileged girls via its Nanhi Kali programme. In view of governmental limitations in many areas, the corporate sector should contribute more towards public health particularly in a country like India where majority of people still are not covered under medical insurance and lack of basic healthcare facilities down the line.

With **CSR** an organization can measure the 3 dimensions of economic impact, environmental performance and social impact. The measurement of **CSR's** three dimensions is commonly called the triple bottom line (TBL) (Scaletta). However the measurement of CSR impact is still a matter of research and great concern amongst the researchers and the corporates who are involved in CSR activities. **Balanced Scorecard** improves strategic alignment. In the past, management and cost accounting principles were exclusively relied upon for performance measurement systems, and with an emphasis on tangible resource management and short-term results. Financial metrics could do this easily, but failed to long-term value creation from intangible resources was lacking. In the field of corporate social responsibility ("CSR") initiatives BSC has been extremely useful, given that the BSC framework explicitly incorporates and balances shareholder, customer and employee perspectives. Researchers and commentators have advised that combining the BSC with CSR can and should begin with financial measures and expand to include CSR-driven market forces (e.g., "green" consumers and energy crunch), thus broadening the performance measurements to include the non-financial parameters like targets taken from the Global Reporting Initiative's Sustainability Guidelines. Improved quality results from insisting on supplier performance related to environmental and social commitments and also attract new customers that base their buying decisions on trust in the responsible business practices of vendors.

TBL indicators are more efficiently reported by BSC since the scorecard illustrates the cause-and-effect relationship between being an honest corporate citizen and being a successful business. The authors recommend that, organizations should introduce a BSC that includes and integrates key economic process driving CSR. The authors also suggest that using the BSC framework, CSR initiatives can overcome resistance among various stakeholders in business. For example, the balanced scorecard couples cost-competitiveness and competitive advantage, highlighting importance of investing in new technology. BSC can also provide better ecological protection and better risk management procedures that lowers the organization cost of capital. A differentiation-based strategy can also be pursued through community building activities following the BSC metrics.

Relevance of System Dynamics:

(Nidumoli, 2013) illustrates a qualitative research on 30 Global 500 companies that use sustainability to drive business innovation published in Harvard Business Review 2009 showing that sustainable companies outperform other companies in long run. In another research by Harvard Business school 90 companies which volunteered environmentally and socially sustainable practices was compared with 90 companies which do not follow such practices. The research revealed that sustainable companies ran their businesses differently and outperformed in market value. For eg. a Rs. 1 Cr. investment in 1993 for a portfolio of sustainable companies would have increased to Rs. 22.6 Cr. by end of 2010, while that in those without sustainability focus would yield Rs. 15.4 Cr. A stooping 47% in market share!

With a system dynamics approach we can join the aspects of healthcare, sustainability and the balance score card measures together. (Linard, 2020) researches with building a simulator which helps managers understand the interrelation between profitability and people competence , internal structure and relation building measures with customers. Many of these measures are coinciding with the BSC measures. It factors the soft values in value creation. It explains about the 10 knowledge strategy issues. With a system dynamics approach it tracks the stock of individual competence, Value adding capacity and most wanted clients. Then it models the 10 knowledge strategies with the system dynamics approach. The system dynamics flight simulator is thus useful for the managing partners to assess likely pay-offs of the soft values and strategies. (Hirsch, 2006) shows how system dynamics is suited to handle complexity for public health issues. Hirsch notes that system dynamics modelling can capture multiple interacting diseases and risks, the interaction of diseased populations and delivery systems, and national and state policy matters. The research shows that the complete view of population health dynamics can be extended to guide national and state level health policies, addressing underinsurance in population, excessive health care cost, and the under availability of healthcare workers.

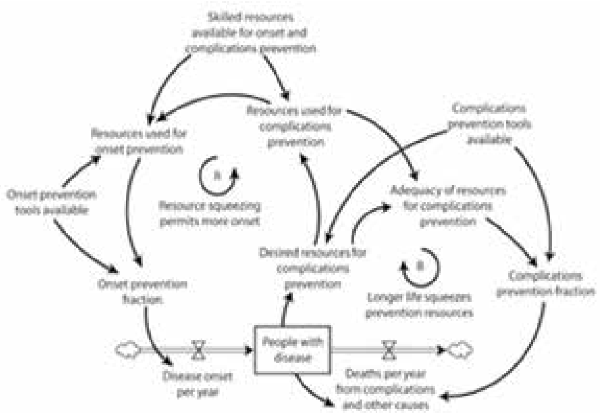

Figure 3 Hirsch 2006: A simple model of chronic disease prevention.

Methodology:

We first build the causal loop diagrams for each perspective of balance score card. For eg for financial perspective as shown below:

Figure 4: Source : https://www.researchgate.net/publication/303121822_A_hybrid_balanced_scorecard_and_system_dynamics_for_measuring_public_sector_performance

Similarly develop for each perspective and link them.

The final model is thus developed as depicted below:

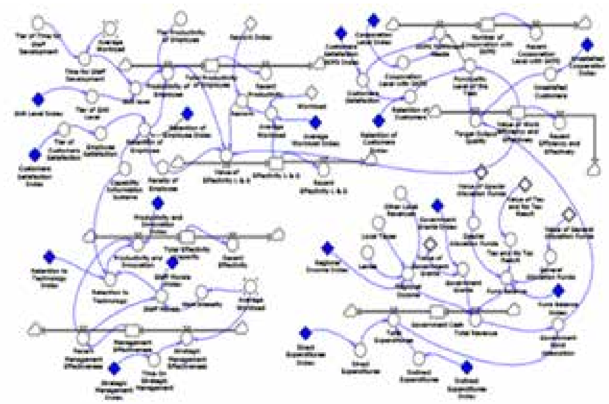

Figure 5: https://www.researchgate.net/publication/303121822_A_hybrid_balanced_scorecard_and_system_dynamics_for_measuring_public_sector_performance

Conclusion:

The article provides a perspective to implement a dynamic balance score card to measure strategic performance in healthcare industry. Corporate social responsibility can be utilized to leverage the strategic planning and the system dynamics model can factor in CSR into the model. CSR is closely associated with sustainability and the dynamic scorecard is ideally suited to capture the soft values of the sustainability factors. The article cites why such factors are critical for the long run for organizations. The healthcare sector is more dependent on soft values and these factors become more prominent for healthcare sector. The article shows how CSR can be measured with the ideally suited BSC technique and how the system dynamics model can build a model for dynamic balanced score card. MA

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Corporate social responsibility can be utilized to leverage the strategic planning and the system dynamics model can factor in CSR into the model. CSR is closely associated with sustainability and the dynamic scorecard is ideally suited to capture the soft values of the sustainability factors.

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BALANCED SCORECARD IN HOSPITAL SECTOR

Abstract

Unlike other service industries, hospitals are unique in terms of demands, objectives and costing. This uniqueness of the hospital industry makes the balanced scorecard the perfect choice for performance measurement to maintain effective evaluation and also for future sustainability.

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The Covid pandemic has put immense pressure on the managements to look into the cost benefit analysis of all businesses and hospital sector is no exception. Unlike the manufacturing or other service sectors, hospital sector is unique in its own way.

Real case of business failure in Hospital

A leading business house had a profitably running hospital. They decided to undertake an expansion project and invested borrowed capital to the extent of Rs. 120 Crores but were unable to service the loan and eventually moved to insolvency.

A critical study carried out on behalf of prospective buyer bought out glaring management oversight. Due to privacy issues, the names or other details of the client are not being revealed.

The Major reason for the collapse of business was initially identified only as income not sufficient to pay interest. A detailed study was conducted and results were eye opening.

The major areas contributing to the failure were found to be

- High Salaries
- Payback on Equipments
- Payback on Infrastructure

High Salaries

The hospital offered very high salaries to woo the best doctors. The hospital had not worked out the cost of providing the services and recovery of costs. The hospital was found to be under recovering the costs in the OP departments which made the OP departments run at loss. This could have been avoided if there was proper costing system to budget costs and pricing services competitively.

Payback on Equipments

The hospital was one of the best hospitals in gastroenterology departments and had an indomitable position.

During the expansion program, the hospital made huge investments in Scanning machines and other equipments. On analysis, it was found that the hospital was under using the equipments. The analysis also revealed that the equipments were suitable for a cardiac care specialised hospital but the hospital in subject was specialised in Gastroenterology.

Payback on Infrastructure

The hospital had spent heavily on

The Major reason for the collapse of business was initially identified only as income not sufficient to pay interest. A detailed study was conducted and results were eye opening.

buildings and related infrastructure. It was a centrally air-conditioned luxurious corporate hospital. The marketing efforts to increase share of inward medical tourism and high income patients were seen lacking. This resulted in only getting patients from the erstwhile goodwill and resulting in excess room capacity.

A proper conversion of the mission and vision of the management into plans and results were seen missing. Depending only on financial information to evaluate performance, lead to business failure in this particular case.

Due privacy and legal issues, the details including the names and other financials of the client cannot be disclosed.

Unique characteristics of Hospital Industry

Not for Profit motives

Most hospitals are not run as a profit making unit alone. They subscribe to a low cost health care commitment to public. Some of them are not for profit organisations and there are other corporate hospitals which provide premium services to the higher income segment of population. Many hospitals also cross subsidize services there by providing subsidized services to the needy as well. We must also not forget to consider the government hospitals/ machineries which provide highly subsidized treatments for major portion of the population.

Capital investment

The hospital industry has a wide spectrum as far the size and facilities provided is concerned. Nursing homes to corporate hospitals fill the space of healthcare providers. The investment on equipments is very huge but they are imperative to the business. The utilization and returns from the capital investments is depended on case to case basis and this makes it difficult to forecast a return on capital investments.

Specialisation and Marketing

Hospital is one industry where specialisation is an intangible asset and usually the most marketed aspect. Though marketing plays a major role in creating awareness of new hospitals which have come into operations, it is usually word of mouth that creates the niche space for hospitals. A hospital will usually provide treatment to almost all illnesses but is usually "popular" for certain specialities ranging from cardiac care to maternity to oncology.

Cost Control Measures

Poor costing systems have disastrous consequences. It is a well-known management axiom that what is not measured cannot be managed or improved.

The remedy to the cost crisis does not require medical science breakthroughs or new governmental regulation. It simply requires a new way to accurately measure costs and compare them with outcomes.

Balanced Scorecard (BSC)

Given the complexities and uniqueness of the hospital industry, Balance Score Card fits as a perfect tool for performance measurement.

Why Balanced Scorecard?

A recent study has shown that only 5 percentages of the people who work for an organisation really understand the strategy of the organisation and only 86% of executive management spends only less than one hour monthly on the strategy of organisation.

Traditional evaluation of business performance was based only on the financial performance of a business. The main areas of focus were profit, income, turnover and other business numbers. The drawback of such a performance evaluation was that the numbers might seem good during a particular period but the futuristic outlook for the business seems out of focus. For example, businesses like Kodak, Nokia etc had fantastic numbers during it's hey days but absolutely missed the miss regarding the changes happening around. Financial measures are only a short term measure of performance. Working only on financial measures might lead to an oversight in terms of sustainability of businesses.

Balanced scorecard being a performance evaluation tool which has the strategy of the company built into it, becomes an ideal tool to path our way to forward the strategy of the organisation.

In the context of VUCA world, it is highly imperative to incorporate non financial measures as well into performance evaluation of a business to aid sustainability.

What is Balanced Scorecard?

Introduced in 1992, by Robert Kaplan and David Norton, the balance score card is the most commonly used framework for ensuring that agencies execute their strategies. Today about 70% of the fortune 1000 companies utilize balance score to help manage performance.

Balanced scorecard as is a performance evaluation tool which looks at business performance from not just financial numbers or operational numbers but as a combination which focuses on the areas of "critical" importance to the top management.

Balanced scorecards are used as roadmap for creating the "strategic management system" to drive overall organisation performance of the entire business.

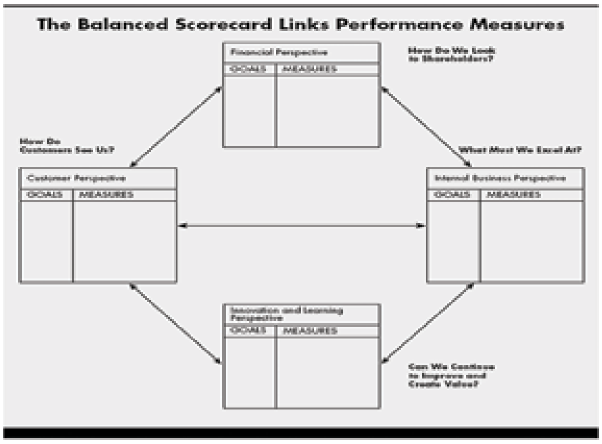
The balanced scorecard allows managers to look at the business from four important perspectives. (See the exhibit "The Balanced Scorecard Links Performance Measures.") It provides answers to four basic questions:

I. How do customers see us? (customer perspective)

II. What must we excel at? (internal perspective)

III. Can we continue to improve and create value? (innovation and learning perspective)

IV. How do we look to shareholders? (financial perspective)



The Balanced Scorecard Links Performance Measures

Critical Success Factors (CSF) and Key Performance Indicators (KPI)

Critical success Factor (CSF)

Critical success factor is the objective of the business in relation to each of the four perspectives of a balanced scorecard. This is also known as the goal. The first critical part of using a BSC is to determine what the objective of the business is. This is then further broken down to smaller units also known perspectives. This basically means how the business classifies its objectives in relation to its customers (customer perspective), in introspection (Internal perspective), from the ownership angle (financial perspective) and in terms of future (Innovation and learning perspective).

The various perspectives synergise to achieve the organisational goal.

Key performance Indicators (Measures)

After a business has set its objectives, it needs to constantly know how the business is performing in the direction of achieving its objectives.

The businesses delegate the tasks to various levels such that the summary of the tasks performed results in achieving organisational objective. The measures to decide the level of achievement of tasks is called Key performance indicators.

The balanced scorecard works by setting goals (CSF) and constantly evaluating the performance of the task (KPIs).

Balance Score Cards for a Hospital

We will look at each of four aspects of the score card separately to understand how and where and what kind of information should be used for an idealistic scorecard.

Customer Perspective

Goals

Goals	Measures
To be an affordable healthcare provider	Billing per procedure Billing per admission
To be a luxury hospital	Feedback score on facilities. Geographical spread of patients opting for services (presence in terms of medical tourism).
Easy admission and discharge	Time per admission Time per discharge
Lesser waiting period for procedures	Turn around time
Deliver quality	Quality control audit scores
Patient centred Care	Feedback from patients and market research.

Internal Perspectives

Goals	Measures
Achieve efficient operations	Control measure on working capital components
Respond to Changing needs	Change management time Training capabilities
Active involvement of stake holders	HR scores on personal performance evaluation
Teaching facilities at Hospital	Cost of courses. Coverage of cost per student.

Innovation and Learning Perspective

Goals	Measures
Cost control	New procedures or protocols of treatment. Payback on usage of new improved technologies.
Best Place to work	HR review scores External audit scores.
Return on Capital employed	Recovery of hospital equipment costs Utilization of Ancillary services cost
Become a One site Facility	Referrals due to non availability of services. Augmentation services provided.

Financial Perspective

Goals	Measures
Achieve a balance financial position.	Balance Sheet
Profitability	Profitability per Procedure. Departmental wise profitability like profit from pharmacy, testing and lab services.
Cost	Cost per procedure Cost per Patient Cost per department
Return on Capital employed	Recovery of hospital equipment costs. Utilization of Ancillary services cost. Recovery of Cost per procedure Recovery of Costs per Patient.

A careful analysis of the various goals (CSF) and measures (KPIs) it is very clear that cost accounting, cost analysis plays a very vital role in the performance evaluation of the organization. All the perspectives have cost of services element in them. The implementation of a well defined balance score card translates into a perpetual performance evaluation to monitor cost effective operations with a focus on sustainability.

Critical areas of a Balance Scorecard

The above example is only a brief illustration of how a Balance Score Card for a hospital can be prepared. The business should involve all the department heads to prepare a meaningful objectives list for an organisation. This list should then be broken down to further smaller goals with responsibilities attached to achieving each goal. The measurement of the performance of each person should be then evaluated to see how it is contributing to the final objective of the business.

The balanced scorecard works by setting goals (CSF) and constantly evaluating the performance of the task (KPIs).

Care must taken to involve all the stakeholders at the discussions to set the objectives and hear them out openly as they are their involvement is crucial to the success of organisational objective.

Summary

A balanced scorecard is a tool to describe the goals of an organisation, the method of achieving it, the measures to evaluate performance and the role of each person in the organisation to help achieve the organisational objective.

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The implementation of a well defined balanced scorecard translates into a perpetual performance evaluation to monitor cost effective operations with a focus on sustainability.

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VALUE ADDITION IN HEALTHCARE INDUSTRY – ROLE OF CMAs

Abstract

Healthcare sector is rapidly growing from a small clinic to super speciality hospitals. Pricing is vital, as it cannot be too high, nor can be too low to cover the cost. Cost structure to be fully understood and cost sheets and prices need review and revision every year. Value addition by the CMAs, in Internal audit, Hospital Management System implementation, Setting up of internal controls, Project appraisal, Project Financing, Government subsidy planning, Government free patients' schemes, all require high level of cost and management accounting and pricing techniques, where the CMAs can properly advise the management to keep the costs and pricing in balance, which in turn will contribute to the society at large.

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Introduction:

"Limited costing mechanism for hospitals in the corporate sector needs to be expanded and there is a need to make costing principles mandatory for healthcare entities in the non-corporate sector also, institute's President Balwinder Singh told PTI" in April 2020 in connection with the Covid-19 scenario. This article takes the cue from this and explores the areas for value addition by CMAs.

Healthcare industry is one of the growing industries in India and has matured in the past twenty years. From a single doctor managed small consulting clinics, we have moved to multi-speciality, corporate styled, board managed hospitals. Hospitals envy the Five-star hotels in facilities and at the same time we have Government run hospitals in rural areas, which lack even the basic facilities to treat the patients. Recent Covid-19 has raised many questions on the price structure of the tests and the treatment offered to the patients. Health Insurance industry has been often questioning the price and cost of the procedures in the hospitals for reimbursement. This article outlines the areas which Cost and Management accountants can add value to this growing sector.

Limited costing mechanism for hospitals in the corporate sector needs to be expanded and there is a need to make costing principles mandatory for healthcare entities in the non-corporate sector also.

Growth in Healthcare sector:

Government of India (GOI) targets three percent (3%) of the Gross Domestic Product (GDP) by year 2022. Healthcare market is expected to reach US$ 372 Billion by year 2022. Number of doctors has increased to 12.60 Lakhs and the number of medical colleges has increased to more than 560 across India. Indian GDP spend is considerably lower than the other countries like, USA (14%), Japan (9.5%), Italy (6.5%), UK (7.5%) and Germany (9.5%).

Indian Healthcare sector has been boosted by Central and State Government sponsored Insurance schemes, which partially relieves the poor and middle-class population across India. Lifestyle changes and increase in health awareness are the other major factors for the increased medical spend by the people. This scenario pictures a high demand for structured hospitals and specialized procedures, which in turn needs a lot of ancillary services and specialized services of CMAs.

Areas for CMAs in Healthcare sector:

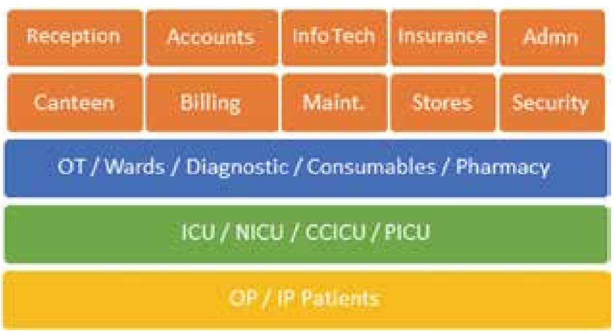
CMAs can play a variety of roles in adding value by their contribution in areas like.,

1. Price determination for the healthcare services
2. Internal Audit of hospitals
3. Implementation of Hospital Management Systems
4. Preparation of Internal control manuals and Internal audit manuals
5. Preparation of Project appraisal and reports
6. GOI policy making, Health Insurance price certifications, Price fixation in government and state sponsored insurance schemes

Understanding the structure of Hospitals:

Hospitals have variety of services to offer and each service is billed to the consumer. Hospitals usually have the following departments like.,

a. Front desk – Reception
b. Outpatient / Inpatient services
c. Operation theatres (OT) (General and speciality based)
d. Wards (Regular, ICU, NICU and highly Critical ICUs)
e. Diagnostic services (X-ray, CT scan, MRI, Laboratory, Speciality services)



f. Medical consumable stores
g. Pharmacy
h. Centralised Cleaning and Sterilization Department (CSSD)
i. Medical Records Department (MRD)
j. Finance / Accounts / Billing / IT
k. Administration / Engineering / Maintenance
l. Insurance liaison offices

These departments may be either a

1. Cost centre or a Revenue centre: For e.g., Pharmacy can be a Revenue centre by itself, whereas the wards/ stores/Finance etc can be a Cost centre. Each one of them charges to the patient and the final consolidated bill is given to the patient.
2. Outsourced: Canteen, Laundry, Specialized diagnostic services may be outsourced.

Understanding the nature of costs/ revenue streams:

1. Costs: These can be classified into department wise – Direct and Indirect costs. For e.g., Diagnostic centres may incur the following costs like.,
   a. Capital cost for the diagnostic apparatus / machine, Interest costs for the machine.
   b. Consumable costs like, cost of lab reagents, cost of x-ray films, cost of operation theatre consumables etc. These can be direct consumables and indirect consumables. For e.g., cleaning materials, gloves, etc can be classified as indirect consumables.
   c. Electricity / Air-conditioning/ Heating – this can be separately identified, if it is exclusively provided to few departments, or it can be provided on centralized basis, where the cost needs to be allocated to the departments.
   d. Labour cost of the employees working in the department, like salaries of the Doctors, technicians, support staff etc
   e. Overhead cost of the department, this may include, water, general upkeep, telephone, allocated general costs like Finance / IT / Front desk / Directors office etc
2. Revenue: Revenue streams are again through different sources like.,
   a. OP billing (will include OP consulting charges, OP small procedures like dressing a wound, minor operations, OP services like nebulizing, dialysis, etc)
   b. IP billing (this includes, Doctors consultations, Room rents, Ward service charges, Operation charges, Diagnostic services, Food, Medicines supplied during admission, Consumables during admission etc.)
   c. Diagnostic services / Pharmacy – the billing from these sections is usually included in the OP / IP billing in all the hospitals. There may be some hospitals, where the services are provided to other hospitals, so the billing may be done directly on the other hospitals.
   d. Health check-up schemes – these are identified as separate income stream. However, the costs incurred are same as discussed above.

Price determination: Billing price has to be determined for all the services. In all these services the following models may be used;

1. Cost Plus profit margin: Cost of each departments/ services will be calculated. Cost drivers such as cost/ x-ray, cost/lab test, cost/ward rent per day, cost/per procedure has to be calculated and suitable margin has

to be added to fix the price. Here the cost model will be

- All Direct Costs + All Indirect costs + Overhead allocations + Profit margin

2. Price in comparable hospitals: For many small services, the hospital may charge comparable price of a nearby hospital in the neighbourhood. To stay in the competition and not to lose patients to competing hospitals, they have to charge similar prices. Only in case of special surgical procedures, or if the hospital has got some special highly qualified and efficient doctors, they can charge more based on the speciality of the doctor.
3. Price at subsidized rates for Government schemes: In Government hospitals and in Government schemes, price will be fixed at subsidized rates. Since Government takes the burden of deficit, the prices will be fixed below cost or even free treatment may be provided.
4. Package price for insurance companies: Insurance companies reimburse patients for the hospital bills. But not all the amounts are reimbursed and a rate chart is fixed for most of the services. Any excess billed than the rate charged will have to be borne by the patients. In these cases, the hospital will have a pre-approved rate in arrangement with the insurance companies.
5. Free treatments: Outrightly free treatment in Government hospitals.

Internal Audit/Cost Audit: Internal audit and Cost audit are avenues where the contribution can add lot of value. In organizations covered by Cost audit, price structure should be reviewed and advising the management will be highly useful.

1. Price fixed by the hospital can be verified and checked for any underbilling areas. Costs should be verified and absorption rates should be checked. All the prices need annual review and re-pricing.
2. Cost sheets to be prepared for all the departments, all the services which need annual revision. Auditors can check the data for correctness.
3. Advising management on leasing or owning the diagnostic services apparatuses and machines. Most of the medical systems are fast obsolete and leasing may be better option in these cases. Capital costs and interest costs have to be absorbed without any omission.
4. Payment to in-house doctors and visiting consultants need closer scrutiny.
5. Revenue leakage can happen in any form. Billing to patients can be omitted by mistake or by purpose, under billing by ignoring few services, patients not recorded in the Hospital Management System (HMS) etc.
6. Insurance claims and receipt against the claims needs lot of reconciliation in every hospital. If the claims are not as per the template and rates, the rejections will happen. These rejected claims/ partially paid claims, unless recovered from the patients, will be a loss to the hospital.
7. Verification of high value inventory, consumables at regular intervals. For e.g., for heart bypass procedures, ballooning and stent fixing procedures the stents and consumables used are of high value. These may be supplied to the hospital on bill-on-use model. Items will be supplied on consignment basis and will be billed to the hospital once the items are billed to the patients.
8. Hospital sponsored wellness programs, outreach health camps, medical health check-ups need close verification for costs and benefits arising from the programs.
9. Verification of all efficiency, capacity utilization and other parameters on regular intervals.

Implementation of HMS: Large corporate hospitals use HMS to maximise the efficiency. HMS work on ERP style, where the patient information is registered on the first visit. The patient ID is tracked everywhere and billing happens through software.

1. HMS master tables updation controls to be verified concurrently. All master updation should be done with double approval process.
2. High controls to be set up for payables. Consumables, reagents, x-ray films, pharmacy medicines all should be verified for excess billing and continuous physical verification should be done regularly.
3. Price list of the procedures should be under high system control and should be approved at the highest level.
4. All the departments should be linked to HMS. Issue of consumables, medicines, any other service should be done under the patient ID only. Manual billing should be avoided.
5. Pharmacy billing should be at approved rates and approved at highest level.
6. Pharmacy should be integrated with the IP and OP billing.
7. Daily review of pending bills from patients, insurance companies need verification.

Efficiency/Effectiveness parameters review: Monthly review on the major parameters need to be set up and should be highlighted to the management either on "System Dashboard" or through monthly reports.

1. Bed occupancy ratio
2. Revenue / OP patient, Revenue / IP patient (disease wise, operation procedure wise, department wise)
3. Revenue / ward room (normal room, special room, deluxe room, suits)
4. Revenue / diagnostic services (service wise)
5. Pharmacy Revenue / IP or OP patient

6. Pharmacy revenue lost – this happens when the medicines are bought from the other pharmacies nearby and not from the hospital pharmacy. This may be due to long waiting in the hospital pharmacies, higher price than the nearby pharmacies, lack of follow up, collusion of pharmacy staff with outsiders.
7. Revenue / Doctors

Project appraisal and reviews: Project reports preparation for new projects can be undertaken by the CMAs. Understanding the costing structure is important in price fixation and viability of the hospital is mainly based on number of patients and the price. Feasibility studies should be undertaken in the neighbourhood to determine the market for new patients. Unlike commercial ventures the price cannot be fixed arbitrarily or as the market can absorb. So, the project report should be prepared with all expertise in pricing structure.

Government healthcare policies and schemes: CMAs should be a part of the healthcare policies promoted by the GOI. Even though the government can absorb all the losses in the subsidized prices charged to poor and rural public, it should be properly estimated. The estimate should be prepared by the experts in price fixation and costing. Unless someone understand the costing structure in hospitals, the proper costing cannot be done. Even the government hospitals should be treated like a private hospital and costing and pricing should be done. The subsidy provided by the government or in case of free patients the full cost has to be absorbed by the government. This will help the government in framing their policies and in budgeting exercise.

Conclusion: CMAs are armed with intricate knowledge on cost and pricing techniques. Successful organizations should balance on the price and cost structure and cannot offered to lose. Overcharging will kill the consumers and effectively business will be lost, at the same time under pricing will kill the organization as the costs cannot be recovered and will lead to loss. If not properly balanced in both the situations organizations finally lose. CMAs can add value to the organization and thereby adding value to the stakeholders, which in turn will lead to the betterment of the society. MA

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AN OVERVIEW OF HEALTHCARE SPENDING AND PRACTICE IN INDIA

Abstract

Healthcare is a service sector which touches billion of lives. Demand and supply of quality healthcare is a major concern for any country. Healthcare policy, practice and expenditure leads to holistic development of a society. This secondary data-based review paper makes a discussion on the pattern of government spending in Indian healthcare sector, availability of healthcare and medical expenditure status in rural and urban India and health coverage (health insurance) practice in India. It concludes that government spending in Indian healthcare sector is increasing although it is not enough, there is disparity regarding health infrastructure in between rural and urban India and people are considering health insurance in their priority list due to increasing cost of medical care. Policies are to be taken to ensure quality and equity in healthcare sector.

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Introduction

Healthcare is such a sector which touches each and every human being in a society. 'Health is wealth', this age-old phrase is equally important to general public, providers of healthcare services and policy makers. Access to the healthcare services (at least primary) is a basic right to the common people and the state has a responsibility to provide affordable and quality healthcare. Now to provide this service the state has to keep provision in annual budget which is expected to increase year by year. More than 93 crore people (around 12% of the world's population) spend at least 10% of their household budgets to pay for health care (WHO). Due to increase in cost of medical care, people take insurance policy i.e., health insurance to protect himself along with his family from the cost of medical treatment due to medical issues. Covid-19 pandemic accelerates and prioritizes the health related matters which eventually makes the health insurance in priority list and converts health expenditure into investment.

Healthcare is a service sector. It has six components. They are: hospitals, clinical establishment, pharmaceuticals, diagnostics, medical equipment management and medical insurance. Indian healthcare sector comprises both of public sector and private sector and provides different systems of treatment like allopathy, homoeopathy, naturopathy, ayurvedic etc. Indian healthcare sector is an opportunity particularly for the profit oriented private players due to increase in purchasing power of a section of population and lack of adequate infrastructure of publicly funded government hospitals. The healthcare should not be measured on the basis of volume of services delivered. Here the true status of health is important. Now government is trying to make the services better and introduces various 'schemes' to cover more people for providing health related benefits. India wants to achieve sustainable development goals by 2030 (WHO). India framed three national health policies, the National Health Policy, 2017 is the latest one. Equity, affordability, universality, quality of care, integrity, ethics, patient centred are the major key principles adopted in the National Health Policy, 2017 in order to achieve universal health coverage[1], reinforce trust in public healthcare system and synchronise the growth of private healthcare sector with public health goals (National Health Policy, 2017).

More than 93 crore people (around 12% of the world's population) spend at least 10% of their household budgets to pay for health care (WHO).

Objective, Methods and Data Sources

This review paper has the objective to get an insight of healthcare spending and practice in India. To achieve this, the paper has analysed and discussed the pattern of government spending in Indian healthcare sector, availability of healthcare and medical expenditure status in rural and urban India and health coverage (health insurance) practice in India. The paper is based on secondary data published by Government of India, private institutions and international organisations.

Pattern of Government Spending in Indian Healthcare Sector

There are three main categories of public expenditure on health: medical and public health, family welfare and others like medical reimbursement/ medical treatment expenditure. The total per capita government spending on healthcare in the financial year 2015 was Rs. 1,008 per person which has been increased to Rs.1944 in the financial year 2020. The total expenditure by the centre and states for the financial year 2020 was Rs. 2.6 lakh crore, or 1.29% of GDP. Since 2015, the total public expenditure on health has risen at 15% CAGR in India (livemint).

India is behind the developed countries and BRICS countries regarding domestic general government health expenditure (% of GDP) and total health expenditure (% of GDP). Following two tables demonstrate it. Selected developed countries have been considered.

[1]*According to National Health Policy, 2017 Universal Health Coverage means, "Assuring availability of free, comprehensive primary health care services, for all aspects of reproductive, maternal, child and adolescent health and for the most prevalent communicable, non-communicable and occupational diseases in the population. Achieving a significant reduction in out-of-pocket expenditure due to health care costs and achieving reduction in proportion of households experiencing catastrophic health expenditures and consequent impoverishment".*

Table 1: Domestic general government health expenditure (% of GDP) (2018)

	Developed countries				BRICS				
India	USA	Germany	France	Japan	Brazil	Russia	China	South Africa	World
0.96	8.51	8.88	8.26	9.21	3.96	3.16	3.02	4.46	5.87

Source: World Bank

Table 2: Health expenditure (% of GDP) (2018)

	Developed countries				BRICS				
India	USA	Germany	France	Japan	Brazil	Russia	China	South Africa	World
3.54	16.89	11.43	11.26	10.95	9.51	5.32	5.35	8.25	9.85

Source: World Bank

Government has the target to achieve 2.5% (of GDP) health expenditure, to reduce in proportion of households facing 'catastrophic health expenditure' from the current levels by 25% and to enhance utilization of public health facilities by 50% from current levels by 2025. (National Health Policy, 2017).

Rural -Urban Scenario

To understand healthcare scenario in India, a rural-urban grouping is necessary. The trend is, rural India is more dependent on government/public hospitals and urban India has inclination to choose private hospitals but in case of critical illness rural people has to come in city to take healthcare services (now this choice can be government/ public hospitals or private hospitals, there are many reasons behind this choice, like availability of healthcare services, purchasing power of patient/ his or her family, complexity of medical issues etc.) Total number of government hospitals and beds in rural and urban India are as below:

Table 3: Number of government hospitals and beds in India (provisional)

	Number of hospitals	Number of beds	Average
Rural	21403	265275	12.39
Urban	4375	448711	102.56
Total	25778	713986	27.70

Government hospital includes central government, state government and local government bodies.

Source: Adapted from National Health Profile, 2019

Number of beds available per hospital is much higher in urban India.

In India, about 7% of rural population and 9% of urban population reported as ailing during a 15-day reference period and proportion of persons (%) that responded as ailing was highest for the age group of 60 (NSS 75th Round). Following tables show the position of rural and urban India in respect of a few healthcare related parameters.

Table 4: In-patient hospitalization (excluding childbirth) for availing treatment

	Government/ Public hospitals	Private hospitals#	Others*
Rural	46%	52%	2.4%
Urban	35%	61%	3.3%

excluding charitable, NGO-run hospital, * Charitable/ Trust/NGO-run hospitals

Source: NSSO 75th Round

Table 5: Healthcare service provider for treatment

	Government hospitals	Private hospitals	Private doctors/ Clinics	Others*
Rural	33%	21%	41%	5.2%
Urban	26%	27%	44%	2.2%

* Charitable/Trust/NGO-run hospitals

Source: NSSO 75th Round

Table 4 and 5 state that rural India is more dependent on government/public hospitals and urban India is less dependent on government/public hospitals.

Table 6: Receipt of free medical services

	Medicine	Xray/ECG	Other diagnostic tests
Rural	13.8%	12.6%	18.1%
Urban	14.4%	12.9%	17.2%

Source: NSSO 75th Round

Regarding receipt of free medical services, the trend is more or less same in rural and urban India (Table 6).

Table 7: Average amount spent per hospitalisation case (excluding childbirth)

	Average cost	Government/ Public hospitals	Private hospitals
Rural	Rs. 16676	Rs. 4290	Rs. 27347
Urban	Rs. 26475	Rs. 4837	Rs. 38822

Source: NSSO 75th Round

Table 8: Average amount spent per childbirth

	Government hospitals	Private hospitals
Rural	Rs. 2404	Rs. 20788
Urban	Rs. 3106	Rs. 29105

Source: NSSO 75th Round

Table 9: Average out-of-pocket medical expenditure per hospitalisation case (excluding childbirth)

	Average out-of-pocket cost	Government/ Public hospitals	Private hospitals
Rural	Rs. 15937	Rs. 4072	Rs. 26157
Urban	Rs. 22031	Rs. 4408	Rs. 32047

Source: NSSO 75th Round

Table 10: Average out-of-pocket medical expenditure per hospital childbirth

	Average out-of-pocket cost	Government/ Public hospitals	Private hospitals
Rural	Rs. 5357	Rs. 1305	Rs. 18501
Urban	Rs. 13292	Rs. 1874	Rs. 25096

Source: NSSO 75th Round

Table 7, 8, 9 and 10 state that spending on medical care cost is higher in urban area than rural India.

Table 11: Major source of finance for expenditure

	Household income/Savings	Borrowings
Rural	80%	13%
Urban	84%	9%

Source: NSSO 75th Round

The practice of finance for medical expenditure is interesting (Table 11). Both urban and rural people use their household income/savings to bear the maximum portion of medical expenditure but urban individuals are less dependent on borrowings than rural individuals.

Health Coverage Practice in India

According to NSSO 75th Round, about 14% of the rural population and 19% of the urban population had health expenditure coverage. Among them, about 13% of rural and 9% of urban population were covered by Government sponsored health insurance.

Both central and states in India provide healthcare support through government sponsored health insurance schemes. Central government has different health coverage schemes such as Ayushman Bharat or Pradhan Mantri Jan Arogya Yojana. It is the flagship health scheme of Government of India. The budget allocation for the scheme in fiscal year 2019-20 was Rs. 6,400 Crore, Central Government Health Scheme (CGHS), Employees' State Insurance Scheme (ESIS), Rashtriya Swasthya Bima Yojona (RSBY). A few examples of state-run health coverage schemes are Swasthya Sathi in West Bengal, Rajiv Arogyasri Scheme in Andhra Pradesh and Telangana and Yeshaswini and Vajpayee Arogyasri schemes in Karnataka.

As government hospitals are overcrowded and suffers from the lack of proper attention and care, people prefer (rather people are compelled to prefer) private hospitals. But the cost of care in private hospitals is much higher than government/ public hospitals. So, people take health insurance coverage to meet the unforeseen medical expenditures. Due to lack of infrastructure in government hospitals and increase cost of care (specially in private hospitals/clinic), private insurance companies are increasing their business. Another reason is the low amount of coverage of government health insurance policy. It is a matter of mind set also. Health insurance segment in India is growing significantly. The volume of private insurance business has increased due to the increasing preference for health insurance. Again, the private health insurance coverage service (reflected through 'premium per person') is becoming costlier. Following table shows it.

Table 12: Gross premium and Premium per person

Financial year	Gross premium (Rs. in Crore)	Premium per person (Rs.)
2015	20096	698
2016	24448	681
2017	30392	695
2018	37029	768
2019	45532	951

Source: Economic Times

Due to the Covid-19 pandemic, people realise the significance of protective investments for health and life security. Even pandemic pushes sales of 1 crore health covers. The age group of 30-40 years has the highest share in the high-sum insured policies, which is, 52% of total customers. Mumbai buys most health covers in FY21 (Economic Times).

In the context of Covid-19, the government should extend its healthcare coverage systematically particularly for the poor and economically vulnerable individuals. Covid-19 has unequal effect on different strata of the society and those in the lowest power strata of the societies are the most affected (Shadmi et al., 2020). They cannot afford quality healthcare. Government sponsored health scheme is one of the remedies for health inequality. Overall government has to ensure an adequately resourced healthcare management system in post Covid-19 era.

Conclusion and Way Forward

Government spending in Indian healthcare sector is increasing although it is not enough.

There is disparity regarding health infrastructure in between rural and urban India. People are considering health insurance in their priority list due to increasing cost of medical care. People have a negative mind set regarding government healthcare services (and reasons are there also). Quality and equity are the most two important elements across the healthcare system. Overcoming the financial hardship to obtain quality health services is really a challenge. On the other hand, no government can provide 'free coverage' for all possible health issues regardless of the cost in long term basis.

Development of healthcare sector across the country (supply side) as well as access the quality health services by people (demand side) without suffering much financial hardship leads to a holistic development of the country. Strategic partnership between government and private players, use of mobile medical units, universal health coverage approach, they all advocate enhanced outreach of public healthcare. Overall, the restoration of trust on government healthcare services will be vital in post Covid-19 era. MA

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CSR PRACTICES OF SELECT PHARMA COMPANIES IN INDIA IN THE LIGHT OF COMPANIES ACT 2013: A STUDY

Abstract

Introduction of CSR provisions through section 135 in the Companies Act, 2013 is one of the important phases of CSR movement in India. Presently, all pharmaceutical companies in India practice CSR as a statutory compliance and manage their businesses so as to produce an overall positive impact. So, this is our duty to search for the nature of CSR compliance by pharma companies in accordance with the new Act. The study highlights the increasingly important role that modern CSR regulation is playing in large pharma companies in India. It is clear from the study that how specific CSR initiatives in line with Schedule-VII of the Companies Act, 2013 have engaged with country health, education and rural infrastructure, and the impacts they have made. It is expected that the policy makers will get valuable insights from the study for better regulation of the CSR activities. However, until and unless the companies willfully assume the responsibility for better transparency, the law alone cannot do everything.

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1. Introduction:

The concept of CSR has existed in ancient India and has not borrowed from foreign countries. The origin of CSR can be traced with historic pieces of evidence from our Upanishads, Puranas and Vedic literature like Ramayana, Mahabharata and Bhagavad Gita. This rich ancient knowledge and tradition is the foundation of modern corporate level CSR practices. A recent study found that before the enforcement of Companies Act, 2013, number of companies spending voluntarily and the quantum of voluntary spending on CSR was remarkable for large companies. (Ray and Chakravorty, 2018). In spite of that, one of the important phases of CSR movement in India is introduction of CSR provisions through section 135 in the Companies Act, 2013. Presently, all pharmaceutical companies in India practice CSR as a statutory compliance and manage their businesses so as to produce an overall positive impact. So far as pharma sector is concerned, India is not only a prominent and rapidly growing presence in global pharmaceuticals but also the third largest pharmaceuticals industry in the world by volume. So, this is our duty to search for the nature of CSR compliance by pharma companies in accordance with the new Act. The present paper will focus on these issues in detail.

2. Objectives of the Study:

- To look into the nature of compliance relating to CSR spending as per the Companies Act 2013
- To know the CSR project focus areas, as mentioned in Schedule-VII of the new Act, in which pharma companies contribute.
- To find out whether the CSR activity conducted directly by the company or through the implementing agency.
- To understand the impact of COVID-19 on CSR practices of pharmaceuticals
- To give suggestions and draw conclusion.

3. Research Methodology:

In the present study secondary data have been used. As the provisions under section 135 came into force on 1st April 2014, we have selected the time period of 6 years after the enforcement of the new Act. We have picked out top 10 BSE large cap pharma companies by market capitalisation on 30th June, 2020 as sample companies. Secondary data have been collected in respect of these 10 pharma companies during the 6 years' time frame from 2014-15 to 2019-20. First of all, CSR spending data is collected from annual reports of these 10 pharma companies and these data have been thoroughly analyzed. Then CSR spending of each company is allocated to CSR focus areas under Schedule VII and the total contribution of 10 companies in these areas during these 6 years is shown by using column chart. Then company-wise CSR investment in core areas is plotted in bar diagrams. Lastly, whether the CSR activities have been conducted by the company directly or jointly or through implementing agency is depicted by using pie chart.

4. Review of Literature:

There is an extensive body of literature which has dealt with the issue of Corporate Social Responsibility. A brief review of literature is given below:

Droppert, H., and Bennett, S. (2015) – "Across the world, all firms offered differential pricing schemes for their products, whereby the same product is sold at different prices according to a country's economic viability. Product donations are central to pharmaceutical companies CSR; all but one company indicated provision of drugs at no cost to patients as part of their efforts. m-Health (mobile health) initiatives were also popular among the firms". **FICCI Corporate Social Responsibility Survey (2016)** showed that out of the key focus areas as listed in Schedule VII of the Companies Act, 2013, about 21% of the participating companies indicated that their efforts aligned towards promoting education, special education and vocational skills. This was followed by eradicating hunger, poverty & malnutrition, promoting health care, sanitation and safe drinking water (20%); ensuring environmental sustainability (13%) and rural development projects (12%) as the other primary areas for the companies. The respondents also pointed out that they undertake project implementation through their company foundations (40%) or directly (36%) or NGOs (24%); and the focus is clearly on community representation in implementation of project. According to **Dutta, S. and Karande, V. (2017)** – "Most of the pharma companies in India have spent almost 30-70% of their budget towards CSR. Under Strategic CSR, Education, Healthcare, Livelihood Enhancement, Community Development and Public Health are the leading Sectors and constituted 94% of total strategic CSR expenditure – 34% for Healthcare, 28% for Education, 14% for Livelihood Enhancement, 11% for Community Development and 7% for Public Health". According to **Ray, R. and Chakravorty, D. K. (2018)** – "Many positive outcomes of CSR have been noticed by stakeholders and the CSR spend is also growing. But, there are instances of setting aside huge unspent amount and giving insufficient reasons for not spending the prescribed sum".

The origin of CSR can be traced with historic pieces of evidence from our Upanishads, Puranas and Vedic literature like Ramayana, Mahabharata and Bhagavad Gita. This rich ancient knowledge and tradition is the foundation of modern corporate level CSR practices.

5. Relevant Provisions of the Companies Act, 2013:

After the enforcement of the Companies Act 2013, the Board to show only the reasons for not spending the prescribed CSR amount but now, as per the amended 2nd proviso to sub-section *(5)* of section 135 of the Companies (Amendment) Act, 2019, it has also to transfer the unspent amount of finished projects to a fund specified in Schedule VII within 6 months after the end of the financial year. If the unspent amount relates to any incomplete project, then it will be transferred by the company within 30 days after the end of the financial year to "Unspent Corporate Social Responsibility Account" opened by the company in a scheduled bank exclusively for this purpose and such amount shall be disbursed by the company in terms of its CSR Policy within three coming financial years from the date of such transfer. Otherwise, the company will have to transfer the unspent amount to a Fund specified in Schedule VII (e.g. Prime Minister's National Relief Fund) within thirty days from the end of third financial year. If a company contravenes the above provisions more stringent penalty is prescribed. Though the amended 2nd proviso to sub-section *(5)* of section 135 is very much relevant in the present situation to restrict unspent CSR spend, but they are yet to be notified.

Further, the Contribution to PM CARES Fund set up to combat COVID-19 shall qualify as CSR expenditure under the head contribution to Prime Minister's National Relief Fund Schedule VII. Any contribution to CM Relief Fund or State Relief Fund for Covid-19 will not qualify as admissible CSR expenditure. However, contribution to State Disaster Management Authority to combat COVID-19 will qualify as CSR expenditure under the head Disaster Management activities of Schedule VII. Spending CSR funds for Covid-19 related activities will qualify as CSR expenditure under Promotion of Healthcare including

Any contribution to CM Relief Fund or State Relief Fund for Covid-19 will not qualify as admissible CSR expenditure. However, contribution to State Disaster Management Authority to combat COVID-19 will qualify as CSR expenditure under the head Disaster Management activities of Schedule VII.

Preventive Healthcare and Sanitation and, also under Disaster Management of Schedule VII. It is also notified that items in Schedule VII may be interpreted liberally for the purpose of COVID-19. Ex-gratia payment made to temporary staff for the purpose of fighting COVID-19 over and above the disbursement of wages will be treated as one-time exemption and will qualify as CSR expenditure.

6. Analysis and Findings:

(1) Nature of Prescribed CSR Spending, Actual CSR Spending and Unspent Amount:

The following table shows CSR Spending under three sub-heads viz. prescribed, spent and unspent for 10 pharma companies from 2014-15 to 2019-20.

CSR Spending (Rs. in Crore)

Sl. No.	Name of Company	CSR Spending	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
1	Sun Pharmaceutical Industries Ltd.	Prescribed	NIL	NIL	NIL	NIL	NIL	2.699
		Spent (Vol)	4.667	11.654	2.409	2.697	3.936	4.371
		Unspent	NIL	NIL	NIL	NIL	NIL	NIL
2	Dr. Reddys Laboratories	Prescribed	36.616	41.889	40.556	32.792	23.637	24.494
		Spent	29.166	41.203	42.666	32.812	26.163	27.531
		Unspent	7.449	0.692	NIL	NIL	NIL	NIL
3	Divis Laboratories Ltd.	Prescribed	17.714	20.395	24.511	27.190	28.240	29.674
		Spent	4.974	7.930	16.258	16.980	28.370	50.679
		Unspent	12.740	12.465	8.253	10.210	NIL	NIL
4	Cipla Ltd.	Prescribed	34.860	35.800	33.380	31.050	32.140	36.240
		Spent	13.430	20.480	28.250	32.200	33.420	36.310
		Unspent	21.430	15.320	5.130	NIL	NIL	NIL
5	Biocon Ltd.	Prescribed	7.100	8.100	9.000	8.800	8.400	7.900
		Spent	7.130	8.133	9.004	8.821	8.430	7.910
		Unspent	NIL	NIL	NIL	NIL	NIL	NIL
6	Torrent Pharmaceuticals Ltd.	Prescribed	13.690	16.410	27.420	27.680	26.350	16.850
		Spent	15.010	16.910	27.550	27.700	26.450	18.070
		Unspent	NIL	NIL	NIL	NIL	NIL	NIL
7	Lupin Ltd.	Prescribed	39.630	54.150	66.250	75.050	65.670	55.510
		Spent	12.580	20.510	19.680	21.680	37.950	34.200
		Unspent	27.050	33.640	46.570	53.370	27.720	21.310
8	Abbott India Ltd.	Prescribed	4.521	5.604	6.849	7.872	9.436	11.360
		Spent	4.632	6.453	7.140	9.122	11.285	11.640
		Unspent	NIL	NIL	NIL	NIL	NIL	NIL
9	Cadila Healthcare Ltd.	Prescribed	10.809	16.455	29.171	26.244	27.190	21.497
		Spent	10.815	16.459	29.172	26.244	27.209	22.008
		Unspent	NIL	NIL	NIL	NIL	NIL	NIL
10	Alkem Laboratories Ltd.	Prescribed	9.500	9.090	10.640	13.660	17.230	18.550
		Spent	1.200	3.010	6.180	10.630	11.580	14.440
		Unspent	8.300	6.080	4.460	3.030	5.650	4.110
	Total							

Table: 1

It is found from Table: 1 that CSR spending for all the sample companies has increased over 2014-15 level and there is a continuous increase in CSR spending of Divis Lab, Cipla, Abbott and Alkem. Sun Pharma is the only company which has instances of voluntary CSR spending though it has incurred continuous losses from 2014-15 to 2018-19. But in 2019-20, it has made profit and spent sufficiently more than the prescribed sum. In every year, four companies – Biocon, Torrent, Abbott and Cadila has spent the entire prescribed amount of CSR. Three companies – Dr. Reddys, Divis Lab and Cipla has failed to spent the entire prescribed amount of CSR upto 2015-16, 2017-18 and 2016-17 respectively. After that these three companies have spent the entire prescribed amount of CSR. Dr. Reddys reported that they could not spent the entire amount because they focused on creating additional infrastructure to expand CSR programmes and on enriching the monitoring and impact measuring systems to ensure proper utilization of CSR funds. In 2014-15, Divis Lab started identifying appropriate CSR projects in the local areas around its manufacturing sites by coordinating with the local elected representatives, village communities, NGOs and Government agencies, which took considerable time, but they were confident of meeting the statutory requirement. From 2015-16 to 2017-18, they showed the reason that they identified several long term projects which were under implementation and would take time for completion. Finally, they completed the projects in 2018-19. Cipla Ltd. has committed to increase expenditure for CSR initiatives in the coming years through structured programmes and projects that are on-going and have a life cycle of three to five years. The other two companies – Lupin and Alkem have huge unspent amount of CSR during the entire period from 2014-15 to 2019-20. In every year, Lupin Ltd acknowledged that they could not spend the prescribed amount of CSR and promised that they were looking for new areas, activities or opportunities in deeper sustainable projects to accelerate the spend. At the beginning, Alkem Ltd. stated that they could not spend the entire prescribed sum on account of considerable time spent for development of internal framework, conceptualization, development and identification of regulatory compliant and sustainable projects, inability to locate the desired number of projects within the focused areas. In 2016-17, they were capable of enhancing the spend substantially mainly on short term projects and promised to implement long term projects to enhance CSR spend in the coming years. Till 2019-20, the company promised same thing but could not find and implement long term projects to increase its CSR spend. So, Lupin and Alkem committed to undertake long term projects but unable to implement them. The reasons shown above for unspent CSR amount by almost all the companies including Lupin and Alkem are not sufficient. In case of Lupin and Alkem, it is interesting to say that they have huge unspent amount in 2018-19 and 2019-20 but have no ongoing project. So, as per the amended 2nd proviso to sub-section *(5)* of section 135 they bound to transfer the unspent amount to a fund specified in Schedule VII viz. Prime Ministers National Relief Fund or PM-CARES Fund or whatever it is, within 30th September, 2019 for 2018-19. However, this amended proviso have not been notified yet. Finally, it is found that Alkem Ltd. donated Rs. 7 Crore to PM-CARES Fund by 31st March, 2020. Then a portion of PM CARES *plus* expenditure on distribution of protective kits and masks, plus ex-gratia to temporary workers amount to Rs. 5.43 Crore is adjusted against Disaster Management CSR activity. But Lupin Ltd. fails to comply it. It is not the right time to assess whether Lupin and Alkem complied this amended proviso for unspent amount in 2019-20.

(2) CSR project focus areas in which pharma companies contribute:

The CSR Policy Statements formulated by pharma companies in India generally driving towards enhancing quality of life and economic well-being of neighboring communities around the manufacturing sites. The CSR projects are focused towards downtrodden, unprivileged and lower strata of society in accordance with Schedule VII of the Companies Act, 2013. They organize their social outreach programmes in health, education including special education, livelihood enhancement, sanitation, environmental concern and rural development to facilitate a holistic approach based on sustainable development.

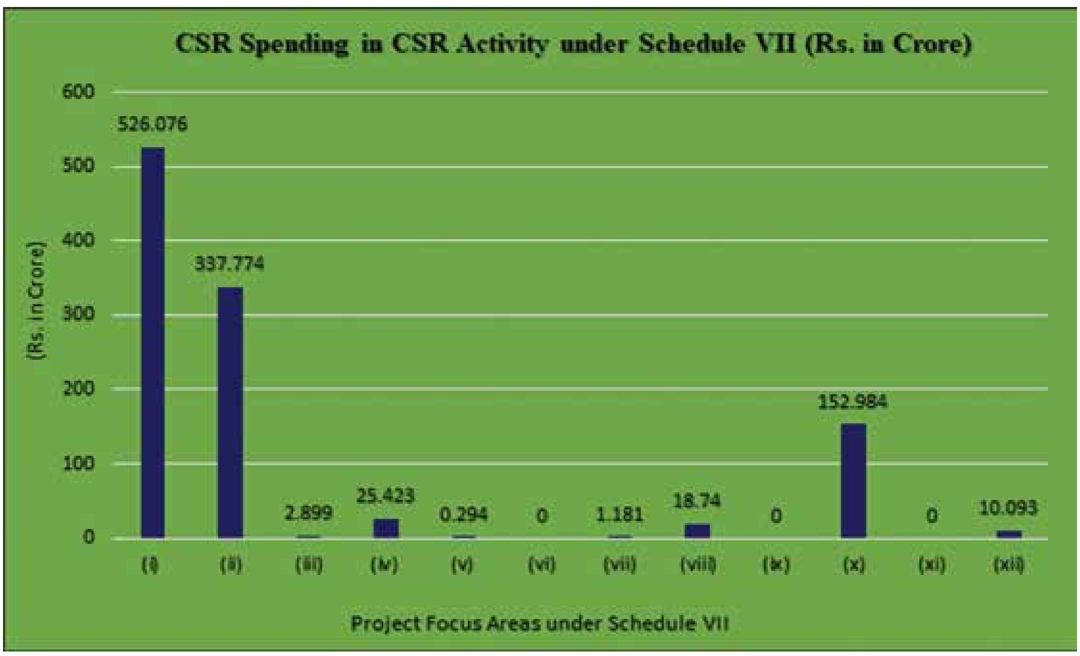

Figure: 1

Figure:1 depicts the head-wise contribution of sample companies in CSR projects as mentioned in Schedule-VII. Each and every sample companies contributed their CSR funds in *Healthcare including preventive healthcare, and sanitation including Swachh Bharat Koshh and safe drinking water projects* [Item No. (i) of Schedule VII]. The total contribution under this head amounts to Rs. 526.076 Crore, being the largest. Utilization of CSR fund in *Promoting education, skill development and livelihood enhancement projects* [Item No. (ii)] is Rs. 337.774 Crore, being second largest. Application of CSR funds by sample companies in *Rural development projects* [Item No. (x)] is Rs. 152.984 Crore, being third largest. This is followed by CSR funds utilized in *Ensuring Environmental Sustainability* [Item No. (iv)] – Rs. 25.423 Crore; *Contribution to Prime Minister's National Relief Fund* [Item No. (viii)] – Rs. 18.74 Crores; Investment in *Disaster Management Projects* [Item No. (xii)] – Rs. 10.093 Crores; Investment in *Empowering Women* [Item No. (iii)] – Rs. 2.899 Crores; Investment in *Promotion of Rural Sports* [Item No. (vii)] – Rs. 1.181 Crores and finally, Investment in *Protection of National Heritage, Art and Culture* [Item No. (v)] – Rs. 0.294 Crores. No company invested in *Measures for the benefit of armed forces veterans, war widows and their dependents* [Item No. (vi)], *Contribution to Incubators Funded by Central Government or State Government* [Item No. (ix)] and *Slum Area Development* [Item No. (xi)].

If we look at company-wise contribution in healthcare (Figure: 2), then Cadila contributed Rs. 125.446 Crore, being the highest in healthcare, followed by Cipla, Torrent, Abbott, Divis Lab, Sun Pharma, Alkem, Dr. Reddys, Biocon and Lupin.

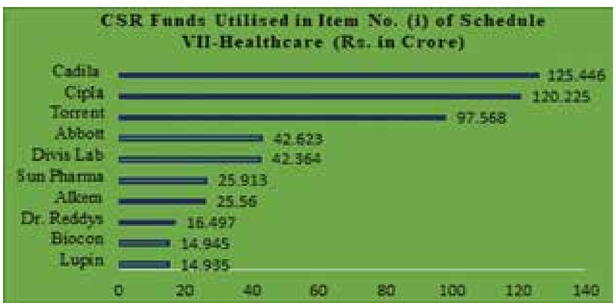

Figure: 2

Company-wise contribution in promoting education (Figure: 3) shows that contribution of Dr. Reddy is Rs. 180.663 Crore, which is maximum in promoting Education. This is followed by Divis Lab, Cipla, Biocon, Torrent, Alkem, Lupin, Cadila, Abbott and Sun Pharma.

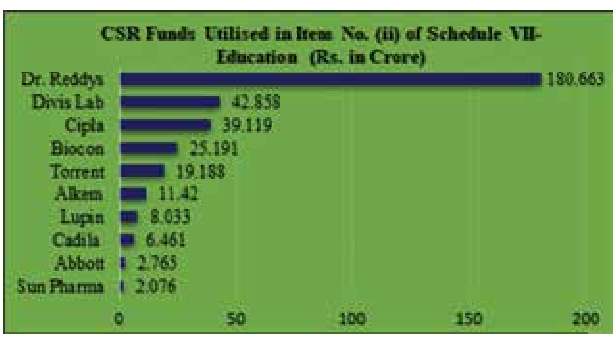

Figure: 3

Company-wise contribution in rural development projects shows that Lupin contributed 104.892 Crore, which is the highest in Rural Development, followed by Divis Lab, Biocon, Abbott, Alkem, Dr. Reddys, and Sun Pharma. Cadila, Torrent and Cipla contributed nothing under this head. Torrent is the highest contributor in Environmental Sustainability (Rs. 14.934 Crores). Lupin is the only company who contributed Rs. 18.740 Crores in Prime Ministers National Relief Fund.

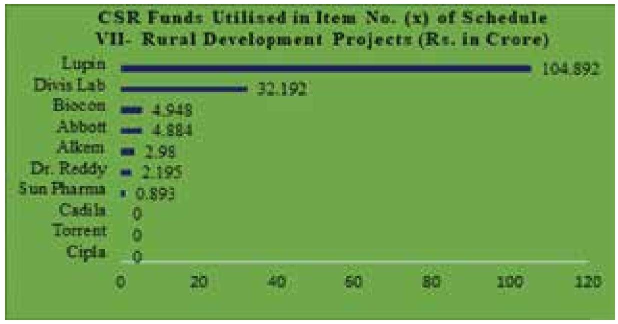

Figure: 4

(3) CSR Project Implementation:

Even after seven years of the new Act, CSR eligible companies cite various reasons for not spending their prescribed CSR amount, such as delay in project identification, delay in implementation plans and lack of prior expertise. Therefore, implementation agencies are an effective mode for the execution of CSR projects since they possess presence in the target areas, local connect, knowledge and experience in executing social projects in an effective manner. Rule 4 of the Corporate Social Responsibility Policy Rules 2014 empowers the companies to have the choice of carrying out CSR activities either directly or through an implementing agency. Implementing agency is a company established under section 8 of the Act or a registered trust or a registered society, established by the company alone or along with any other company, or established by the Central or State Government, or any other entity established by an Act of Parliament or State Legislature. The company may choose any other implementing agency other than as mentioned here, but in that case these agencies' must have an established track record of three years in undertaking similar projects. A company may also collaborate with other companies in this regard if the CSR Committee of these companies is capable of reporting separately on such projects in accordance with these rules. Figure 5 shows the percentage of CSR outlay carried out directly, jointly or through implementing agency. From the figure it is clear that 22% of the expenditure carried out directly by the company, 5% of the outlay is carried out jointly by the company with other company/implementing agency and finally 73% through implementing agency only.

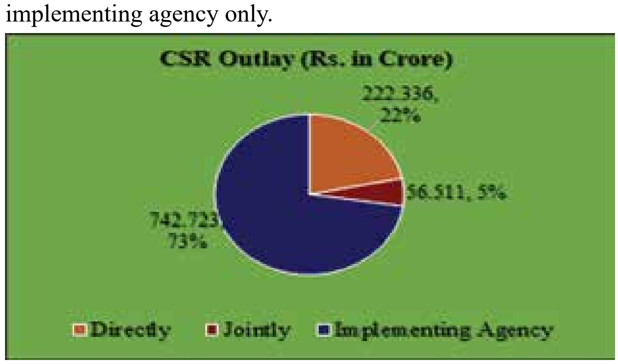

Figure: 5

(4) Impact of COVID-19 on CSR practices of pharmaceuticals

The COVID-19 pandemic has intensified into a global disaster, driving the nation to enforce lockdown of all economic activity for the last couple of months. In spite of this, all the sample pharmaceutical companies remain committed to the health and safety of its employees and their families, as well as, business continuity to safeguard the interests of their patients, customers, owners and other stakeholders. Though it is not the right time to assess the impact of the pandemic but it is found that out of ten sample companies Alkem has given support for eradicating COVID-19 till 31st March, 2020 by donating Rs. 7 Crores in PM CARES Fund.

7. Conclusion and Suggestions:

The study highlights the increasingly important role that modern CSR regulation is playing in large pharma companies in India. Detailed study of annual reports has revealed the gap between law and its implementation. It is clear from the study that how specific CSR initiatives in line with Schedule-VII of the Companies Act, 2013 have engaged with country health, education and rural infrastructure, and the impacts they have made. The study shows that CSR spending for all the sample companies has increased over 2014-15 level and there is a continuous increase in CSR spending in four companies. In the learning phase of 3-4 years, the unspent CSR amount was significant for few companies but after that it becomes gradually negligible except for two companies. It is also noticed from the study that investment in CSR projects mainly concentrate in healthcare, followed by education and rural development. Cadila, Cipla and Torrent rendered remarkable service in healthcare. On the other hand, Dr. Reddys in promoting education and Lupin in rural development made substantial impact. In implementing CSR projects, most of the sample companies conduct CSR activity through implementing agency. Alkem Ltd., the only company, donated in PM-CARES to fight against the pandemic as a measure of compliance. It is suggested that pharma companies should undertake long term projects in addition to short term projects for implementation of CSR activity. Companies should disclose in the CSR report properly. More and more companies should come out and donate in PM CARES fund. It is expected that the policy makers will get valuable insights from the study for better regulation of the CSR activities. However, until and unless the companies willfully assume the responsibility for better transparency, the law alone cannot do everything. MA

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DOES COVID-19 PANDEMIC ACCELERATE THE GROWTH OF HEALTH INSURANCE SEGMENT? A STUDY IN RESPECT OF INDIAN HEALTH INSURANCE

Abstract

Covid-19 pandemic has impacted production as well as service sectors of the world. The wave of the pandemic has also impacted the Indian insurance sector. Health insurance, as a protective investment, is gaining importance as a consequence of the pandemic. In this paper, an attempt has been taken to study whether the pandemic has accelerated the growth of health insurance sector or not? For that purpose, segment-wise market share and growth rate have been computed. This study concluded that pandemic has accelerated the growth rate of health insurance sector in case of private insurance sector.

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1. Introduction

From the beginning of 2020 world is facing challenges from Covid-19 pandemic. Initially, it was originated in Wuhan but gradually it spreads throughout the world. On March 11, 2020, World Health organisation has declared it as global pandemic. Two types of shocks are mainly arising from the pandemic-economic shock as well as health shock. Government has forced to declare lockdown to control the diseases. Lockdown has impacted heavily production sectors such as automobile, metal, FMCG sectors etc. In case of service sector, travel and tourism, banking sectors also affected by the pandemic. Among service sector, insurance plays an important role in Indian economy. It acts as protective investment. In India, a large section of population of India remains uninsured and insurance industry has been developing rapidly as compared to overall market in the world. In recent time, health insurance is gaining importance due to Covid-19. Health insurance provide quality healthcare to customers and it also supports in health care financing. Due to Covid-19, the mind shape of the customer changed. Since the insurance is related with the life or security of the customer, many policyholders are interested to take a policy which acts as a protective investment. It transforms health insurance products from push type product to pull type products. This has created new avenues in the insurance sector which attracts new players in the market. It has accelerated the growth of the health care industry. With this in the backdrop, the main objective of the paper is to study the growth of Indian health insurance sector during pre and post covid-19 situation.

2. Literature review

Within a short span of time, different studies have been conducted for assessing the impacts of the pandemic. **Ashraf (2020) examined the** responses of stock market in different stages of outbreak. In their study, **Alam et. al (2020, Liu at. al (2020), Mirza et. al (2020)** have used event study methodology and tested the significance of the abnormal returns surround the event day**. Chaudhary et. al (2020)** assessed the impacts of the pandemic on aviation, tourism, capital market, oil prices and MSMEs and they also pointed out some opportunities for India that has occurred due to pandemic. **Kumar et. al (2020)** analyses the present position of Covd-19 outbreak in India along with some preventive measures to overcome the diseases.

The findings of **Lee, Jais and Chan (2020)** revealed that higher number of positive cases along with oil prices and volatility index adversely affected the stock market of that countries. **Pareek and Singh (2020)** analysed initial signalling effect of pandemic on the Indian stock market. They **found** that rapid spread over of COVID-19 has impacting the stock market negatively. **Thomas, Sankararaman and Suresh** (2020) studied the impact of COVID-19 on returns on nifty stocks using paired t test and ANOVA.

Since the insurance is related with the life or security of the customer, many policyholders are interested to take a policy which acts as a protective investment. It transforms health insurance products from push type product to pull type products.

In this context, the present study focuses on impacts of pandemic on health insurance sector of India that has not been taken into consideration in previous studies.

3. Objectives of the study

In this paper an attempt has been taken to study the impacts of the pandemic on the health insurance sector. Through this study it is analysed that whether the pandemic has accelerated the growth of the health insurance sector or not?

4. Methodology

For the purpose of the study, secondary data have been collected from the website of Insurance Regulatory and Development Authority (www.irdai.gov.in). For evaluating the growth of the insurance sector, insurance premium data have been collected for the period of 2010-2019. In order to study the growth of health insurance sector, segment wise market share and compounded annual growth rate (CAGR) have been computed.

5. Analysis and findings of the study

Table 1 represents segment –wise break up in respect of general insurance for the period. In 2000, reforms of insurance industry took place. Before 2000, public sector was playing a major role in the insurance sector. After that, many private sector insurance companies have entered in to the market. In 2010-11, the share of fire insurance, marine insurance and motor car insurance were 11%, 6% and 43% respectively. The shares of these insurance sector have been reduced to 8%, 2% and 37 % respectively. On the other hand, a significant growth of other general insurance sector has been noticed. But share of health insurance sector remain unchanged (26%) during pre-pandemic period.

If we consider the growth rates of different sector, total insurance premium has increased from 2010-11 to 2018-19 at 18.03%. But in case of fire and motor car insurance, compounded annual growth rate are 14.89% and 16.01% respectively which are lower than the growth rate of general insurance industry (18.03%). In case of health insurance and other segments also, growth rates are higher than industry average.

Table 1: Segment-wise breakup of total insurance for the period 2010-11 to 2019-20

Year	Fire (Rs.)	% of share	Marine (Rs.)	% of share	Motor Car (Rs.)	% of share	Health (Rs.)	% of share	Other (Rs.)	% of share	Total (Rs.)
2010-11	4555	0.11	2519	0.06	18173	0.43	11031	0.26	6298	0.15	42576
2011-12	5430	0.1	2875	0.05	24239	0.46	13070	0.25	7262	0.14	52876
2012-13	6659	0.11	3029	0.05	29630	0.47	15453	0.25	8202	0.13	62973
2013-14	7392	0.1	3154	0.04	33824	0.44	17495	0.23	15689	0.2	77554
2014-15	8053	0.1	3020	0.04	37379	0.44	20096	0.24	16136	0.19	84684
2015-16	8731	0.09	2984	0.03	42331	0.44	24448	0.25	17885	0.19	96379
2016-17	9538	0.07	2917	0.02	50251	0.39	30392	0.24	35030	0.27	128128
2017-18	10781	0.07	2895	0.02	59246	0.39	37029	0.25	40711	0.27	150662
2018-19	11668	0.07	3238	0.02	64522	0.38	44873	0.26	45147	0.27	169448
2019-20	15883	0.08	3519	0.02	69208	0.37	51636	0.27	49055	0.26	189301
Growth tae (%)	**14.89**		**3.78**		**16.01**		**18.71**		**25.62**		**18.03**

Source: Compiled by the researcher

In table 2, share of public health insurance, private health insurance and private stand alone health insurance out of total health insurance have depicted. From the table 2, it has been revealed that share of public health insurance premium out of total health insurance premium has been decreased from 61% to 48%. On the other hand share of private sector has been increased from 39% to 52% during this period. The compounded annual growth rate of private sector is more than the compounded annual growth rate of the industry and it has also been noticed that growth rate of public sector is less than the industry average

Table 2: Break up of total health insurance for the period 2010-11 to 2019-20

Year	Public Health insurance (Rs.)	% of share	Private health insurance (Rs.)	% of share	Private Stand alone Health (Rs.)	% of share	Total Private health Insurance (Rs.)	% of share	Total health insurance (Rs.)
2010-11	6689	0.61	2850	0.26	1491	0.13	4341	0.39	11031
2011-12	8015	0.61	3446	0.26	1608	0.13	5054	0.39	13070
2012-13	9580	0.62	4205	0.27	1668	0.11	5873	0.38	15453
2013-14	10841	0.62	4482	0.26	2172	0.12	6654	0.38	17495
2014-15	12882	0.64	4386	0.22	2828	0.14	7214	0.36	20096
2015-16	15591	0.64	4911	0.2	3946	0.16	8857	0.36	24448
2016-17	19227	0.63	5632	0.19	5532	0.18	11164	0.37	30392
2017-18	21509	0.58	7689	0.21	7831	0.21	15520	0.42	37029
2018-19	23536	0.52	10655	0.24	10681	0.24	21336	0.48	44873
2019-20	24625	0.48	13167	0.25	13844	0.27	27011	0.52	51636
Growth rate (%)	**15.58**						**22.25**		**18.70**

Source: Compiled by the researcher

Table 3 shows the segment –wise insurance premium collected for the period April - October, 2020. From the table, it has been reflected that total insurance premium collected for the period April,2020 to October,2020 amounted to Rs 112763. Similarly Rs 112450 was collected during the corresponding period of the previous year. Hence, growth rate of 1.18% has been noticed on overall insurance premium. From the segment-wise data, it has been revealed that growth rate of motor car insurance and marine insurance have shown downward trend. On the other hand, positive growth rates have been noticed in case of fire and health insurance and these have been increased to 33.09% and 14.54% respectively. Market share of health insurance segment has also been increased from 25% to 29%. Therefore, it may be concluded that the pandemic has accelerated the share and growth rate of this segment.

Table 3: Total health insurance premium collected for previous as well as current years

Type of Insurance	Previous Year April, 2019 to Oct, 2019 (Rs.)	% of share	Current Year April, 2020 to Oct, 2020 (Rs.)	% of share	Growth rate (%)
Fire	9,880	0.09	13149	0.12	33.09
Marine	2,157	0.02	1910	0.02	-11.45
Motor car	39355	0.35	35280	0.31	-10.35
Health	28704	0.26	32877	0.29	14.54
Others	31354	0.28	29547	0.26	-5.76
	111450		112763		1.18

Source: Compiled by the researcher

Conclusions:

From the study, it has been revealed that health insurance sector accounts for a major portion of total insurance sector and share of this sector remains unaltered during the pre-pandemic period also. The findings of the study also showed that the share of public sector of this segment has been decreased. On the other hand, upward movement is noticed in case of private health insurance. The covid-19 pandemic has also accelerated the growth of health insurance. In post Covid-19 situation, growth rate of health insurance is remarkable. Hence there is an ample scope of growing health insurance sector in India during new normal situation. At the same there are so many challenges for health insurance companies. In new normal situation, health insurance companies are facing challenges due to higher claim costs. There is uncertainty regarding the treatment expenses for the Covid-19 situation. It is very difficult for the insurance companies to predict the healthcare expenses and consequently the claims. Another important challenge faced by the companies is the pricing of health insurance products. Lastly, the industry is moving towards digitisation. Hence, there is urge to develop digital distribution strategies and users centric digital platform is also needed in issuing policies or filling claims. MA

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DESIGNING OF SUSTAINABILITY BALANCED SCORECARD IN HEALTH CARE SECTOR – CONTEXTUAL REFERENCE TO THE EMERGENCE OF PANDEMIC

Abstract

Balanced Scorecard aims to categorise quantifiable objectives of an organisation generally into four perspectives: financial (economic), customer, internal business processes and learning and growth perspectives respectively. The paper aims to develop a Balanced and Sustainable performance measurement tool for healthcare organisations in emerging market economies who are facing numerous and uncontrollable challenges owing to the Covid-19 pandemic. The sustainability dimension in BSC integrates environmental and social perspectives. Proposed Sustainability Balanced Scorecard has been designed. The designed SBSC identifies probable-feasible-attainable-objective measurement techniques.

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1. Introduction

Balanced Scorecard is a performance measurement tool that can be applied to obtain quantifiable and valued data with regard to the degree of achievement of the strategic plans and objectives. BSC helps to categorise quantifiable objectives of an organisation generally into four perspectives: financial, customer, internal business processes and learning perspectives respectively. The concept was first introduced in 1990 by Kaplan and Norton and has wide applications across all industries (Alvarez et.al, 2018; Catuogno et al., 2017). The perspectives are not mutually exclusive. Owing to the credibility of the concept for evaluating the strategic plan it's application in the health care industry cannot be undermined. The paper aims to develop a Balanced and Sustainable performance measurement tool for healthcare organisations in emerging market economies who are facing numerous and uncontrollable challenges owing to the prevailing Covid-19 pandemic. The cost of healthcare services has been severe in numerous countries. Even for countries that have avoided the pandemic outbreaks domestically, exports have weakened due to the fall in demand globally. In this junction, emerging economies are striving hard to stimulate their economies. Many emerging economies particularly India, Brazil, Peru have been bearing the severe brunt of the terrible COVID-19 outbreak. Despite implementation of public policy measures to restrict the spread of COVID-19, the measures have resulted in significant operational disruption for many industries inclusive of the Indian healthcare industry. Despite the current crisis being a healthcare issue, the healthcare system of many countries are reeling under the adversarial impact of the pandemic. Significant decline has been witnessed in both in-patient and out-patient footfall across single/multi-speciality, tertiary-care hospitals and even diagnostics businesses owning to continued lockdown and consequential loss in business and income rendering many unemployed and wage less. Moreover, this decline has deterred the ability of health care industry/ set ups to sustain fixed costs and has resulted in loss of liquidity and profitability. Loss in income and rise in healthcare costs owing to the outbreak of the pandemic have made conditions of both the people needing treatment (patients) and their respective service providers (healthcare industry) lamentable. Researchers have actively tried to explore ways in which organizations can utilize Balanced Scorecards to realize their sustainability objectives which has paved the way for a new stream of perspectives – sustainability BSC. Sustainability can be incorporated in BSC in different ways either within the existing four perspectives or as an additional dimension. The sustainability dimension in BSC integrates environmental and social perspectives (Hansen and Schaltegger, 2018; Fatima & Elbanna, 2020)

To ensure revamping, betterment, sustenance and primary stakeholders' satisfaction (patients) in the healthcare industry a multidimensional and sustainable performance measurement system should be conceptualised, designed and implemented.

2.1 BSC performance perspectives

Kaplan and Norton had stated that in spite of presenting four perspectives as the main BSC pattern, organisations may add and customise perspectives based on situations and needs (Alvarez et.al, 2018). Most of the organisations preferred to apply the four traditional BSC perspectives (Aujirapongpan et al. 2019; Behrouzi, et al. 2014; Alvarez et.al, 2018). Assessing the performance of each individual perspective is crucial, although aggregated BSC may be applied to obtain an overall understanding of organizational performance (Aujirapongpan et al. 2020).

Traditional Perspectives:

Customer perspective: The term customer means end users or end consumers or buyers or beneficiary of services. In the context of health care industry customers mean patients or recipients of health care services or medical facilities or consultations. Healthcare institutions have to devote greatest efforts to this perspective since they are the ultimate recipients of the actions of improvement. The customer perspective includes several parameters of performance measurement as shown in Table I and Table II respectively (Kaplan & Norton 1996, 2001; Alvarez et.al, 2018; Catuogno et al., 2017; Trotta et al., 2013; Aujirapongpan et al. 2020).

Financial perspective: The financial perspective is an illustrative concept and includes several parameters of performance measurement as shown in Table I and Table II respectively. This perspective should follow the customers' perspective in the context of Healthcare industry (Kaplan & Norton 1996, 2001; Trotta et al., 2013; Catuogno et al., 2017).

Internal process perspective: The Internal process perspective includes several parameters of performance measurement as shown in Table I and Table II respectively. It aims at producing and delivering the value proposition for customers and improving processes and decreasing costs for the efficiency of financial perspective (Kaplan & Norton 1996, 2001; Trotta et al., 2013; Catuogno et al., 2017). This re-emphasizes on the point that the perspectives are not mutually exclusive.

Learning and growth perspective: The Learning and Growth perspective includes several parameters of performance measurement as shown in Table I and Table II respectively (Kaplan & Norton 1996, 2001; Catuogno et al., 2017; Trotta et al., 2013; Aujirapongpan et al. 2020)

2.2 Indicators and goals of the perspective's objectives:

Monitoring of the objectives of different perspectives can be facilitated through the development/designing of relevant indicators which shall help to study results analytically and objectively. The results of some indicators may assess single or multiple objectives from individual or diverse perspectives.

Table I

BSC perspectives – Objectives - Key performance indicators – brief generalised summary with reference to healthcare industry (Catuogno et al., 2017; Trotta et al., 2013; Aujirapongpan et al. 2020)

BSC Perspectives	Perspective Objectives	Key Performance Indicators
Customers (Patients)	CO_1 - To increase customer (patients) satisfaction and perceived value of healthcare services received by patients CO_2 - To improve the image and brand value of the Healthcare Organisation CO_3 - To improve patient safety and reduce vulnerability CO_4 - To meet the healthcare needs and expectations of the population	CPI_1 - Rate of patient complaints CPI_2 - Percentage of patient satisfaction (in-door and out patients' department separately) CPI_3 – Perceived Value of Patients for services received in a scale of 1-5 CPI_4 - Outpatient waiting time
Financial	FO_1 - Compliance with the strategic budget FO_2 - Generation of sufficient self-financing to meet the Organisational objectives FO_3 - Generation of admissible profit when suffers from lack of grants-in-aid	FPI_1 - Ratio of total revenue to total costs FPI_2 – Percentage of cost of drugs and materials/Total cost FPI_3 - Percentage of Operating cost/Total cost FPI_4 - Percentage of personnel cost /Total cost FPI_5 - Percentage of compliance cost (taxes, legal costs etc.)/Total cost FPI_6 – Percentage of training costs to total costs/Total cost
Internal Process	IPO_1 - To improve the organisational set up IPO_2 - Maximise patients' care through medication and necessary curative/diagnostic measures IPO_3 - Reduction of mortality rate to negligible percentage IPO_4 - To improve the diagnostic and process efficiency IPO_5 - To improve the quality and efficacy of the process and product IPO_6 - Offer specialised treatment and services	IPI_1 - Average length of stay IPI_2 - Bed turnover IPI_3 - Bed occupancy IPI_4 - Hospital infection rate IPI_5 - Mortality rate IPI_6 - Readmission rate
Learning and Growth	LGO_1 - To motivate the clinical physicians, healthcare staff, allied professionals, associated medical practitioners LGO_2 - To increase the training/exposure of functional and strategic personnel LGO_3 - Enhancement of staff competence LGO_4 - Facilitation of two-way internal communication	$LGPI_1$ – Staff satisfaction rate (Medical / Non-medical / paramedical separately) $LGPI_2$ - Staff turnover rate (Medical / Non-medical / paramedical separately) $LGPI_3$ - Number of studies in a given time frame

3. **Study Design** - A qualitative methodology has been applied owing to its efficiency in unravelling complex organisational phenomenon (Catuogno et al., 2017). BSC perspectives and performance indicators design based on the present scenario for revival and sustainable growth of the healthcare industry through incorporation of additional dynamics are taken into consideration. Pertaining to the unprecedented focus on sustainability (Biswas, 2019), Incorporation of sustainability strategies taking a stakeholders' view into consideration facilitated the designing of SBSC perspectives focussing on the key performance indicators during and after a pandemic that can cripple the economy and healthcare sector (Biswas, 2019; Fatima & Elbanna, 2020).

4. Designing of Proposed Sustainability Balanced Scorecard in Healthcare organisations - contextual reference to emergence of pandemic and post pandemic economy

Table II (Part A & Part B)

Part A

Sustainability Balanced scorecard	BSC Perspectives	Perspective Objectives	Key Performance Indicators
Potential incorporation of sustainability into traditional perspectives	Patients' Satisfaction	a) Improve accessibility b) Increase loyalty, attraction, trust c) Increase patients' satisfaction d) Increase employees' satisfaction e) Enhance departmental reputation	i. Departmental services ii. Complaints rate iii. Patients' waiting time iv. Declining mortality rate v. Recovery rate based on age, nature of disease vi. A value gap score between patients' expected and perceived value from services received (Biswas, 2017) vii. Average time taken to recover based on age, nature of disease viii. Recovery rate for communicable diseases ix. Recovery rate of patients with co-morbidity infected by deadly infectious diseases such as Covid-19 virus, other epidemics x. Recovery rate of patients without co-morbidity infected by deadly infectious diseases such as Covid-19 virus, other epidemics xi. Percentage of discounts on total charges of treatment to patients infected by deadly infectious diseases xii. Percentage of discounts on post-recovery follow-up check-up charges to patients infected by deadly infectious diseases xiii. Relationship with patients xiv. Professional commitment and fulfilment
	Core Internal Process (Care perspective)	a) Work climate and employee motivation b) Internal and external communication c) Expertise and skills improvement d) Provide high quality of care e) Achieve high productivity f) Achieve lowest and negligible mortality rate g) Achieve and ensure quick recovery and discharge h) Achieve internal efficiency i) Promote clinical safety j) Promote patient-centric care k) Optimize staff productivity l) Develop multi/super speciality departments to provide value-added services	i. Mortality rate ii. Bed occupancy iii. Departmental services iv. Declining mortality rate v. Case-mix index vi. Complication index vii. Employee satisfaction scores viii. Average rate of recovery based on age, nature of disease ix. Average time taken to recover based on age, nature of disease x. Declining average recovery time xi. Increasing average recovery rate xii. Recovery rate of communicable diseases xiii. Average recovery rate and average recovery time of patients infected by deadly infectious diseases such as Covid-19 virus, other epidemics with co-morbidity xiv. Average recovery rate and average recovery time of patients infected by deadly infectious diseases such as Covid-19 virus, other epidemics without co-morbidity xv. Declining employee turnover xvi. Increasing employee retention xvii. Incentive plan xviii. Percentage of employees involved in development plans

	Learning, Growth and Innovation perspective (Research Process)	a) Increased research and provision for innovative care a) Orientation of scientific research to increase its impact b) Clinical and process innovation c) Active research projects in medical science d) Active research on deadliest infectious diseases and epidemics e) Attract outstanding scientists-professionals-medical practitioners to undertake pertinent research focussing on present and future health care needs f) Collaboration with international research centres g) Sharing of intellectual property rights with other health care research centres for broader application of innovations and inventions in medical science and healthcare h) Promotion of Patenting of research outcomes i) Early Detection j) Vaccine preventable diseases k) Chronic disease prevention l) Control Infectious diseases	i. Number of active trials ii. Number of patients in active trials iii. Research investments iv. Patents per medical staff v. Research publications per medical staff vi. Number of active Research Projects vii. Scientific articles viii. Published Research articles on infectious diseases ix. Innovation/invention of methods of treatment for life-threatening diseases x. Innovation/invention of methods of treatment for infectious diseases xi. Number of vaccines developed xii. Effectiveness of vaccines developed to control the spread of deadly infectious diseases – percentage of patients infected after vaccination xiii. Training hours per employee xiv. Percentage of Investment in technology
	Financial and Economic perspective	a) Financially sustain mission and vision of the organisation b) Respect budget constraints c) Cost containment d) Fund rising e) Increase in patients' base f) Increase in funding of the healthcare institution g) Optimise the cost of treatment h) Optimise operating and other administrative costs i) Capture new avenues j) Achieve financial balance by effective cost-revenue management k) Profit estimation for sustenance	i. Home care investments ii. Supporting investments iii. Number of admissions iv. Overall and average value of Diagnostic related groups v. Percentage of discounts on total charges of treatment to patients infected by deadly infectious diseases vi. Percentage of discounts on post-recovery follow-up check-up charges to patients infected by deadly infectious diseases vii. Ratio of total cost of treatment / Total revenue for transplants and critical care viii. Ratio of total cost of treatment / Total revenue for deadly infectious diseases such as Covid-19 and similar epidemics ix. Ratio of total cost of treatment / Total revenue for patients infected by deadly infectious diseases with co-morbidity x. Ratio of total cost of treatment / Total revenue for patients infected by deadly infectious diseases without co-morbidity xi. Ratio of total cost of treatment / Total revenue for non-infectious diseases-transplant-critical care upto six months before the pandemic xii. Percentage of rise in charges due to pandemic xiii. Market share xiv. Performance growth rate

Table II – Part B

Sustainability related perspective	**Social**	a) Inclusion and Involvement b) Focus on Health and Leisure c) Facilitate healthy and active living d) Improve access to facilities, programs, and services e) Emergency Response and Public Safety	I. Number of Community development practices undertaken II. Number of Wellness programs conducted III. Number of Social and health awareness programs and campaigns conducted IV. Number of wellness programs conducted for elderly and people with special needs
	Environmental	a) Environmental Protection b) Pollution prevention c) Reuse, recycling d) Waste management e) Resource conservation f) Advocacy g) Third party certifications	I. Use of recycled products II. Hospital waste management initiatives undertaken III. Conservation of resources such as energy and water in health care set ups through smart green systems IV. Third party certifications received V. Timely compliance of environmental norms

5. Discussion and Conclusion

Table II (Part A & Part B) highlights the possible ways in which the SBSC can assist to meet existing healthcare challenges. It has been widely reported that if the BSC is applied judiciously by innovative and skilled management teams, it can play a critical role in helping healthcare organisations to fulfil their mission and deliver outstanding health services to their customers and meet their expectations in a rapidly changing world. However, it should be noted that the BSC is not a miracle cure for all deficiencies.

The designed sustainability BSC emphasises on patients infected by deadly infectious diseases as the aftermath of pandemic which aspires to facilitate the revival, sustenance and sustained growth of the healthcare sector. Key performance indicators applied in the study to design the SBSC pinpoints the challenges faced by the healthcare industry in tackling the pandemic. Owing to the diverse, transitional nature and high vulnerability of health care industry to external threats more KPIs are needed to encompass all the strategic objectives even after integration of the overlaying KPI. It may be expected that healthcare sectors in the emerging economies crippled by the prevailing pandemic may be able to revive and gain opportunities and sustain through effective designing of perspective objectives and consequent key performance indicators of performance measurement.

The annual results of the indicators of the SBSC shall help to identify the priority areas of respective perspectives for improved and sustained performance. In terms of practical implications, this design provides industry specific recommendations from a long term perspective. Integration of sustainability parameters have made the design pervasive. The healthcare industry can advance itself through the inclusion of sustainability concept in a standard performance metric. The proposed SBSC can act as a driver for practitioners in the industry to attain an understanding of the current trends and design strategic plans to tackle the aftermath of the pandemic and make provisions for future contingencies of similar nature. MA

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EMPLOYEE WELLNESS PROGRAM: ITS BENEFITS SURPASS ITS COST

Abstract

When a person falls ill, it costs a lot not only in monetary terms but also in terms of his mental well-being. Not only the person who has fallen ill suffers, his family, friends also have to suffer because of his illness. The same logic applies to an organization also. When an employee falls ill, the whole organization suffers. In order to avoid such damages and disturbances, precautions are to be taken. For that, employee wellness program is a great panacea. Employee Wellness Program is the program run by an employer in order to improve employee health and also to help an individual employee to overcome any specific health related issue. So, the organizations should implement such Employee Wellness Programs to reap the benefits of the same.

In this article, how Employee Wellness Programs can be executed, types of wellness programs and their benefits are discussed.

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Introduction:

We are passing through the unprecedented health crisis over the whole world in the form of COVID-19. The pandemic has taught us several newer aspects of life which we could not learn before this pandemic. The outbreak of this pandemic has made us more health and safety conscious. The meaning of the proverb "Precautions are better than cure" is now really understood by us in its true sense. The people with foolhardy attitude have suffered a lot and this pandemic has taught them real lessons. They also started focusing more towards precautions than to cure. When a person falls ill, it costs a lot not only in monetary terms but also in terms of his mental well-being. Not only the person who has fallen ill suffers, his family, friends also have to suffer because of his illness. The same logic applies to an organization also. When an employee falls ill, the whole organization suffers. The ill health of an important employee and his absence from the organization that follows results in a great damage to the organization. Because of the absence of an employee, so many projects get pending and so many tasks and processes get disturbed.

In order to avoid such damages and disturbances, precautions are to be taken. For that, employee wellness program is a great panacea.

In this article, how Employee Wellness Programs can be executed, types of wellness programs and their benefits are discussed.

Employee Wellness Program: What Is It?

Employee Wellness Program is the program run by an employer in order to improve employee health and also to help an individual employee to overcome any specific health related issue.

Under this Employee Wellness Programs, an employer can offer compulsory employee training, organize health seminars or can execute health program with the third party providing such wellness services or can offer any such programs for the benefit of employees' health. An organization without physically and mentally fit employees is like a body without soul.

An organization without physically and mentally fit employees is like a body without soul.

In some cases, Employee Wellness Programs can extend up to spouse and dependents of the employees.

Dimensions of Employee Wellness Programs:

The notion of wellness is generally associated with the physical well-being only. But, in reality, it is associated with the quality of life of the employees. It is not associated with only going to gym or exercise for weight loss, but in a holistic view, employee wellness can take several dimensions.

1. **Physical Wellness:**

   Physical wellness actually includes smooth running of physical bodily functions. Physical wellness is the easiest dimension of employee wellness because it is the most common and the most familiar among the employees. Initiatives such as exercise, yoga, pranayama, pranik healing, nutrition, sleep, etc. fall under the dimension of physical wellness. Many organizations arrange such yoga sessions or sessions for physical exercises at regular interval.

2. **Emotional Wellness:**

   Another dimension of employee wellness is emotional wellness. Emotional wellness is the ability to manage one's own emotions at the same time taking care of the emotions of one's counterparts. Emotional wellness includes being attentive to one's own thoughts, feelings and behavior. Emotional wellness of the employees is very crucial for the organization to grow.

3. **Financial Wellness:**

   Financial wellness of an employee focuses on the financial stability of the employee. If an employee is financially stable, then he is free of tension and can focus more on his work. An employee with financial instability loses focus from the work and is disturbed. Making the employees able to manage their income, expenses and saving requires financial literacy. The employer can be helpful for imparting financial literacy to the employees.

4. **Social Wellness:**

   Ability to manage one's personal social network is the focus of social wellness. As the human is a social animal, he depends on others for his well-being. Team building exercises, programs including social interactions, etc. can be organized to improve social wellness of the employees.

Features of Employee Wellness Program:

- Employee Wellness Programs reduces operating cost by improving productivity of the employees, decreasing sick days and leave of absence.
- Employee Wellness Program may be able to reduce organization's health insurance cost.
- Employee Wellness Programs are beneficial to the employees also by lowering their health insurance premiums, lower out-of-pocket medical expenses and the sense of well-being.
- Employee Wellness Programs may include weight loss competition, exercise program, yoga and pranayama sessions, educational seminars, etc.
- Cafeteria with healthy diet plans offered by employers can also be the part of Employee Wellness Programs.
- Employee Wellness Programs result in an indirect dividend to both employer and employee by reducing health expenses.

The notion of wellness is generally associated with the physical well-being only. But, in reality, it is associated with the quality of life of the employees.

What Can Be Done for Employee Wellness?

Depending on the requirements, the employers can offer various programs. Following are some of the examples of Employee Wellness Programs:

1. **Biometric Testing:**

   Biometric Testing is a practice of measuring employees' physical characteristics such as level of blood pressure, Body Mass Index (BMI), Glucose, Cholesterol, eye-checkup, dental checkup, etc. With the help of biometric screening, early detection of disease and health risk can be possible and early precautions and treatment can be taken. With the help of biometric testing an effective disease management program can be implemented.

2. **Disease Management Program:**

   The employees suffering from blood pressure, diabetes or any such chronic diseases are benefitted from such programs. Under this program, a team of physicians, nurses, dieticians, pharmacists, etc. come to the organization and they counsel and treat such employees. They educate the employees on an ongoing basis. These program also include, home visit, personal counselling, 24*7 call center, appointment remainders to the employees. Such programs are more successful because they are employee focused.

3. **Fitness Classes:**

   Some organizations offer on-site fitness classes. A fitness coach is invited to the organization who train the employees on the physical fitness. Such on-site fitness classes are organized in the conference room or any other open space. Group fitness programs are more successful as they provide an opportunity to come together, develop companionship and to enjoy the work out. Such fitness classes, in addition to the physical wellness, address the mental and social wellness also. Guided meditation, yoga and pranayama sessions are the examples of such fitness classes.

4. **Cafeteria with Healthy Food:**

   The organization can open in-house cafeteria which should provide free healthy food to the employees. The organizations working on the shift basis should provide healthy breakfast, lunch and dinner to the employees. Provision of such healthy food to the employees can make them healthier and prevents health risks.

5. **Tobacco/Smoking Cessation Program:**

   Chewing tobacco or smoking creates a great health risk for the employees. An organization can organize such tobacco/smoking cessation programs by which the employees are encouraged to leave such addiction. Such cessation programs are multifaceted and employees are encouraged in many ways by offering several benefits in reward of leaving the addiction.

6. **Weight Management:**

   Weight management program is a combination of exercise and nutrition in order to gain a healthy weight of the employees. Healthy weight can be a key to avoid several diseases which are caused because of improper weight. Employees can get benefit of this weight management program to prevent such diseases.

7. **Health Education:**

   Under this program, the organization arranges on-site seminars or on-line webinars for providing timely health content to the employees. Tailor made session on various dimensions of health can be arranged by the employer for the benefit of employees.

8. **Gym Reimbursement:**

   Some organizations may provide reimbursement of the fees paid by the employees for the gym. This reimbursement encourages the employees to join the gym and to work out for the improvement of their physical fitness.

9. **Flexible Work Schedule:**

   The employees may also be provided with the option of flexible work schedule so that they can accommodate their other needs. With the flexible work hours, employees are able to spend time with their loved ones. As a result, it can work on the mental wellness of the employee.

Steps to Implement an Employee Wellness Program:

The organizations can follow the below given steps to implement an Employee Wellness Program:

Benefits of Employee Wellness Program:

The employee wellness programs are beneficial to both employee and the company. Here are some benefits which can be derived from employee wellness program:

1. **Increased Productivity:**

   Healthy employees are likely to be more productive than the unhealthy employees. Poor health reduced the zeal for work and ultimately productivity reduces. If wellness programs are offered by the organization, the employees may understand the importance of staying healthy and in turn become more productive.

2. **Increased Employee Morale:**

   When the employees are offered such wellness programs, they feel special and their morale is boosted. The employees become more enthusiastic when such special wellness programs are offered to them.

3. **Better Recruitment and Retention:**

   The companies that offer such wellness programs are likely to get better employees. Many people are more conscious while selecting the job and they select the company which provides such health and wellness programs. Employee wellness program play a vital role in the employee retention also.

4. **Employee Absenteeism Decreases:**

   When employees are provided with such health and wellness programs, the chances of their falling ill

reduces. As a result, the ratio of sick leave reduces.

5. **Reduced Health Risk:**

   Employees who are engaged in such health and wellness programs understand and follow healthy life styles, eat healthy food and avoid addictions. As a result, risk on their health is reduced.

6. **Builds Companionship Among Employees:**

   When employees are engaged in such health and wellness programs, they get together and perform activities other than their regular work. Participating in the sports team, going to gym, eating lunch together, etc. increases employee interaction and they feel bondage among them.

Conclusion:

Now, from the above discussion, it is quite clear that Employee Wellness Program is very helpful to the organization in several manners. It is no doubt that the companies have to spent a huge amount on such programs but it is needless to say that the benefits of such programs are long lasting and outweigh the cost involved. So, the organizations should implement such Employee Wellness Programs to reap the benefits of the same. MA

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A STUDY ON SECTORAL CONTRIBUTIONS IN MEDICAL ASSETS AND PATIENT MIGRATIONS UNDER THE SWASTHYASATHI SCHEME

Abstract

This paper analyses the data on the "SwasthyaSathi" scheme run by the Government of West Bengal. The objective is to assess the relative share of private and public sector hospitals in providing healthcare facilities under the scheme, analyse trends in patient migrations from various districts to Kolkata and to draw inference on the state of medical infrastructure in West Bengal.

Statistical techniques like coefficient of variation, standard deviation and Student's T-Test has been used.

The paper has found that larger numbers of empanelled hospitals under SwasthyaSathi are from private sector. However, government hospitals have higher bed count. The districts from where patients migrate to Kolkata have higher variability in the availability of medical infrastructure.

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INTRODUCTION

Governments all over the world have been making efforts to reduce Out of Pocket Expenses (OOPE) which low income households incur in availing medical treatment. Lack of social security, low incomes, increasing life-expectancy makes OOPE large relative to the household income. The "SwasthyaSathi" scheme was started by the Government of West Bengal, India in 2016 to provide cash free medical treatment to the state's low income households at the hospitals empanelled under it. This paper attempts to analyse data published in the SwasthyaSathi website to estimate the relative shares of the public and private sector hospitals in the scheme, study the process of patient migrations from various districts to Kolkata and to make estimations on medical infrastructure availability in West Bengal.

OBJECTIVES

The objectives of the paper are as follows:

i. To analyse the relative shares of the private and public sectors in terms of medical assets at their disposal for providing healthcare facilities under the SwasthyaSathi scheme

ii. To compare Kolkata with those districts whose patients migrate to Kolkata for medical treatment, in terms of available medical assets

iii. To draw inference on the state of medical infrastructure in West Bengal using the SwasthyaSathi dataset as a sample

DATA AND METHODS

This paper uses the dataset available on the official website of "SwasthyaSathi". The SwasthyaSathi website provides links for ad-hoc querying of data on medical infrastructure available under the scheme. Using this facility, the following data was extracted:

i. Number and grades of empanelled hospitals.

ii. Number of hospital beds available for various medical procedures

The data collected was on 45 different hospital categories and 37 types of medical procedures. Data on the progress of the SwasthyaSathi scheme is published as monthly reports. Such monthly reports since the scheme's inception to July 2020 were downloaded. Each monthly report publishes the names of the top five districts that accounted for the highest number of patient migrations to Kolkata in that month as well as the diseases for which such migrations occurred. The following districts have had the highest number of patient migrations to Kolkata since the scheme's inception:

Table 1: List of districts with highest patient migrations to Kolkata

i.	South 24 Parganas	ii.	North 24 Parganas
iii.	Howrah	iv.	Hooghly
v.	Bankura	vi.	Birbhum
vii.	Murshidabad	viii.	Nadia
ix.	Purba Medinipur		

Source: *https://swasthyasathi.gov.in/*

Statistical techniques used:

- ***Coefficient of Variation (CV):*** CV expresses the standard deviation of a data set as percentage of its mean:

$$\text{Coefficient of Variation(CV)} = \frac{\text{Standard Deviation}}{\text{Mean}} \times 100$$

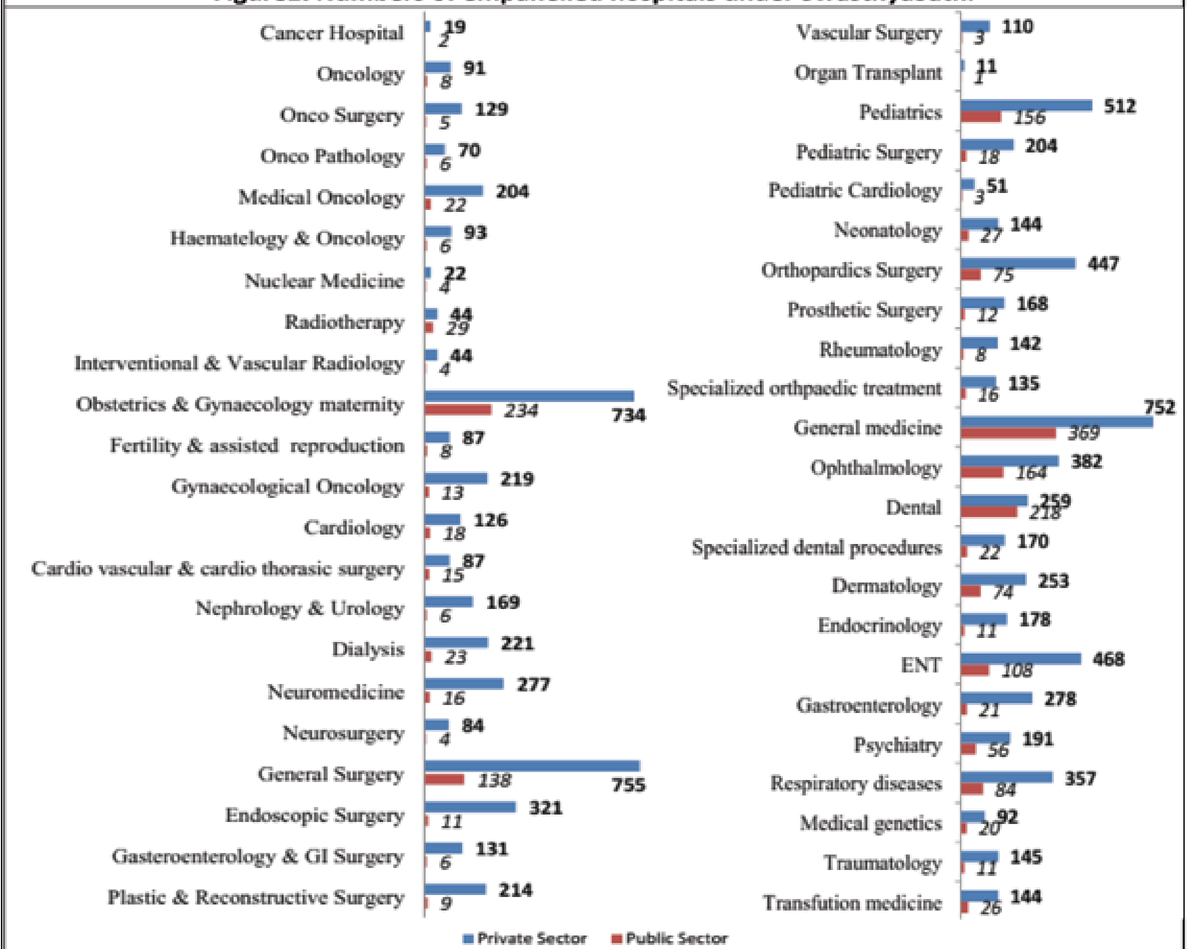
  CV was used for measuring the variability in medical assets in the various districts where the SwasthyaSathi scheme is operational.

- ***Student's T-Test:*** T-Test is a statistical hypothesis testing technique for small sample sizes (n<30). This paper has used T-Test (i) for drawing inferences on the state of medical infrastructure in West Bengal and (ii) to compare Kolkata with the districts of Table1 in terms of availability of medical assets.

RESULTS AND DISCUSSION

Figure1 shows the numbers of hospitals empanelled under the SwasthyaSathi scheme.

Figure1: Numbers of empanelled hospitals under SwasthyaSathi



Source: *https://swasthyasathi.gov.in/*

In almost all categories, the private sector has a much larger share in the number of empanelled hospitals.

Table 2: Descriptive statistics on hospitals empanelled under SwasthyaSathi		
	Private sector	**Public sector**
Total numbers of empanelled hospitals	9734	2090
Mean	216.3111	46.44444
Standard Deviation (SD)	183.3926	74.79797
Coefficient of Variation (CV)	84.78%	161.05%
Source: *Author's computation*		

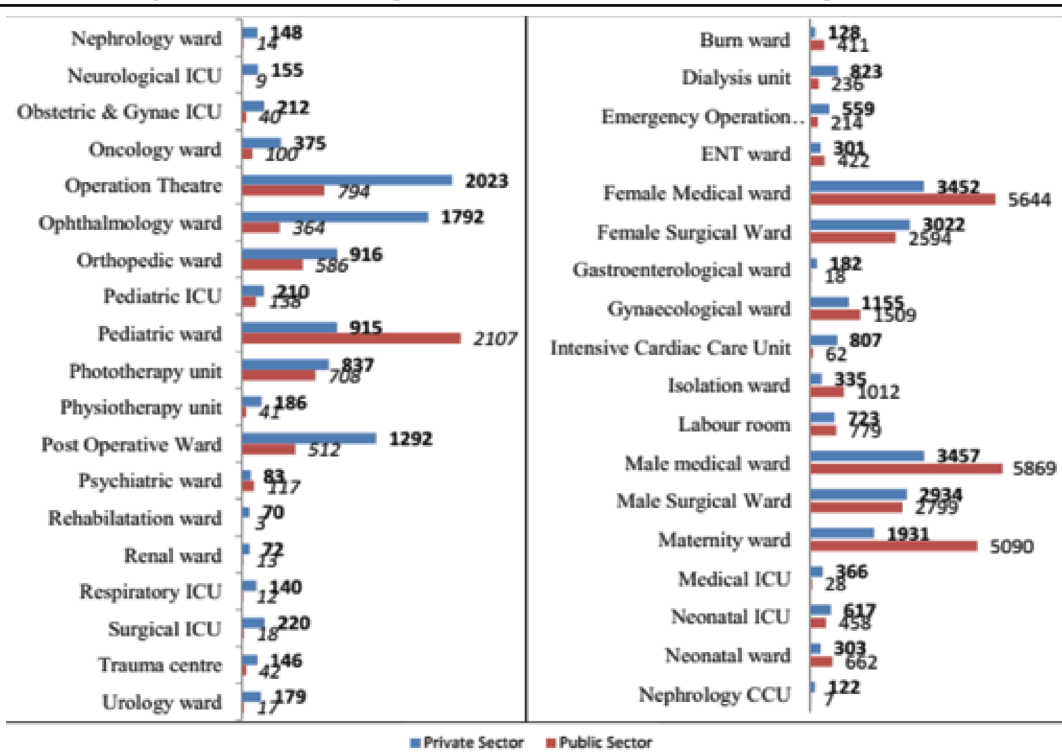
The private sector has 9734 hospitals against 2090 of the public sector. This is due to the establishment of numerous smaller private sector hospitals in the districts. The public sector had much higher Coefficient of Variation (CV) although its Standard Deviation was lower than the private sector (Table2). This can be explained by the much lower mean. The lower numbers of public hospitals under the scheme highlights the low penetration of the government sector in the remote parts of the districts.

The SwasthyaSathi scheme provides for gradation of the empanelled hospitals in various grades: A, B, C and R Descriptive statistics on A, B and C grade hospitals are presented in Table3.

Table 3: Descriptive statistics on grades of hospitals empanelled under SwasthyaSathi						
	Grade-A		**Grade-B**		**Grade-C**	
	Private sector	**Public sector**	**Private sector**	**Public sector**	**Private sector**	**Public sector**
Numbers of hospitals	1331	271	4486	1074	2148	653
Mean	29.57	6.02	99.68	23.86	47.73	14.51
Standard Deviation (SD)	7.62	4.09	63.22	31.25	73.49	39.92
Coefficient of Variation (CV)	25.78%	68.01%	63.42%	130.96%	153.97%	275.15%
Source: *Author's computation*						

In each of the gradation categories, the private sector has a much larger share in the empanelled hospitals. The public sector also has displayed much higher variation in hospital numbers in all the three categories. However, for both private and public sectors, variability was largest in Grade C hospitals followed by the Grade B and Grade A hospitals.

Figure 2: Number of hospital beds available for various medical procedures



Source: *https://swasthyasathi.gov.in/*

In terms of number of beds available for various medical procedures, the public sector has some parity with the private sector.

Table 4: Descriptive statistics on hospital beds available for medical procedures		
	Private sector	**Public sector**
Total numbers of available hospital beds	31188	33449
Mean	842.91	904.02
Standard Deviation (SD)	975.61	1541.32
Coefficient of Variation (CV)	115.74%	170.50%
Source: *Author's computation*		

Table 4 shows that under the SwasthyaSathi scheme, the public sector hospitals have higher number of available hospital beds for medical procedures. However, the variability in case of the public sector has still been higher than the private sector.

From the preceding analysis, the picture that emerges is that under the SwasthyaSathi scheme, although private sector hospitals are present in larger numbers, they have lower bed capacity. Conversely, government hospitals under SwasthyaSathi have higher bed capacity but they are lower in numbers. This observation may help to explain the issue of patient migrations from the districts (Table1) to Kolkata. Table 5 compares the descriptive statistics of Kolkata with the districts listed in Table1 in terms of the number of empanelled hospitals.

Table 5: Descriptive statistics of Kolkata and districts of patient migrations					
	Kolkata	**South 24 Parganas**	**North 24 Parganas**	**Howrah**	**Hooghly**
Number of hospitals	893	1208	1377	613	642
Mean	19.84	26.84	30.6	13.62	14.26
SD	7.23	30.20	23.69	8.07	16.15
CV	36.45%	112.51%	77.42%	59.26%	113.25%
	Bankura	**Birbhum**	**Murshidabad**	**Nadia**	**Purba Medinipur**
Number of hospitals	595	524	699	764	819
Mean	13.22	11.64	15.53	16.97	18.2
SD	15.35	12.74	20.13	19.34	18.07
CV	116.10%	109.41%	129.62%	113.97%	99.32%
Source: *Author's computation*					

Table 6 compares the descriptive statistics of Kolkata with the districts listed in Table1 in terms of the number of beds for various medical procedures.

Table 6: Descriptive statistics of Kolkata and districts of patient migrations					
	Kolkata	**South 24 Parganas**	**North 24 Parganas**	**Howrah**	**Hooghly**
Number of beds	4565	5321	4399	2528	4402
Mean	123.37	143.81	118.89	68.32	118.97
SD	122.73	210.60	135.83	78.92	205.39
CV	99.48%	146.45%	114.25%	115.52%	172.64%
	Bankura	**Birbhum**	**Murshidabad**	**Nadia**	**Purba Medinipur**
Number of beds	3171	4593	3894	3111	3741
Mean	85.70	124.13	105.24	84.08	101.1081
SD	118.80	216.79	175.15	96.25	142.2122
CV	138.62%	174.65%	166.43%	114.48%	140.65%
Source: *Author's computation*					

Some of the districts of Table1 have more number of empanelled hospitals and available beds than Kolkata. However, Kolkata has the lowest CV for both these measures (Tables5&6). This indicates that Kolkata has the lowest degree of variability both in terms of various categories of hospitals and number of beds. Districts whose patients migrate to Kolkata have far higher variability in both terms.

A high amount of variability in medical resources is likely to have an impact on uninterrupted patient treatment. For instance, a patient who suffered a heart attack may also need physiotherapy apart from the services of an Intensive Cardiac Care Unit. The patient may also have to undergo emergency surgery which will require an Emergency Operation Theatre. As shown by Tables 5 and 6, all districts whose patients migrate to Kolkata for treatment have shown much higher variability in numbers of hospitals and number of beds than Kolkata. Therefore, it is very likely that for specific diseases or medical procedures, although part of the treatment may be available in the districts, a patient may be forced to travel to Kolkata for further or for supportive treatment. High volumes of patient migrations to Kolkata from these districts may be fuelled by the need for availing a complete range of treatment for curing specific diseases.

Since the SwasthyaSathi scheme has achieved wide coverage in West Bengal, its dataset can be deemed to adequately represent medical infrastructure available in the state. It was therefore used as a sample for drawing statistical inferences.

Table 7: List of alternate hypotheses	
HA1	The average number of hospitals under private sector is higher than public sector
HA2	The average number of Grade-A,B and C hospitals under private sector is higher than public sector
HA3	The average number of available beds in private hospitals is higher than public sector hospitals
HA4	The average number of hospitals in Kolkata is higher than in the districts whose patients migrate to Kolkata
HA5	The average number of available hospital beds in Kolkata is higher than in the districts whose patients migrate to Kolkata
Source: *Author*	

Table 8 gives the results of T-Test on hypotheses HA1, HA2 and HA3 at 5% level of significance:

Table8: T-Test results

Alternative Hypothesis	Sample size (n)	T values		Result
		Computed	Table (5%)	
HA1	45	5.689*	1.662	Null hypothesis rejected
HA2				
• Grade-A hospitals		18.05*		
• Grade-B hospitals		7.131*		
• Grade-C hospitals		2.635*		
HA3	37	−0.201	1.666	Null hypothesis accepted
Source: *Computed by author*				

* Significant at 5% level of significance

T-Test results in Table8 support the paper's earlier findings. In case of HA1 and HA2, the null hypothesis was rejected but was accepted for HA3. This indicates that there are indeed higher numbers of hospitals run by the private sector than under the public sector. However, the bed count of government run hospitals is much higher.

Table 9: T-Test results

Alternative Hypothesis	Sample size (n)	T values		Result
		Computed	Table (5%)	
HA4	45			
• Kolkata- South 24 Parganas		-1.49516	1.662	Null hypothesis accepted
• Kolkata- North 24 Parganas		-2.88023*		
• Kolkata- Howrah		3.80798*	1.662	Null hypothesis rejected
• Kolkata- Hooghly		2.09013*		
• Kolkata-Bankura		2.58865*		
• Kolkata-Birbhum		3.71277*		
• Kolkata- Murshidabad		1.33665	1.662	Null hypothesis accepted
• Kolkata-Nadia		0.92055		
• Kolkata-Purba Medinipur		0.56027		
Source: *Computed by author*				

* Significant at 5% level of significance

Table10: T-Test results

Alternative Hypothesis	Sample size (n)	T values		Result
		Computed	Table (5%)	
HA5	37			
• Kolkata- South 24 Parganas		-0.50293	1.666	Null hypothesis accepted
• Kolkata- North 24 Parganas		0.14704		
• Kolkata- Howrah		2.26372*	1.666	Null hypothesis rejected
• Kolkata- Hooghly		0.11047	1.666	Null hypothesis accepted
• Kolkata-Bankura		1.32339		
• Kolkata-Birbhum		-0.01823		
• Kolkata- Murshidabad		0.50875		
• Kolkata-Nadia		1.51168		
• Kolkata-Purba Medinipur		0.71132		

Source: *Computed by author*

* Significant at 5% level of significance

T-Test results of testing HA4 and HA5 indicate that both average number of hospitals and number of hospital beds in Kolkata are lesser than the most districts from where patients migrate to Kolkata. This is indicative of the fact that the high rate patient migrations to Kolkata stem from the high rate of variability in availability of medical infrastructure in the districts. MA

REFERENCE

1. ***SwasthyaSathi:*** *https://swasthyasathi.gov.in/*

Ref No: G/82(129)/01/2021

22nd January, 2021

NOTIFICATION

In pursuance of Regulation 146 of the Cost and Works Accountants Regulations, 1959, the Council of the Institute in its 327th Meeting held on 22nd and 23rd November, 2020 by virtue of power conferred therein has constituted the following Chapter of The Institute of Cost Accountants of India covering the area of Hajipur, Chapra, Siwan, Jehanabad, Gaya, Arwal and Arrah, in the State of Bihar.

The Institute of Cost Accountants of India – Patna Saheb Chapter
Near Arrah Machine, Gurugovind Singh link Path,
Patna Saheb Railway Station,
Patna – 800 008
Bihar.

(CMA Kaushik Banerjee)
Secretary

DIGITAL OBJECT IDENTIFIER (DOI)

Issue: December - 2020 [Vol. 55 No. XII]

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BUDGET HIGHLIGHTS 2021-2022

In a challenging situation as it happened just after the two World Wars, not only our country the world economy is facing contraction due to the COVID 19 pandemic. Hence this year Budget is a boldest and strategic push to revamp the economy for accelerating towards sustainable growth. The Budget proposals for 2021-2022 rest on 6 pillars.

- Health and Wellbeing
- Physical & Financial Capital, and Infrastructure
- Inclusive Development for Aspirational India
- Reinvigorating Human Capital
- Innovation and R&D
- Minimum Government and Maximum Governance

Health & Wellbeing

A new centrally sponsored scheme, **PM AtmaNirbharSwasth Bharat Yojana**, will be launched under the scheme the main interventions would be:

a. Outlay ₹64180 crore over 6 years

b. Support for Health and Wellness centres

c. Setting up of Integrated Public Health Labs

d. Establishing critical care hospital blocks

e. Strengthening NCDC

f. Expanding integrated health information portal

- Supplementary Nutrition Programme and Poshan Abhiyan to be merged and launched as Mission Poshan 2.0
- Introduction of National Commission for Allied Healthcare Professionals Bill
- Pnuemococcal vaccine to be rolled across the country
- ₹35000 crore for Covid-19 Vaccine in 2021-22

Physical & Financial Capital, and Infrastructure

- MITRA Scheme to create world class infrastructure for global champions in textile sector leading to creation of 7 textile parks over 3 years. To enable the textile industry to become globally competitive, attract large investments and boost employment generation, a scheme of *Mega Investment Textiles Parks (MITRA)* will be launched in addition to the Production Linked Incentive scheme (***PLI***) scheme.
- NIP Project pipeline expanded to 7400 projects.
- Indian Railways have prepared a National Rail Plan for India – 2030. The Plan is to create a 'future ready' Railway system by 2030. The objective is to increase the modal share of rail in freight from the current level of 27 per cent to 45 per cent. 100% electrification of Broad Gauge Routes by 2023. Indigenously developed automatic train protection system to be launched.
- MetroLite and MetroNeo for tier 2 and peripherals of tier 1 cities.
- Hydrogen energy mission will be launched.
- Ujjwala Scheme which has benefited 8 crores households will be extended to cover 1 crores more beneficiaries. A gas pipeline project will be taken up in Union Territory of Jammu & Kashmir. An independent Gas Transport System Operator will be set up for facilitation and coordination of booking of common carrier capacity in all-natural gas pipelines on a non-discriminatory open access basis.
- Rationalised single Securities Markets Code by 2022.
- World class fintech hub at GIFT IFSC.
- Permanent institutional framework for Corporate bond market.
- SEBI as regulator and greater role for WDRA for development of commodity market ecosystem.
- Investor charter as a right across all financial products
- Amending the Insurance Act,1938 to increase the FDI limit with safeguards
- Asset Reconstruction Company Limited and Asset Management Company to resolve stressed assets problem of PSBs. To further consolidate the financial capacity of PSBs, further recapitalization of Rs.20,000 crores is proposed in 2021-22.
- Privatization of two Public Sector Banks and one General Insurance company in the year 2021-22
- Strategic disinvestment would be completed in BPCL, Air India, Shipping Corporation of India, Container Corporation of India, IDBI Bank, BEML, Pawan Hans, Neelachal Ispat Nigam limited among others in 2021-22
- IPO of LIC to be launched

Agriculture and allied sectors

- Concessional Credit Boost to farmers
- Agri Infrastructure Fund
- Emergency working capital for farmers
- Agriculture marketing reforms
- Extending coverage of SWAMITVA Scheme to all states/ UTs
- Expansion of Operation Green scheme to include 22 perishable products

- 1000 more mandis to be integrated with e-NAM

Fisheries

- Development of modern fishing harbours and fish landing centres. To start with, 5 major fishing harbours – Kochi, Chennai, Visakhapatnam, Paradip, and Petuaghat will be developed as hubs of economic activity.
- Multipurpose Seaweed Park to be set up in Tamil Nadu

Migrant workers and labourers

- One nation one ration card scheme under implementation in 32 states and UTs.
- A portal to be launched for gig, building and construction workers
- Social security benefits will be extended to gig and platform workers

Reinvigorating Human Capital

- 100 new Sainik Schools will be set up in partnership with NGOs/private schools/states.
- 750 Eklavya model residential schools in our tribal areas

Direct Tax Proposals

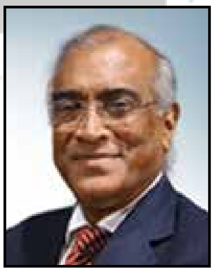
- Exemption from filing income tax returns for senior citizens (75 years and above) who only have pension and interest income. The paying bank will deduct the necessary tax on their income.
- In order to rationalise tax exemption for the income earned by high income employees, it is proposed to restrict tax exemption for the interest income earned on the employees' contribution to various provident funds to the annual contribution of Rs.2.5 lakh. This restriction shall be applicable only for the contribution made on or after 01.04.2021
- In order to discourage the practice of not filing returns by the persons in whose case substantial amount of tax has been deducted/collected, it is proposed to provide that a person in whose case TDS/TCS of Rs.50,000 or more has been made for the past two years and who has not filed return of income, the rate of TDS/TCS shall be at the double of the specified rate or 5%, whichever is higher. This provision shall not be applicable for the transactions where full amount of tax is required to be deducted e.g. salary income, payment to non-resident, lottery, etc.
- Reducing time limit for reopening of income tax assessment. Time-limit for re-opening of assessment would be reduced to 3 years from the present 6 years.
- Constitution of a Dispute Resolution Committee for small tax payers. Anyone with a taxable income up to Rs.50 lakh and disputed income up to Rs.10 lakh shall be eligible to approach the Committee.
- Income Tax Appellate Tribunal to be made faceless.
- There is a proposal to notify rules for removing hardship for double taxation for NRI.
- Dividend payment to REIT/InvIT to be exempted from TDS.
- Increase in limit for tax audit for persons who carry out 95% of their transactions digitally. The limit for tax audit for such persons proposed to increase from Rs. 5 crore to Rs.10 crore.
- Pre filling of returns will also cover capital gains from listed securities, dividend income, etc. To further ease filing of returns, details of capital gains from listed securities, dividend income, and interest from banks, post office, etc. will also be pre-filled.
- Eligibility for claiming tax holiday for start ups proposed to be extended by one more year till 31st March, 2022.
- Additional deduction of ₹1.5 lakh shall be available for loans taken up till 31 March 2022 for purchase of affordable house.
- For small charitable trusts running educational institutions and hospitals there is a blanket exemption to such entities, whose annual receipt does not exceed Rs. 5 crore.

Indirect Tax Proposals

- Customs duty rates are revised on few items copper scrap, solar inverters, solar laterns, textile, chemicals and other products, gold, silver, basic and special additional excise duty on petrol and high-speed diesel oil (both branded and unbranded). The revised rates will be applicable from 2nd February 2021 onwards.
- Regarding agricultural products, the customs duty is increased on cotton, silks, alcohol, etc.
- Exemption of Social Welfare Surcharge on the value of AIDC imposed on gold and silver. Therefore, these items would attract surcharge at the normal rate, only on value plus basic customs duty.
- The exemption on import of leather will be withdrawn as they are domestically produced
- Support to MSMEs hit by recent sharp rise in iron and steel prices and relief to metal recyclers
- A new initiative called 'Turant Customs' will be introduced for faceless, paperless, and contactless customs measures
- Agriculture Infrastructure and Development Cess has been newly imposed on petrol and diesel at Rs2.5 and Rs.4 per litre respectively.
- CGST Act was amended for several provisions as follows:
  - Section 16 amended to allow taxpayers' claim of the input tax credit based on GSTR-2A and GSTR-2B.
  - Section 50 of the CGST Act is being amended to provide for a retrospective charge of interest on net cash liability with effect from the 1st July 2017.
  - Section 35 and 44 amended: Mandatory requirement of furnishing the GST reconciliation report signed by the specified professional is relaxed by allowing the filing of annual return on a self-certification basis. The Commissioner can exempt a class of taxpayers from the requirement of filing the annual return.

Sources:
indiabudget.gov.in, cleartax.in

DIGITAL TRANSFORMATION - ADVANCEMENTS IN APPLICATIONS OF BLOCKCHAIN TECHNOLOGY THE EVOLVING POWERHOUSE OF INDUSTRY 4.0



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Introduction

The idea for processing transactions in a cryptographically secured chain of blocks was first revealed in 1991 by computer scientists Stuart Haber and W. S. Stornetta. Their objective was to ensure data privacy, security, and integrity. Nick Szabo, a legal scholar, and specialist cryptographer researched on introduction of digital money and ideated 'Bit Gold' in 1998 using a Blockchain platform. This was further advanced by Stefan Konst. He published improved research papers on applications of cryptographically secured chains and their implementation for designing solutions.

In 2008, when subprime mortgage crisis in USA and its aftershocks were tormenting the world, came the path breaking contribution of Satoshi Nakamoto, albeit controversies about identity remaining unresolved. The objective was to liberate money from regulatory controls by introducing Bitcoin through a peer-to-peer network created with Distributed Ledger Technology (DLT), synonymously known as Blockchain.

Vitalik Buterin liberated Blockchain from the castled domain of cryptocurrency. He proved that private blockchain platforms would be efficient and effective for handling many more commercial transactions. Buterin, one of the co-founders of Ethereum and contributors to Bitcoin codebase, unveiled in 2015 the second platform called Ethereum. He designed it with the embedded facility of a Smart Contract to ensure legal and regulatory compliances of transactional agreements for commercial purpose. Technology giants like Microsoft, BBVA and UBS, could foresee vast business potentials of Blockchain because of its foundational abilities, and speed to disrupt legacy systems. All these saw the advent of a new technological renaissance in Industry 4.0 era.

Readers may find several articles[1-4] of this author on fundamental features and applications of Blockchain technology for creating driving platforms, integrated with simultaneous applications of other seven other deep technologies, in his personal website www.innoventionians.com. A video recorded presentation is also available in his YouTube Channel[5] (from 6.00 minute) along with many other sessions on digital transformation as are hosted there.

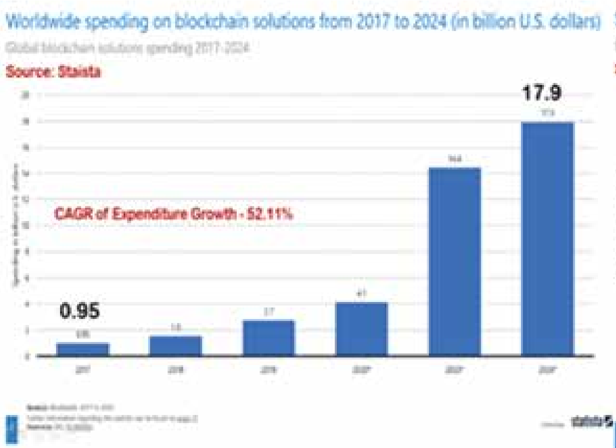
Objective

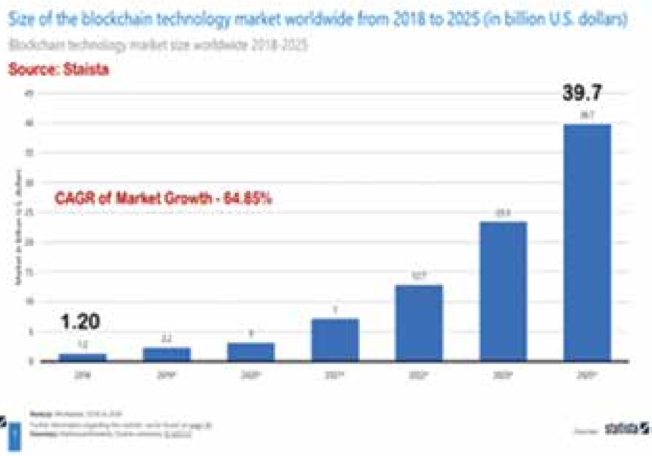
Since writing of those articles, Blockchain technology has advanced with accelerated pace towards becoming the Powerhouse of Industry 4.0 and opened new vistas for multipurpose applications. Dreadful impacts of Covid-19 Pandemic on business and life of all under the sun have also speeded up the pace of digital transformation with applications of Blockchain. Therefore, objectives of this 18th article, in a row under this monthly column, are to add knowledge about the enormity of spending for and expansion of worldwide market for developing Blockchain based solutions. What and how CXOs around the world are sensing and projecting benefits from advanced applications of DLT will be shared. Certain unique applications of Blockchain will also be added at the end

Reader will be able to gather how digital solutions are being designed to derive benefits from foundational capabilities of Blokchain platforms for rendering multifarious services from one platform transcending sovereign borders. One of the cases in point for this is the article of this author in which he has ideated Kisan Blockchain Platform[2].

Enormity of Growth in Expenditure and Market

The following is a set of two vital information from the globally reputed firm Statista[6] with projections till 2025. These delineate the enormity of expenditure for designing digital solutions with blockchain technology, at what pace its global market is expanding since 2017 and estimated to expand till 2025.





Source: *https://www.statista.com/topics/5122/blockchain/*

The graphical report has been presented through for ease of developing observations and drawing inferences at global level:

Description of Data	2017 / 2018	2020	2024 / 2025
Expenditure for Blockchain solutions (USD Bln.)	0.95	4.10	17.90
CAGR of spending from 2017		62.8%	52.1%
CAGR of spending from 2020 to 2024			44.5%
Size of Blockchain Technology Market (USD)	1.20	3.00	39.70
CAGR of market volume from 2018		58.1%	64.8%
CAGR of market volume from 2020 to 2025			67.6%

Albeit a slow starter for commercial applications since 2015, Blokchain as a digital technology has picked up acceleration with quantum leap both in terms of spending and market growth, particularly since 2017. Readers must have realised the enormity of applications that are being done by digital scientists for designing solutions with the help of DLT.

An understanding about the above for India can be drawn from the report of 'businesswire'[7] in its report published on September 17, 2019. It stated that *"Blockchain spend in India has increased at 103.4% during 2018 to reach US$ 154.8 million. Over the forecast period (2019-2025), spend on blockchain is expected to record a CAGR of 47.3%, increasing from US$ 289 million in 2019 to reach US$*

4,348.3 million by 2025." One can, therefore, infer that seeing the actual pace of growth in past two years and from the perspective of projection till 2025 applications of Blockchain technology will continue to expand in India also with an accelerated pace.

There are reasons to be more optimistic in India from the recent news item that the Lower House of the Indian Parliament is expected to consider a bill during current winter session of 2021. In this Law provisions will be kept for introduction of digital currency and promotion of Blockchain. According to the Indian Express[8], *"The proposed law will provide a framework for the creation of an official digital currency to be issued by the Reserve Bank of India and allow certain exceptions to promote blockchain, the underlying technology of cryptocurrency and its uses, according to a bulletin of the lower house of parliament."*

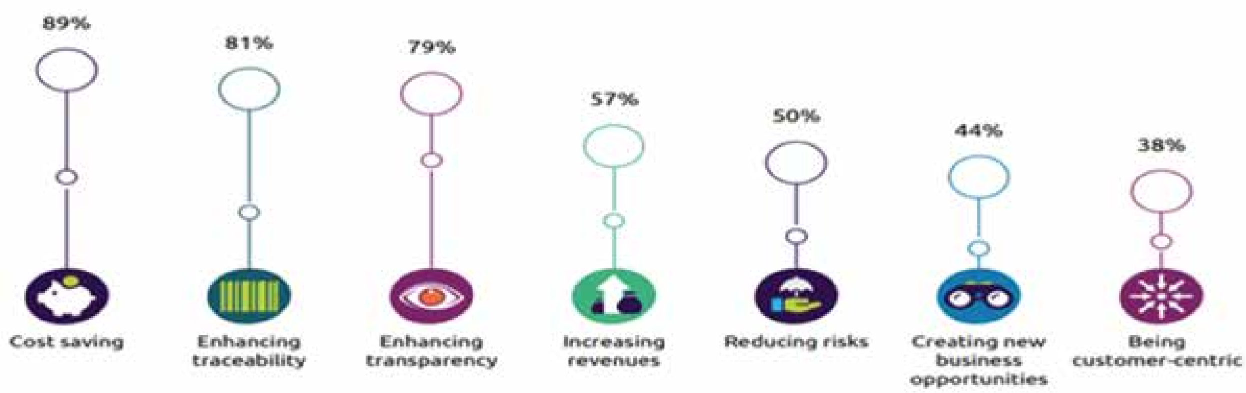
Relevance, Business Objectives and Priority

Capgemini Research Institute conducted a survey in 2017[9] among 447 corporate executives across the world on the path of Blockchain from awareness to maturity and business relevance of Digital Transformation with Blockchain. Based on the responses Capgemini segmented the period into three waves:

- Wave I : Awareness - 2011 to 2018
- Wave II : Experimentation - 20117 to 2020
- Wave III : Digital Transformation - 2019 to 2025

On hindsight one can perceive that the then prediction is almost coming to reality. This survey result can also be corroborated using the aforesaid financial numbers of Statista regarding expenditure in applications and growth of market for Blockchain technology.

Business managers would be happy to note the following statistical numbers drawn by Capgemini from the replies of those 447 survey respondents about the drivers and their graded importance for investing money in designing solutions with blockchain technology. The respondents had more than one choice.



Source: Capgemini Research Institute, Blockchain Survey; April–May 2018, N=447 organizations.

Further analysis of the above data reveals the following:

- Cost savings, enhancing traceability and transparency as drivers topped the agenda,
- Two drivers would directly contribute profit and profitability, viz., Cost saving (89%), and Increasing revenue (57%),
- Four drivers are market and customer centric, viz., Enhancing traceability of products (81%), Increasing revenues (57%), Creating new business opportunities (44%) and Being customer-centric (38%);

It would be pertinent here to analyse the comparative results of three consecutive global level surveys[10] conducted by Deloitte on the same set of mission critical business issues as well as approach and attitude of business executives towards blockchain.

Universe, Description of Priority and Relevance of Blockchain	Percentage of Respondents		
Survey years	2018	2019	2020
No. of total respondents	1,053	1,386	1,488
Critical as a strategic priority	43	53	55
Important but not at the top five of urgent agenda items	29	27	26
Relevant but not a strategic priority	21	14	14
Conclusion not reached about the strategic priority of Blockchain	4	3	3
Not relevant as an agenda point of business strategy	3	3	2

One can deduce from the above table with reasonable certainty that adoption and applications of blockchain technology is fast climbing up the CEO's strategic agenda in terms of priority, importance, and relevance for adoption of blockchain technology. The same survey results of 2020 revealed certain more exciting conclusions from the perspective of business relevance of Blockchain as a technology for digital transformation. These can be summarised in the following data points:

- 88% of respondents mentioned that Blockchain as a technology is scalable,
- 86% opined that there are compelling business cases for applications of Blockchain,
- 85% of respondents mentioned that they have a plan to replace existing systems by Blockchain technology
- 83% were of the view that competitive advantages of the business will be lost if Blockchain is not adopted as a technology for digital transformation,

The above proportion of responses again corroborate the projections contained in the aforesaid report of Statista. They indicate the drivers which will move the market for Blockchain from USD 3.00 Bln. in 2020 to USD 39.70 Bln. in 2025. Readers will agree with this authors prophecy that if spending on blockchain technology and its market sizes grow with 44.5% and 67.6% respectively at the global level, there is no reason to believe that India fall behind. Again, such a prediction has also been indicated in the report of 'businesswire' as stated above. The report of the Indian Express adds more to silver lines

Blockchain for Controlling and Monitoring of Pandemic

In the context of Covid-19 Pandemic zillions of bites have been used in cyberspace for driving the fact that Blockchain, AI & ML and six other deep digital technologies can be integrated for monitoring and controlling of pandemic and comorbidities. This in tun would and is also bringing efficient and effective solutions for reducing sufferings and sad demises of people of all levels of society across the world. This author has written one such article[3] on digital transformation of health care services.

Source: *https://www.bbvaopenmind.com/en/technology/digital-world/blockchain-technology-and-covid-19/*

Prof. Ahmed Banafa of San Jose University, USA has concluded that[11] *"A blockchain is an essential tool for establishing an efficient and transparent healthcare business model based on higher degrees of accuracy and trust because technology is a tamper-proof public ledger. …….. what it can do is create the first line of rapid protection through a network of connected devices whose primary goal is to remain alert about disease outbreaks. Therefore, the use of blockchain-enabled platforms can help prevent these pandemics by enabling early detection of epidemics, fast-tracking drug trials, and impact management of outbreaks and treatment. …. Blockchain could also manage crisis situation. It could instantly alert the public about the Coronavirus by global institutes like the World Health Organization (WHO) using smart contracts concept."*

Recent Unique Applications

It will not be possible to make a comprehensive list of reported unique applications of Blockchain technology during last about two years due to limitations of pages allotted for this article and ability of the author to hold on to readers' patience. However, and attempt has been made to list a few unique applications in the following segments:

- **Digital identity for motor vehicles**: Mobile Open Blockchain Initiative (MOBI), a consortium of automobile majors like Honda and Ford has initiated the first of its kind Blockchain operated systems for providing standard digital identify to new vehicles. This solution would be able to monitor, track and report various prelisted types of incidents during a vehicles operating life. More uniquely the solution can be used for bringing those monitored vehicles in a chain link for communicating material information, keeping surveillance on speed, geographical route of movement and position, intensities of braking and even driver's behaviour like cutting of lanes, etc. Such facilities will also help insurance companies
- **Automation of middle office functions for PE Funds**: Northern Trust, a financial services entity has designed a blockchain based software for Broadridge, New York. That software can handle and control on an end-to-end basis investment activity by private equity funds. Their manual middle office functions,

viz., handling agreements, rationalising the process of data accumulation, and communicating with investors, etc have been automated. Broadridge will soon commence executing bilateral repurchase agreements (Repos) making use of the blockchain platform.

- **Nine Blockchain Projects of China Bank**

  This second largest bank of the world has the following blockchain based projects in operation for commercial applications. Certain major objectives for such projects are:

  - Monitoring and tracing pharmaceutical products to their origin of manufacturing,
  - Monitoring and tracking carbon credits for less polluting industrial units,
  - Monitoring and tracking how government grants are being spent, and
  - Connecting sixty financial institutions, including Postal Savings Bank of China and The Bank of Shanghai, with circa three thousand manufacturing units and commercial entities engaged in inbound and outbound trading of goods. This would help an exporter at times of sufferings from liquidity crunch, while waiting for a shipment to be established, can borrow within a few minutes by submitting documentary evidences in support of confined receivables.

- **Equity Swap and Derivative Transactions**: Citi Bank, Goldman Sachs and thirteen trading firms have collaborated for automating the process for pairing and reconciling and settlement of derivative contracts using Axoni's Axcore blockchain. This digital transformation with blockchain platform will minimise mistakes, processing costs and disputes over valuation of underlying assets. Global securities warehouse DTCC will soon move its $10 trillion credit derivatives business to a blockchain.

- **Smart Contracts for Musicians**

  Mediachain of New York has started using smart contracts embedded in a Blockchain Platform for ensuring that musicians get their deserving share of money by entering a decentralized, transparent smart contract. It helps them by ensuring that they get higher royalties and full payment when it is due.

- **Cybersecurity for IoTs**

  A Blockchain platform can function as a convergence point for receiving, distributing, and monitoring of data and information received form IoTs in a peer-to-peer network with assurance of security, safety, pace, and transparency. HYPR impedes exposures of IoTs to risks caused by cybercriminals with the help of its decentralized credential management solutions. IoTs virtually made unhackable. All these in turn will help in proliferation of edge computing, further bring down costs and enhance speed.

  Xage of California operates the world's first blockchain-enabled cybersecurity platform for IoT companies. Billions of IoT devices are digitally managed and monitored at any given point of time. It can *suo moto* diagnose and mend in any unlikely event of breaches. This software is used by IoT companies engaged with transportation, energy and manufacturing industries.

The list can continue to run in almost unending manner, but the author will have to stop somewhere due to shortage of space.

Conclusion

Digital scientists are steadily moving ahead with innovative and agile solutions built using Blockchain technology. Their objective is to handle multifarious business processes, which are complex, risks prone, cost and time inefficient when handled using legacy systems with avoidable human interventions. Through the above discourse an effort has been made to sense and appreciate the immensity of such work being done. Instances of success in application of DLT, which are gaining further momentum every day, are enabling the technology to climb up and find place at top three CEO's agenda in large and medium companies all around the world.

In a separate article further attempts will be made to understand digital transformation of day-to-day administration processes and delivery of services to citizens by governmental organisations and NGOs. Meanwhile the author's fervent appeal to all commercial organisations to please share the monetary benefits being derived through such digital transformation with all direct and indirect stakeholders for inclusive smile. MA

Webliography

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FORENSIC AUDIT: THE RELEVANT ISSUES

Abstract

Forensic Audit can be defined as an examination of an organization's financial and other associated records in order to trace out the evidence / proof against frauds committed which can be used in a court of law. Forensic audit, which is investigative in nature, requires in-depth study / analysis of the area under investigation and evidence identified which can be used in the court of law. Forensic Audit is a rigorous examination of financial and other related transactions and records, while proof is derived against the offence committed and can be used in the court of law. With the increasing trends in the corporate scams and scandals, the normal auditing practices are often proved to be limited in certain circumstances making the room for forensic auditing.

This Paper has been planned to study the various issues in forensic auditing in different corporate as well as non-corporate sectors and steps taken by the Government of India in curbing the fraud / scams.

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INTRODUCTION:

Forensic Audit is the examination of the financial and other related transactions and records of an organization in order to identify and to derive the evidence against frauds committed that can be used in the legal proceeding.

A Forensic Auditor conducts forensic audit and during the forensic audit, he/she applies his/her accounting knowledge, auditing concept and investigative skills etc as required while conducting the examination into the books of accounts and other associated records and documents & other activities of an individual or business establishment. It differs from financial audit. The financial audits are designed to detect material misstatements in the financial report of the company. It is also true that the frauds could have been detected by financial auditors. The Forensic Auditing is a specialized activity which provides a detail analysis suitable to be used in a court of law. Forensic Auditing is not merely confined to vouchers and books of accounts & profitability statements. Forensic Auditors are trained to look beyond these elements so as to investigate deeper and deeper into the financial crimes like frauds and embezzlements etc.

MEANING OF FORENSIC AUDITING:

Forensic Auditing is a specialized mode of auditing activities to be done by the financial auditor or such other professional with a specialized knowledge which is investigative in nature. It is done with an intention to resolve the dispute pending in the court or in any other decision-making tribunals.

There is no denying the fact that frauds as well as the white collar crimes are increasing day by day. For the purpose of detecting the frauds and financial crimes, the concept of Forensic auditing has come up in the corporate world. Sometimes, the Regulatory Authority fails to detect the scams. Due to the increasing cases of cyber-crimes and other frauds as well, the services of experts are required in the areas of forensic accounting and forensic auditing in order to take up investigative nature of work.

The task of Forensic Accountants is handled by the Chartered Accountants or Cost Accountants who are engaged primarily in dealing with financial audit or cost audit etc as required by the respective statute. But, the forensic audits are required by the various enforcement agencies or the companies or private individuals in order to assist in investigating the financial crime or scam etc.

In the Companies Act, 2013, the insertion of the following

sections is definitely a bold step:

1. Section 210: Investigation into the affairs of the company;
2. Section 211: Establishment of Serious Fraud Investigation Office (SFIO);
3. Section 212 : SFIO to investigate into the affairs of the company;
4. Section 213 : Investigation into the Company's affairs in other cases;

The formation of Serious Fraud Investigation Office (SFIO) under the Ministry of Corporate Affairs is the landmark creation for the Forensic Audit and to recognize the importance and advancement of the profession of Forensic Auditor in India and abroad.

It is important to mention here that there are various provisions related to Forensic auditors but it is not categorically mentioned about the Forensic accountants.

The Companies Act, 2013 has taken care of in fighting and preventing against the frauds & scams.

The following sections in the Companies Act, 2013 deserve worth mention:

i. Section 245 (1) (g) of the Companies Act, 2013 provides that such a number of member or members, depositor or depositors or any class of them, as the case may be, can sue to claim damages or compensations or demand any other suitable action from or against the company or its directors, auditors including the audit firm of the company, or any expert or advisor or consultant or any other person for the loss caused due to fraudulent, unlawful or wrongful act or omission, misleading statement or particulars made in the audit report or misleading statements made to the company or mismanagement of the resources of the company.

ii. Section 149 (12) of the Companies Act, 2013 provides that an Independent Director shall be held liable, only in respect of such acts of omission or commission by a company which had occurred with his knowledge, attributable through Board processes, and with his consent or connivance or where he had not acted diligently.

The forensic auditing involves the following activities:

In one Part:

a. Forensic audit is an in-depth investigation into the financial Affairs or such other activities of an entity that refers to the whole process of investigating a financial and other related issues,
b. Forensic audit is associated with investigations into alleged fraudulent activities;
c. It can also be engaged in case of non-fraud situations i.e. the settling of monetary disputes in relation to a business closure or against any insurance claims or such other claims.

In another Part:

Forensic Auditor may also be assigned to investigate such other issues. Collection of the evidence and related records during the investigation would be relevant in the event of a court case. Such issues included the following:

a. Motive / intention of the suspect to commit fraud,
b. Whether the fraud involved collusion between several suspects,
c. Any other physical evidence at the scene of the crime,
d. Anything available in the suspected documents,
e. Any attempts were made by the suspected to destroy/ to damage the documents / records during interviews and/or at the time of arrest.
f. Magnitude of the fraud committed ;
g. Affected persons due to the said fraud;
h. Extent of violation of statutory laws of the country due to the said fraud and quantum of revenue loss to the Government;

CAUSES FOR CONDUCTING FORENSIC AUDIT:

The causes for which forensic audit is being conducted which can broadly divided into three groups, i.e. (i) Corruption (ii) Fraud (iii) Misappropriation

CORRUPTION:

Corruption may take place in the form of Bribery, Extortion, Conflict of Interest etc.:

i. Bribery, means offering money for getting the things done or influencing a particular situation to be moved to someone's favour ;
ii. Extortion amounts to demanding money by one person from some other;
iii. Conflict of interest refers to use of one's influence for personal gains which are detrimental to the interest of the organization.

FRAUD:

In the Oxford dictionary, the fraud means a criminal deception ; use of false representations of Fact in order to gain an unjust advantage; a dishonest artifice or trick ; a person or thing not fulfilling what is claimed or expected of him/her or it. A fraud is an act of convincing someone to believe a particular fact to be true which, in fact, is not true. It is a deception to gain by another's loss, a kind of cheating with an intention to get an advantage.

Under Section 17 of the Indian Contract Act, 1872, 'fraud' means any of the following acts committed by a party to a contract or with his/her connivance , or by his/her agent, with an intent to deceive another party thereto or his/her agent or to induce him/her to enter into a contract :

1. The suggestion, as to a fact, of that which is not true, by one who does not believe it to be true;
2. The act of concealment of a fact by one having knowledge or belief thereof;
3. A promise made without any intention of performing it;
4. Any other act fitted to deceive;
5. Any such act or omission as the law specially declares to be fraudulent."

Fraud can be of various types as mentioned below:

1. Financial statement frauds; 2. Financial Institutions frauds; 3. Insurance frauds; 4. Internet / computer frauds; 5. Insolvency frauds; 6. Security frauds; 7. Money laundering frauds; 8. Tax evasion frauds; etc

MISREPRESENTATION:

It means false representation, false statement, incorrect assertion, intentional misstatement, misstatement of facts, untrue statement, deceptive statement , any manifestation of words or other conduct by one person to another that under the circumstances, amounts to an assertion and not in accordance with the facts.

Under "Section 18 of the Indian Contract Act, 1872, 'Misrepresentation' means and includes the following activities:

i. The positive assertion, in a manner not warranted by the information of the person making it of what is not true, though he/she believes it to be true;

ii. Any breach of duty which, without an intent to deceive , gains, an advantage to the person committing it , or any one claiming under him, by misleading another to his /her prejudice or to the prejudice of any one claiming under him;

iii. Causing innocently, a party to an agreement to make a mistake as the substance of the thing which is the subject of the agreement."

FRAUDS RECOGNIZED BY IPC. 1860:

The following are different types of frauds under IPC, 1860:

i. Impersonation: This means pretending to be another.

ii. Counterfeiting: This means the idea of an exact imitation without right to do so with an intention to deceive.

iii. Wrong weighing Measurement: This means violation of legal right to weighing or measuring.

iv. Criminal breach of trust: This means dishonestly misappropriate or convert to own use that honestly uses or disposes that property.

v. Cheating: This means deceiving, defrauding, swindling and the practice of deception.

vi. Dishonest dealing in Property: This means doing anything with an intention of causing wrongful gain to one or wrongful loss to another.

vii. Mischief: This means an evil conduct, harmful act with an intention to cause harm or destruction to others.

viii. Forgery: This means any false document or false records with an intention to cause damage to others.

ix. Falsification: This means falsely representing one to as another person for the purpose of deceiving someone.

x. Possessing stolen property: Possess by theft or extortion or robbery and criminally misappropriated by breach of trust.

xi. Concealment of fact: This refers to an act of refraining from disclosure or an act to prevent one from the discovery of something.

NECESSITY OF FORENSIC AUDIT:

The 'forensic auditing' refers to the specific procedures to be carried out in order to collect and to produce concrete evidence against fraud. Auditing techniques are used to identify and to collect the evidence that is required to establish and also to prove that the fraud is committed either (i) willfully; or (ii) with a malafide intention or (iii) for a personal gain/ benefit.

Evidence may also be collected in order to support the other related issues which would be relevant in the event of a court case.

During investigation of fraud, the areas need to be taken care of by forensic auditor include the following: (i) Conflict of Interest; (ii) Bribery; (iii) Extortion (iv) Corruption (v) Asset Misappropriation; (vi) Financial Statement Fraud (vii) Fabricated Documents; (viii) Security Manipulation; (ix) Ponzi Scheme (x) Reverse Merger Scheme.

PROCEDURE FOR A FORENSIC AUDIT INVESTIGATION:

Apart from sound educational background, a forensic auditor is required to have specialized training in order to build up special skill and knowledge so that he/she can understand the legal framework. He/she should have the knowledge of forensic audit techniques, too.

To conduct Forensic audit, following steps that need to be performed apart from regular audit procedures:

A. Planning the Investigation: The Forensic Auditor should plan the investigation with the following points in mind: (1) Identify the frauds, if any, being carrying out; (2) Time period for which this fraud has been committed in the organization; (3) How the fraud has been concealed so far; (4) Identify the fraudsters (5) Quantify the loss suffered; (6) Gather the relevant evidence that is admissible in the court; (7) Suggest measures that can prevent such frauds in future.

B. Collecting Evidence: For the purpose of collecting the evidence, the Forensic Auditor should diagnose the following: (1) First of all he/she should try analyze the type of the fraud committed; (2) Time length of the fraudulent activities; (3) The manner in which the fraud has been committed; (4) Adequacy of the evidence so as to prove the identity of the fraudster(s) in the court (5) Detect the technicalities of the fraud scheme. (6) Maintain a logical flow of the evidences (7) Quantify the amount of loss suffered; (8) Identify the parties affected; (9) Protect the original records and documents and all related evidences from being destroyed or damaged by the suspects.

Unless the logical flow of the evidence is maintained, the evidence can be challenged in court, or the court may refuse to accept the same and the entire process will be in vain.

COMMON TECHNIQUES USED FOR COLLECTING EVIDENCE IN

A FORENSIC AUDIT:

i. **Substantive Techniques:** These refer to reconciliation and reviewing the documents in order to collect evidence.

ii. **Analytical Procedures:** These procedures refer to comparing the trends over a certain time period or to get comparatives among the segments.

The knowledge in the following areas will help the forensic auditor to conduct investigation work in an effective manner:

i. Application of computer assisted audit techniques,

ii. Understanding the internal control systems and testing them so as to understand the loopholes through which the fraud had penetrated.

iii. Interviewing and observing the suspects for collecting sufficient evidence and make the fraudster admits his/her fraud.

iv. Examination and scrutiny of the available records and documents.

While doing this, the forensic auditors need to consider the following points:

a. The originality of the records collected,

b. Verification of signatures of the officials in the documents connected to the frauds

c. Verification of the contents in the documents collected during the investigation,

d. Analysis of the financial records and the documents submitted to various statutory authorities,

e. Examination and interrogation of various officials like Directors, Accountants, Auditors and other key managerial personnel along with their reports and opinions,

f. Examination of related offices, organizations as well as persons involved therein.

C. Preparation of Report: The preparation of report by forensic auditor requires a special acumen. For this purpose, the forensic auditor needs to organize the entire documents, examination, analysis of reports etc and keep the same in a logical sequence.

Unless the logical flow of the evidence is maintained, the evidence can be challenged in court, or the court may refuse to accept the same and the entire process will be in vain.

The report should satisfy the following characteristics:

i. The entire findings should be placed in a chapter-wise and logical manner;

ii. Investigation should be conducted on the basis of the findings;

iii. Evidence should be collected in a summarized form;

iv. The loopholes which caused the fraud should be mentioned;

v. Recommendations should be made for improving the internal control systems in order to prevent such frauds in future;

vi. At the end, the Report should be submitted to the client so that he/she can start legal proceedings against the fraudster.

D. Court Proceedings / Disciplinary Action: The following points deserve special attention here:

i. The Forensic Auditor needs to submit the report before the court and is also required to explain the evidence collected;

ii. They may be required to explain the complex Accounting issues in a simple language so that everyone can understand the same.

iii. Proceed to the Court for legal proceedings against suspected fraudster;

iv. The client may take departmental disciplinary action against the fraudster;

v. Devise precautionary systems in order to prevent such frauds in future.

vi. Record for future action.

CONCLUSION:

Forensic auditing is a very specialized type of auditing work. It requires highly skilled team members having sound knowledge & experience in various subjects like the relevant legal frame work, fraud auditing, investigative skills, collection of evidence as well as evaluation of the various records etc apart from Accounting and Auditing Techniques.

The Forensic Auditors must have specialized training in these matters so as to ensure that their credibility and professionalism are not undermined during the legal process.

The setting up of a Serious Fraud Investigation Office, under the Ministry of Corporate Affairs, Govt. of India is an appropriate step towards the advancement of the forensic audit profession in our country. Building up professional forensic auditors will definitely play the role of anti-virus which is the crying need of the hour. MA

Building up professional forensic auditors will definitely play the role of anti-virus which is the crying need of the hour.

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CSR ACTIVITIES IN INDIA- A STUDY WITH SPECIAL REFERENCE TO PGCIL AND NTPC

Abstract

Corporate Social Responsibility (CSR) has now been one of the most important mandatory areas of business because of the government intervention. The present study has examined the pattern of CSR spending and the CSR activities undertaken by the Indian corporates. It has been observed that more and more corporates are coming under the scope of CSR and the amount of money spending on CSR has also increased year after year for serving various sectors. A correlational analysis has revealed that there has been a significant difference in CSR spending pattern between the two companies. The study has suggested that a robust monitoring mechanism by way of regular reporting and measuring the progress of CSR activities can help to accomplish the major objectives of corporate social responsibility congruously.

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Introduction

The basic concept of CSR is rooted in the philosophical wisdom of East and West. Evidences have been established from the writings of (Muniapan.B,2014)[1], (Kautilya'sArthasastra, Shyamsastri.R,2019)[2], (Bowen.H.R,1953)[3], (William.C.Fredrick,1953)[4], (Friedman.M,1970)[5], (Dr. JojiValli,2015)[6] and many others. Shifting from the voluntary, missionary, philanthropic and unsystematic concept of CSR to a systematic, structured, strategic and mandatory concept for contributing towards the socio-economic and environmental causes of the society, CSR in India has now become an integral part of a responsible enterprise. The Companies Act,1913, Schedule-VII of Section 135 and time to time notifications by The Ministry of Corporate Affairs, Government of India mandated the provision of CSR fund where every company including its holding and subsidiary company having a net worth of Rupees 500 Crore or more or a turnover of Rupees 1000 Crore or more or a net profit of rupees 5 crore or more and a foreign company having its branch office or project office in India will have to spend 2% of their average net profit provided that they meet the criteria for three consecutive financial years.[7]

Objectives of this study

- To explore the spending pattern of CSR fund in India and to examine the sector-wise CSR activities of Indian corporates under both public and private sector.
- To analyse the CSR funding and CSR activities of Power Grid Corporation of India Limited (PGCIL) and National thermal power Corporation Limited (NTPC) and to make a comparative analysis between financial

positions and CSR spending of PGCIL and NTPC.

Methodology of the study

Basically it is an analytical study based on secondary data. The data and information have been procured from the various books, websites of mca.gov.in, csr.gov.in, ntpc.co.in, powergrid.com and from the annual reports and CSR reports of the selected companies viz. PGCIL and NTPC, the two top companies in the power sector, in terms of the total assets, profit of the year, reserve and surplus and market capitalisation. The study covers a period of ten years i.e, from 2010-11 to 2019-20. A correlational analysis (with the help of Pearson's Correlation Formula) has been done to establish and examine the degree of relationships of the selected parameters like, total assets, profit, reserve and surplus and CSR spending percentage of the selected companies.

CSR Spending Pattern in India [8]

Table-1
Pattern of CSR Expenditure in India (Company Number Wise)

Financial Year	Total Number of Companies Under CSR Ambit	Number of CSR Projects	Number of Zero Spent Companies	Number of Companies More Than Prescribed	Number of Companies Less Than Prescribed	Number of Companies Exactly As Prescribed	Total Number of CSR Contributing Listed Companies (%)	Total Number of CSR Contributing Unlisted Companies (%)
2014-15	16548	9365	10600	1701	3157	1090	1832(11%)	14716(89%)
2015-16	18291	18468	9102	3140	4713	1336.	1873(10%)	16418(90%)
2016-17	19546	23073	9328	3770	4601	1847	1967(10%)	17579(90%)
2017-18	21441	23833	12404	4285	3467	1285	2103(10%)	19383(90%)
2018-19	24902	30619	14673	5862	3701	666	2314(9%)	22588(91%)

In India, the number of organisations or companies coming under the ambit of CSR and the amount of money spending for CSR activities have increased in last 5 years. The cumulative spending over a period of 5 years through CSR project is Rs.71,277 crore through 1,05,358 projects in various sectors. Despite the fact, a large number of companies (14673) are not spending a single coin towards CSR activities. In India, companies spent their CSR fund based on their CSR activities and in some cases they spent their fund over their allocated budget on CSR activities. But it has been observed that some corporates have underutilized their CSR funds and this also happened in case of government run public sector

In India, companies spent their CSR fund based on their CSR activities and in some cases they spent their fund over their allocated budget on CSR activities.

(See Table-1). From the data of The Ministry of Heavy Industries and Public Enterprises,152 Central Public Sector Enterprises spent only Rs. 3442.38 crore out of their allocated CSR fund of rupees 6024.81 crore in the financial year 2017-18. In the financial year 2016-17, central public sector units spend only Rs.336.50 crore from their allocated CSR budget of Rs.4929.70 crore. Big companies, ONGC Power Finance and BPCL spent only 25%, 47.38%, 46%, 54% and 52% respectively from the allocated CSR fund in the financial year 2017-18. Contrary to the trend of underspending, there are also other major companies like, Coal India, NTPC, Oil India and Indian oil etc. companies overshot the allocated fund.

Sector-wise CSR Expenditure in India [9]

Table -2
Development Sector-Wise CSR Expenditure from FY 2014-2015 to 2018-2019

	DEVELOPMENT SECTORS	CSR Fund Spent FY 2014-15 (₹ cr.)	CSR Fund Spent FY 2015-16 (₹ cr.)	CSR Fund Spent FY 2016-17 (₹ cr.)	CSR Fund Spent FY 2017-18 (₹ cr.)	CSR Fund Spent FY 2018-19 (₹ cr.)
1.	Clean Ganga Fund	5.47	32.82	24.37	4.54	5.41
2.	Education	3188.09	4921.06	5,559.13	5.822.47	7,499.26
3.	Sports	57.61	140.11	180.32	227.75	295.1
4.	Environment	853.99	971.06	1,317.70	1.362.83	1.516.63
5.	Women Empowerment	189.92	342.67	468.74	499.65	517.88
6.	Health, Poverty,Water etc.	2,525.92	4633.46	3,658.14	3,316.25	4958.48

7.	Heritage Art Culture	117.37	119.16	305.57	284.05	189.89
8.	Armed Forces	9.5	37.48	60.95	43.33	119.71
9.	PMNRF	228.18	218.04	158.8	161.84	300.07
10.	Rural Development	1059.34	1,376.16	1,554.77	1,479.80	2,308.83
11.	Slum Area Development	101.14	14.09	52.49	35.1	50.23
12.	Swachh Bharat Kosh	113.86	325.52	184.06	213.67	93.8
13.	Any Other Fund	277.09	334.34	419.98	255.62	710.59
14.	NEC/Not Mentioned	1338.39	1,051.15	388.95	1.04	87.54
	Grand Total	**10065.93**	**14,517.21**	**14333.04**	**13708.02**	**18653.48**

From the table-2,it is clear that the companies have spent about 75% of the total CSR money in the following sectors or areas, like, i)Environmental Sustainability 9.5% ii)Rural Development 10.5% iii) Poverty, Hunger and Malnutrition and Healthcare 25% and iv)Education 30% either directly by the company or indirectly by the implementing partners and the remaining 25% of the total CSR money in as many as 23 different sectors ranging from art, sports women empowerment, water supply, animal welfare, senior citizen welfare etc.

Public-Private Spending on CSR

Table-3

Total CSR Fund Spent by Government Companies and Other than Government Companies

Financial Year	Total CSR Fund Spent (₹cr.)	CSR Fund Spent by Government Companies (₹ cr.)	CSR Fund Spent by Other than Government Companies (₹ cr.)
2014-15	10066	2817	7249
2015-16	14517	4214	10303
2016-17	14333	3295	11038
2017-18	13708	2554	11154
2018-19	18653	3836	14817

The average annual CSR budget of our Public Sector Unit is Rs.3000 crore and that of the Private Sector Units is Rs.12000 crore. This year, i.e, the year 2020-21 is an exceptional year because of the pandemic Covid-19 where both the public sector units and the private sector units donated to PM Cares Fund to the amount of Rs.2570 and Rs.2817 crore respectively as CSR because PM Cares Fund came under the ambit of CSR. The corporates have also spent money and taken other Covid relief measures particularly by the private corporates to the extent of Rs. 2511 crore so the total availability for this year for all other CSR activities is Rs.7147 crore out of Rs.15000 crore total CSR budget.

Power Grid Corporation of India Limited (PGCIL)

PGCIL is a ‘Maharatna’, Central Public Sector Enterprise and it is the largest electric power transmission utility in India. The Government of India’s holding is 53.37% and the balance 44.63% is in the hands of the public and it is also a dividend paying public sector utility since 1993 that is reflected in the last 10 years’ assets, reserve and surplus positions of the company (See Table-4). In the mission statement of PGCIL, it has been stated, “to align CSR and sustainability policy with the business policy so as to conduct business in a sustainable manner adhering to the principles of avoidance, minimization and mitigation dealing with environmental and social issues and to undertake community development projects of national and local importance in consultation with stakeholders”.

Table-4

Assets, Reserves and Surplus

Power Grid Corporation of India Limited.[10]

F.Y	Total Assets (₹cr.)	Reserve & Surplus (₹cr.)
2011	60033	16737
2012	74257	18858
2013	91316	21610
2014	113950	29228
2015	128742	32935
2016	178428	37502
2017	194679	44576
2018	212906	49183
2019	246473	53786
2020	255550	59208

In the financial year 2018-19, the expenditure on CSR of PGCIL based on the thrust areas are as follows: Sanitation (44%), Rural Development (17%), Skill Development (3%), Sports (1%) Environment and Sustainability (9%), Healthcare (15%), Protection of National Heritage, Art and Culture (1%) and others (5). In the year 2020 21, PGCIL contributed Rs.200 crore to PM Cares Fund. Apart from that it also provided ration and food items to 81000 beneficiaries worth of Rs.4.27 crore at more than 200 locations across the country. It has also provided assistance to hospitals for the purchase of materials needed to fight pandemic Covid-19 in the year 2020-21.

Table-5 Profit and Spending Pattern Power Grid Corporation of India Limited [11]					
F.Y	PROFIT 0F THE YEAR(₹ cr.)	3 yrs.' AVERAGE NET PROFIT* ANP*(₹ cr.)	ACTUAL CSR SPENT(₹ cr.)	2% of ANP* EXPECTED CSR (₹ cr.)	CSR SPENT % of ANP*
2011	2697	2308	15.58	46.16	0.68
2012	3255	2573	24.93	51.46	0.97
2013	4235	2891	21.75	57.82	0.75
2014	4497	3396	27.05	67.92	0.8
2015	4979	3996	47.42	79.92	1.19
2016	6027	4570	115.78	91.4	2.53
2017	7520	5168	147.27	103.36	2.85
2018	8239	6175	157.99	123.5	2.56
2019	9939	7262	195.73	145.24	2.7
2020	10811	8566	346.21	171.32	4.04

The CSR policy of PGCIL is based on the guidelines of Development of Public Enterprises and the Companies Act, 2013. The key CSR activities include rural development, skill development, health, and environmental sustainability. PGCIL was recognized for its excellence and received a number of CSR Awards and medals like, Gold Medal for CSR from Indian Red Cross Society, Gold Peacock Award, Dainik Jagaran CSR Award in PSU category etc.

NTPC Limited, Formerly National thermal power Corporation Limited (NTPC)

NTPC is the largest power generating utility established in 1975 and its vision and mission are to be the world's leading power company and energising India's growth respectively. It became a 'Maharatna' company in 2010. In order to strengthen its core business i.e., power generation, it diversified itself into the field of consultancy, power trading, training of power professionals, rural electrification and coal mining etc. Presently Government of India's holding in NTPC is 54.14% and the rest is held by the institutional investors, banks and public.

Table-6 Assets Reserves and Surplus National Thermal Power Corporation Limited [12]		
F.Y	TOTAL ASSETS (₹ cr.)	RESERVE & SURPLUS (₹ cr.)
2011	125739	59647
2012	140838	65046
2013	161116	72142
2014	179554	77570
2015	197084	73412
2016	215138	83048
2017	236577	87986
2018	260193	93532
2019	290877	97514
2020	327667	103675

Since inception, NTPC has framed and initiated a dynamic Corporate Social Responsibility - Community Development (CSR-CD) policy for doing CSR activities and has believed that CSR is an integral part of the organization for improving efficiency and growth as well as for enhancing investors' confidence. The corporate governance philosophy has been scripted "As good corporate citizen, the company is committed to sound corporate practices based on conscience, openness, fairness, professionalism and accountability in building confidence of its various stakeholders in it thereby paving the way for its long-term success". It has spent more than the prescribed CSR budget in the last four years.

Table-7 Profit and CSR Spending Pattern National Thermal Power Corporation Limited [13]					
F.Y	PROFIT OF THE YEAR (₹ cr.)	3Yrs.'AVERAGE NET PROFIT* ANP*(₹ cr.)	ACTUAL CSR SPENT (₹ cr.)	2% of ANP* EXPECTED CSR (₹ cr.)	CSR SPENT % of ANP*
2011	9102	8115	72.21	162.3	0.89
2012	9224	8677	49.44	173.54	56.9

2013	12619	9019	79.42	180.38	0.88
2014	10975	10315	128.35	206.3	1.24
2015	10291	10939	205.18	218.78	1.88
2016	10700	11295	491.8	225.9	4.35
2017	9385	10655	277.81	213.1	2.61
2018	10343	10338	241.54	206.76	2.34
2019	11750	10143	285.46	202.86	2.81
2020	10113	10493	257.5*	209.86	2.45

The expenditure on CSR of NTPC based on the thrust areas are as follows: environment sustainability (40 6.25%), rural development (24.5 6%)education and skill development (12.19%), art and culture (14.9%), sports (5 5%), empowerment of women and other economic backward sectors (1.26 %), eradicating hunger and poverty, healthcare and sanitation (0.29%). Besides, NTPC also contributed Rs.257.50 to PM Cares Fund in the fight against covid-19 pandemic. NTPC also provided 1200 PP kits, 120000 surgical masks, 33000 gloves,5000 aprons,8000 shoe covers and 535 litres of hand sanitizers to all NTPC centres to prevent transmission of the contagion. NTPC is the first public utility in our country to create the comprehensive NTPC Environment Policy and Environment Management System. CSR activities of NTPC span a large and wide area covering 19 states. CSR activities are the part and parcel of NTPC's business policy for the greater good of social welfare on the one hand and the performance growth of the business on the other.

Main findings of the study

PGCIL and NTPC-A Correlational Analysis

Table-8
Value of Correlation Coefficients of Various Items of PGCIL and NTPC

SL. No.	Correlation Between the Following Items	Value of r (correlation Coefficient)	Remarks
1	Total Assets of PGCIL & NTPC	0.99	Very Strong Correlation
2	Reserve & Surplus of PGCIL % NTPC	0.98	Very Strong Correlation
3	Profit of the Year of PGCIL & NTPC	0.18	Very Weak Correlation
4	3 Yrs.' ANP of PGCIL & NTPC	0.56	Moderate Correlation
5	CSR (Total Amount Spent) of PGCIL & NTPC	0.67	Moderately Strong Correlation
6	2% Expected CSR of PGCIL & NTPC	0.56	Moderate Correlation
7	CSR(% of Profit Spent) of PGCIL & NTPC	-0.24	Weak Negative Correlation
8	Total Assets of NTPC & CSR Spent	0.61	Moderately Strong Correlation
9	Reserve & Surplus of NTPC & CSR Spent	0.62	Moderately Strong Correlation
10	Profit of the Year of NTPC & CSR Spent	0.1	Very Weak Correlation
11	Total Assets of PGCIL & CSR Spent	0.98	Very Strong Correlation
12	Reserve & Surplus of PGCIL & CSR Spent	0.97	Very Strong Correlation
13	Profit of the Year of PGCIL & CSR Spent	0.97	Very High Correlation
14	Total Assets and Reserve & Surplus of NTPC	0.98	Very Strong Correlation
15	Total Assets and Reserve & Surplus of PGCIL	0.99	Very Strong Correlation
16	Total Assets and Profit of the Year of NTPC	0.17	Very Weak Correlation
17	Total Assets and Profit of the Year of PGCIL	0.98	Very Strong Correlation

From the table-8, it is clear that the total assets, reserve and surplus positions of these two selected companies are similar and have a very strong correlation between the two companies. A very weak relationship has been found between the profit of the year of PGCIL and NTPC. CSR spending relationship of these two companies are moderately correlated but between the percentage of profit spent of PGCIL and NTPC has been found negative(r=-0.24).The degree of relationship between CSR spent and profit of NTPC has shown a very low(r=0.1) but that of the PGCIL has shown a very high(r=0.97).In terms of CSR spending attitude PGCIL has been found in a better position than that of NTPC though the financial position in terms of total assets, total profit, total reserve and surplus of NTPC showed a higher volume than that of PGCIL.

During the last 10 years total assets, reserve and surplus of PGCIL has increased from Rs.60033 crore and Rs.16737 crore to Rs.255550 crore and Rs.59208 crore respectively. Similarly, total assets, reserve and surplus of NTPC has increased from Rs.125739 crore and Rs.59647 crore to Rs.327667 crore and Rs.103675 crore respectively. That means, assets, reserve and surplus of PGCIL has increased 4 times and that of NTPC that been doubled in the last ten years.

Profit of PGCIL and NTPC has jumped up from Rs.2697 crore to Rs.10811 crore and Rs.9102 crore to Rs.10113 crore respectively. Actual CSR spent of PGCIL and NTPC has increased from Rs.2308 crore to Rs.8566 crore and from Rs.72.21 crore to Rs.257.5 crore respectively. During the last five years both the companies have spent more than the statutory requirement of spending of 2% of average net profit for CSR activities.

Suggestions and Conclusion

The government should take necessary steps to motivate the corporates to spend more towards CSR activities and efforts to be made to reduce the number of zero-spent companies.

Between PGCIL and NTPC, the former is smaller than the NTPC in terms of employee number, net sales and total assets. But, earning per share, net profit and profit-earning ratio of PGCIL are better than that of NTPC. Employing almost fifty percent less manpower than NTPC, PGCIL's net profit has crossed the net profit of NTPC and the earning per share of PGCIL is almost double than that of NTPC. So, the financial efficiency of PGCIL is better than that of the NTPC. NTPC may spend a higher amount towards CSR activities.

As most of the CSR activities are implemented by the partners and the corporates are highly dependent on them, it is very difficult to implement and execute the CSR projects. Another fact has also come out that is the involvement and limited monitoring over the implementation of CSR projects become a challenge to make the CSR programmes successful. Threats of misrepresentation, fraud and unethical practices by the third party implementing partners or vendors become a reality and it is the daunting task of the corporates to address these issues. Through a modern and robust monitoring mechanism by way of regular reporting, measuring impacts

Threats of misrepresentation, fraud and unethical practices by the third party implementing partners or vendors become a reality and it is the daunting task of the corporates to address these issues.

on CSR projects and developing the soundness of CSR project committees, the effectiveness of CSR spending can be attained and the broad objectives of CSR can be achieved. MA

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PIVOTAL ROLE OF BUREAUCRACY IN GDP GROWTH

Abstract

The Central Government has proclaimed that our economy would be a $5 Trillion economy by 2024, achievement of which would require an annual growth rate of 12 %. Besides, the willpower of political leadership, the Indian Bureaucracy plays the pivotal role in formulation and implementation of government policies. For creation of a robust economy, the article highlights the importance of requirement of professional knowledge and acumen of the officers of Indian Civil Services, specially, for those Govt. departments/ organizations which require specialized knowledge. A review is therefore, required at the Govt. level to ensure the induction of officers with requisite professional/ technical skills in the Indian Civil Services.

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David Lloyd George, the former British Prime Minister, quoted about Indian Civil Service: " ICS is the steel frame on which the whole structure of our government and our administration in India rests." The Indian Civil Service, originally known as the Imperial Civil Service, was the elite higher civil service of the British Empire during the British rule in India. In the post independence era also, the civil service is considered as a hallmark of governance in India.

There is an All India Civil Service recruited on an All India basis with common qualification and uniform scale of pay and members of which alone could be appointed to the strategic posts throught the Union. The Civil Servants are permanent bureaucracy in India forming an un-separable part of the executive branch of the Govt. of India, thus providing continuity to the administration. They hold key and strategic positions in the Union Govt., State Govts. and PSUs. The Civil Services, therefore, represent the essential spirit of our nation.

Our Prime Minister has targeted India to be a $5 trillion economy by 2024. India is currently, a less than $3 trillion economy, would require nominal growth in dollar terms of over 12% a year which is quite challenging. This is a great ambition and a strong leader like Shri Narendra Modi has rightly aimed it in view of higher expectations of people of India from this Govt. For this to achieve, the policy makers have to review the entire system from the stage of the process of policy formulation itself. The bureaucracy plays a pivotal role in all type of policy formulation and equally responsible for its implementation. The million dollar question is whether the present set up of our bureaucracy is strong enough to give boost to required accelerated growth rate.

Facing an All India competition, the selected candidates in civil services are no doubt superb but it can not be denied that they are generalists and may not be equipped with the specialized/ professional knowledge to face the increased technical/ financial/ economic complications. The eligible qualification of combined civil services examination is only a degree (in any discipline) of any university incorporated by an Act of Central or State legislature. Our bureaucracy have always arisen to tackle any type of situation of troubled times and problems relating to maintenance of law and order. But the desired results for economic growth could not be achieved because of generalists' centric administrative system. How, a person can be master of all subject matters?

Problem is more in Govt. departments/ organizations where in-depth professional expertise/ technical knowledge is required. Imagine the difficulties being faced in grasping the subject by an Arts graduate with history/ geography as core subjects selected in Indian Revenue Service (Excise & Customs) or (Income Tax). Will it not be better if a candidate possessing the qualification of CA/ CMA is selected in as IRS (Income tax) ? A Civil Servant possessing an MBA degree in Finance from IIM (in place of a person who is P.G. in English literature)may prove better CMD of a public sector financial institution. General public will also be at ease in explaining and pleading for their justified causes in front of dealing Govt. officers having in-depth knowledge of the subject matter.

It is ironical that most of the revolutionary changes in the country in the past were effected by legendry scientists/ technocrats/ professionals only and not by bureaucrats, examples of which are Dr.A.P.J.Abul Kalam for missile development, Vikram Sarabhai for space technology, Verghese Kurien for white revolution and Sam Pitroda for I.T. revolution.

The Union Public Service Commission (UPSC) presently conducts the combined Indian Civil Services Exam every year for 19 no. of group 'A' services and 5 no. of group 'B' services. It is observed that barring a few, almost all the group 'A' civil services require some kind of professional/ specialized knowledge whereas the UPSC prescribes for eligibility, only a degree from a recognized university (in any discipline) for all the civil services. Under mentioned civil services require specialized/ professional knowledge of finance, accounts, commerce, technical, HR or other disciplines in place of general degree:

1	Indian Revenue Service (Excise & Customs)
2	Indian Revenue Service (Income Tax)
3	Indian Audit & Accounts Service (IAAS)
4	Indian P&T Accounts & Finance Service
5	Indian Defense Accounts Service
6	Indian Civil Accounts Service
7	Indian Railway Accounts Service
8	Indian Trade Service
9	Indian Ordnance Factories Service
10	Indian Corporate Law Service
11	Indian Information Service
12	Indian Railway Personnel Service
13	Indian Railway Traffic Service

Moreover, as far as policy making is concerned in the Govt. departments, it is entirely in the hands of IAS officers (mostly generalists or not having related professional qualification) who are always posted on higher and strategic posts as Secretaries/ Principal Secretaries in all the Govt. departments, whether it is Finance or Commerce or Non-renewable Energy or Science & technology. Control of all Public Sector Undertakings, Banks, Public Financial Institutions, Securities Exchange Board, autonomous bodies , commissions etc. is also directly or indirectly lies in the hands of IAS officers. The similar system is also adopted by the State governments.

To have an IAS at the top in PSU is to stifle the rightful ambition of growth of those who have worked throught the career in that organization. It also means that generalist would always be superior to specialists. One of the reasons for the public sector not competing with the private sector is also the difference of professionalism in management. Steps have been taken to promote professionalism at lower or middle level of Govt. departments/ organizations to some extent but there is almost no change in the previous system at the top level.

The bureaucracy plays a pivotal role in all types of policy formulation and equally responsible for its implementation. The million dollar question is whether the present set up of our bureaucracy is strong enough to give boost to the required accelerated growth rate.

Presently, the Indian economy is facing multifold challenges for which the policy makers and decision makers have to remain well equipped with the required technical/ professional knowledge. For attracting more and more foreign and domestic investment, there should be an environment of ease of doing business and world class infrastructure. Besides, there is a herculean task of improvement of Govt. revenue to cater the increasing developmental needs.

Present scenario is highly complex and there are chances of tax evasion by way of frauds and malpractices. Tax authorities are presently equipped with limited specialized/professional knowledge and are following traditional tax collection strategies which are time consuming and tedious. The bureaucrats, dealing in such departments, therefore, require to have thorough knowledge of macro a & micro level economics, current domestic as well as international business practices, commercial & business laws, accounting and auditing systems, strategic financial management, techniques of capital investment decisions, cost reduction & value engineering techniques, budgetary control system, management information system, artificial intelligence, forensic audit, fraud risk management, data mining techniques etc.

It appears that the Govt. has started thinking in that direction. To promote domain expertise, the Govt. of India has started some recruitments of experienced professional persons directly on the post of Joint Secretary on lateral entry basis. In addition to common Civil Services exam, UPSC is also conducting recruitment of some group 'A' services requiring specialized/ technical qualification such as Central Engineering Services, Cost Accounts Service, Economic Service etc. But these changes are merely a drop in the ocean and require revolutionary changes all around.

The generalists may be allowed to enter the civil services related to maintenance of law & order and administration or where there is no requirement of specialized knowledge. The government departments which require specialized/ professional skills should be manned with the concerned skill from top to the bottom. The professional / technical degree provides wings to the innovative and result oriented thinking of officers. When the top brass also possesses the concerned professional skill, it works as a stimulator and moral booster to the subordinate officers/ staff. In the present set up it is observed that in most of the Govt. departments, junior officers are having enough requisite skills/ professionalism. Their enthusiasm and efficiency will be doubled if their bosses sitting at the top are also equipped with much higher level technical / professional skills.

The Govt. may assign this important task of reviewing the entire system of Indian Civil Services to a group of experts to bring requisite professionalism and expertise up to the top level in every Govt. department. The present system of common civil services requiring a degree in any discipline may be dispensed with. Separate civil services may be introduced for specific nature of work for a particular sector with mandatory requirement of specialization/ professional knowledge. Officers of each civil service may be allowed to grow upto the top level in that department, unlike the present system where the topmost and strategic posts in every department/ organization are held only by IAS officers.

To promote domain expertise, the Govt. of India has started some recruitments of experienced professional persons directly on the post of Joint Secretary on lateral entry basis.

Separate civil services with requisite professional skills may also be organized for PSUs, Public Sector Banks, Financial Services, Stock Exchanges etc. Like wise to promote education, health services, science & technology in the country, separate services are required for such sectors. To inculcate the latest personnel/ human resources techniques and incessant training programs, separate HR civil service may be needed. To formulate and effectively implement more customized policies for rural development, separate civil service may be required with officers having specialization in agriculture, dairy farming, veterinary science, village & small scale industries and having some kind of rural background.

In today's scenario there is one more need for bringing the aspirations of democratically elected government in reality for giving the constitutional shape to a Team of Experts to be selected by the ruling party from amongst the available renowned sector experts within the country and NRIs abroad as per needs to coordinate between the government and bureaucracy. Whenever, there is a change in the Govt., there may also be change in the Team of Experts so that promises made to public by the ruling party in the election manifesto can be implemented effectively.

Much water has flown through Ganges since independence. In the initial years of independence there was dearth of highly educated persons and even a graduate degree was considered rare. But the scenario is altogether changed now. We have many world class educational institutions and abundant number of youth possessing requisite expertise and professional/ technical knowledge. Brain power of the country brings laurels from all over the world. The pay scales now in Govt. Sector are also quite lucrative. The government may utilize the technical/ professional wisdom of the country in nation building by bringing requisite changes in the system of Indian Civil Services. MA

At the Helm

Our heartiest congratulations to **CMA R M Bhadang** being conferred the position of Director (Finance) of Konkan Railway Corporation Limited (KRCL) – Schedule A Public Sector Undertaking, under Ministry of Railway, Govt of India. Earlier he has served as General Manager (F&A) & Chief Financial Officer in the Gujarat State Electricity Corporation Limited (GSECL). Mr. R M Bhadang is an experienced Finance Manager. He has hands-on skills in negotiation, power industry, project management, risk management and construction industry. He is a strong finance professional with a Bachelor's degree focused in Civil Engineering from LD Engineering College, Ahmedabad. He is a fellow member of The Institute of Cost Accountants of India and The Institute of Company Secretaries of India. He is also an MBA in Finance from Indira Gandhi National Open University (IGNOU).

We wish CMA RM Bhadang the very best for all his future endeavours.

ROLE AND FUNCTIONS OF INTEGRATED MATERIAL MANAGEMENT IN PUBLIC SECTOR UNDERTAKINGS

Abstract

Indian Public sector undertakings have significantly contributed to the Economic development of the country. However challenges related to Productivity and Material management pose great barriers to their growth trajectories. In this paper attempt is made to give a glance about the activities involved in the procurement of materials with an understanding of responsibilities and functions of Planning, Purchase and Stores. Various steps involved in Purchase process were highlighted.

Material forecast is an input to the Company's Budget, Purchase of materials will have impact on the cost of the Product, taken as a whole the Material Management activities will have significant importance on the performance of the Industry. Enterprise resource Planning solutions and Data analytics are scalable enough to create a technology driven environment for material management in the PSU's. To achieve competitive advantage PSU's need to leverage the emerging technologies and best practices in material management.

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"Temples of modern India" was the term coined for Public Sector Undertakings by India's first Prime Minister Jawahar Lal Nehru while starting the construction of the Bhakra Nangal Dam In 1954 .

Industrial Policy Resolution announced in 1948 laid the strategy of industrial development. Subsequently, the Planning Commission was formed in March 1950 and the Industrial (Development and Regulation) Act was enacted in 1951 with the objective of empowering the government to take necessary steps to regulate industrial development.

India's second five year plan (1956–60) and the Industrial Policy Resolution of 1956 emphasized the development of public sector enterprises. Nehru's vision of industrialization was carried forward by Dr. V. Krishnamurthy known as the "Father of Public sector undertakings in India".

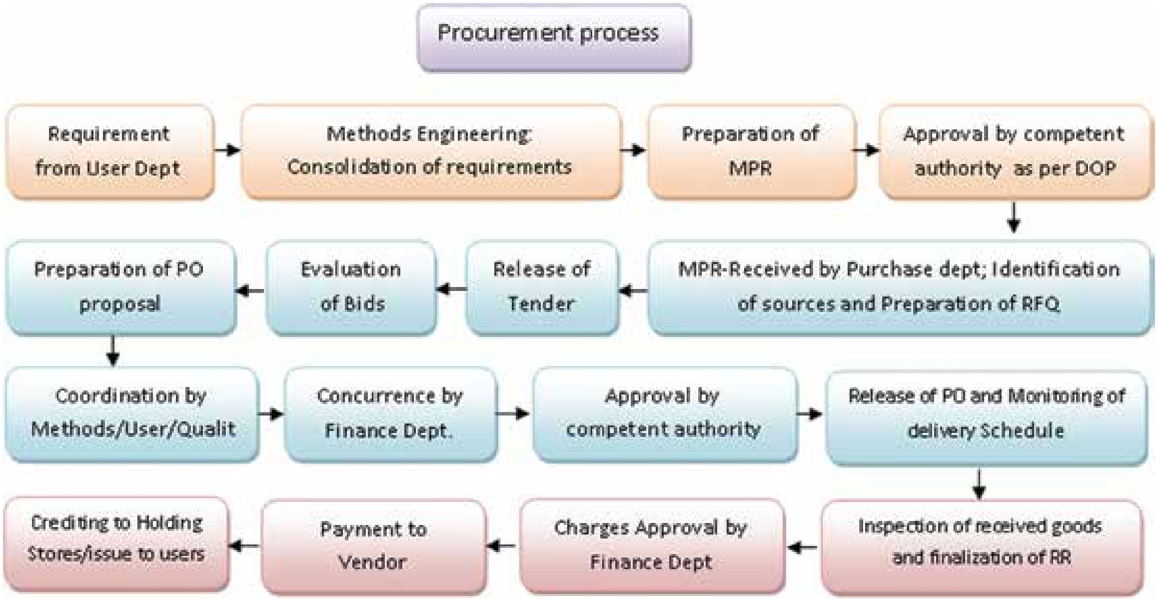
It was in 1948 that India got its first PSU in the form of ITI (Indian Telephone Industries Ltd). Over the years, the number and significance of PSUs grew enormously. In the first Five-Year Plan, there were just five central PSUs. By 1980, the number had grown to 163. These have grown to nearly 348 CPSEs (central public sector enterprises) in total. These enterprises represented a total investment of about Rs. 16.41 trillion as on 31st March, 2019. The total paid up capital as on 31 March, 2019 stood at about Rs. 2.76 trillion. The major consideration for the setting up of PSUs, was to accelerate the growth of core sectors of the economy; to serve the equipment needs of strategically important sectors, and to generate employment and income.

Integrated Material Management: Materials Management as a function is responsible for the co-ordination of planning, Sourcing, Purchasing; Moving; Storing and Controlling materials in an optimum manner so as to provide a pre-decided service to the customer at a minimum cost.

If the above functions of Materials Management are separately handled a conflict of interests occurs and there is a need to balance the conflicting objective from a total organization point of view so as to achieve optimum results for the organization. Integrated materials management functions which bring together conflicting and yet inter-related functions of Materials Management.

Procurement Management In Public Sector Procurement in the public sector entails streamlining processes, reducing the prices and costs of raw material and finding better supply sources. This function of reducing the bottom line is placed in the docket of high executives in the public sector. The executive board is responsible with handling procurement functions in the public sector.

Properly managing all **procurement** activities not only keeps business operations running smoothly; it also saves money, time, and resources. **Procurement** management ensures that all items and services are properly acquired so that projects and **processes** can proceed efficiently and successfully.



Methods Engineering:

Based on the annual production tasks, production engineering prepares the list of required material for accomplishment of tasks by checking with inventory available in the stores. The requirement is analyzed and categorized into Raw material/ Standard Parts/Bought out Items.

The list of Standard parts, Bought out items and raw material will be sent to Methods Engineering. Methods Engineering consolidates the request from production engineering along with future forecast tasks, rejection allowance and consumption pattern and prepares the final requirement of parts /materials. This final requirement is sent to Material Planning to initiate the Procurement action.

In case of Design & Development activities, respective design groups prepare the Bill of materials required for developmental activities and advices methods Engineering to project the requirement for procurement.

Material Planning:

After receipt of the requirement, Material Planning does the stock verification and Goods in transit and prepares the final requirement. Accordingly, Material Planning initiates the Material Purchase Request (MPR).

Enterprise resource Planning solutions and Data analytics are scalable enough to create a technology driven environment for material management in the PSU's.

The Preparation of MPR involves below activities.

- Checks for correctness of the part number, Alternate part number if any —To ensure that required part numbers are as per the standards/specifications available in the production ranges of suppliers. Also check for alternate part numbers if any available to get adequate response from vendors.
- The sources of supplies i.e., Original Equipment Manufacturer (OEM)/Distributor, Sources suggested by user—Identification of authorized distributors/OEM's to ensure the genuine sources are contacted during procurement. Sources suggested by user are to be verified for credentials. Sources recommended by customer are nominated source i.e., single source. Proprietary source where equivalent source is not available and there exists only one manufacturer.
- Preparation of Material adequacy statements - This statement reflects the final requirement of the by considering all the materials in stock/ Transit etc.

Material to be purchased: Total requirement – Material in stock – Material in Transit

- Type of Tendering depending on the nature of materials and previous procurement history. – *Open Tender*, where all vendors including non registered vendors are free to participate in the Bidding. *Limited Tendering* where likely and suitable sources are addressed. *Single Tender/Proprietary* where only one source is approached. *Spot Tendering* to meet the emergent requirements.
- Delivery schedule, determined based on the time line requirement of part to meet the Tasks. This is one of the criteria in bid evaluation to select the supplier with less lead time.
- Certificates/Documents required along with supply to avoid Counterfeit parts - Documents like Certificate of Conformance, Certificate of Country of origin , material composition certificates are essential to ensure the quality standards /Custom clearances of the supplies.
- Warranty Certificate- An undertaking, either expressed or implied that a certain fact regarding the subject-matter of a contract is presently true or will be true.
- Type approval or Certificate of Conformity required- Approval given by certifying authorities to any specific supplier for a specific product after evaluation and certification.
- Obsolescence Management. – To check for the life cycle of the product and ensure outdated materials/parts are not procured.

After considering all the above, estimate is prepared by considering Previous PO/ User estimate/Budgetary quote. The MPR is circulated for co-ordination to User/Quality/Methods/ Finance and approving authority as per Delegation of Powers (DOP). The approved MPR will be sent to Purchase department for procurement action.

Material planning also performs

1. Authorization for issue of Materials to users.
2. Inventory control
3. Codification of Materials
4. Standardization of specifications
5. Stock verification

Purchase: Function of Purchase department is to procure products and services as per the required specifications from approved reliable sources at economical price within the time schedule to support production plan requirements

Purchase department receives the MPR from Material Planning and initiates the preparation of Request for Quotation (RFQ).

The following activities are carried out by Purchase

TILL PLACEMENT OF ORDER:

- Determine the type of bid, mode of tendering and inclusion of additional probable sources of supply, if required.
- Preparation of terms and conditions of tender depending upon the nature of requirement
- Hosting the tender online in e-portal/web portal/GeM Portal (or) floating the tender manually
- Providing the clarifications to bidders on the tender, if any. Also, arranging pre-bid meeting with interested bidders, wherever applicable.
- Follow-up with bidders to ensure adequate competitive bids.
- Opening the tenders after bid due date & time and scrutiny of bids received.
- Forwarding the qualified bids to User Dept for technical evaluation and obtaining the clarifications from bidders on their quotations, if sought by technical evaluation committee/ user dept to evaluate the bid.
- Identification of lowest bid (L1 offer) by preparing comparative statement of prices of technically qualified bidders.
- Preparation of price justification statement (comparison of L1 price with previous procurement prices / engineering estimate/ MPR estimate) to check price reasonability.
- Obtaining approval for holding price negotiation with L1 bidder /single offer received in response to limited/open tender/Single or proprietary vendor, wherever the price quoted appears to be on higher side / unreasonable.
- Holding negotiation with L1 bidder and achieve reduction in price and improvement in commercial terms and conditions.
- Preparation of PNC Recommendation and obtaining the approval from PNC Chairman.
- Obtaining approval for placement of Purchase Order.

POST PLACEMENT OF ORDER:

- Ensuring order acknowledgement from Supplier with confirmed delivery schedule.
- Obtaining Bank Guarantees/ Security Deposits from Supplier, wherever PO called for and timely return of the same to Supplier after completion of obligations as per PO terms.
- Issuing amendment to purchase order, if required viz. for altering the quantity, terms of tender, extension of delivery schedule etc., after obtaining the necessary approval.
- In case of imports, making available the following documents:
  a. End User Certificate to Seller (for obtaining export license from their Government)
  b. Letter of Credit (if the payment terms is letter of credit)
  c. DGCA Permit to freight forwarder (for transporting dangerous goods)
  d. Duty Exemption Certificate to Customs House Agent (CHA), wherever applicable.
  e. GST Concessional Certificates and e-way bill for local supplies, wherever applicable.
- Follow-up with Suppliers for timely supplies as per PO schedules.
- Providing necessary documents

to CHA for customs clearance of goods (in case of imports) at destination airport / seaport and making payment of Customs Duty after filing Bill of Entry.

- Ensuring installation and commissioning of equipments/ instruments/machinery/software by Sellers.
- Obtaining the quality documents and shipping documents that are not accompanied with the supplies and provide it to Quality Inspection.
- Ensuring charges approval of accepted stores by Finance Dept.
- Timely payment to Suppliers as per PO terms & schedule based on the quantity/portion of work accepted.

MISCELLANEOUS:

- Vendor registration after verifying all the credentials of interested bidders.
- Maintaining Vendor directory by carrying out 'vendor rating' periodically and banning/ removing the unfit vendors.
- Imprest / petty purchase to meet emergent needs of production.
- Salvage disposal by e-auction
- Finalisation of required rate contracts/ Long Term Agreements for recurring items (sweets/ uniform/jerkin etc.), regular stock items (Aviation Turbine Fuel), transit insurance agreement etc.
- Maintaining the procurement details/data as per the formats prescribed by various statutory bodies.

In the whole process the Purchase dept will ensure to minimize the Turnaround time for conversion of MPR to Stores for timely accomplishment of Production tasks.

Stores:

Store is an important part of material management since it is a place that keeps the materials in a way by which the materials are well accounted for, are maintained safe, and are available at the time of requirement. Storage is an essential and most vital part of the economic cycle and store management is a specialized function, which can contribute significantly to the overall efficiency and effectiveness of the material management.

Receiving: To receive the incoming materials from various ordered sources. Ensure the materials are cleared at Customs depart by coordinating with Tax authorities (if materials are imported). Check for damages and shortages of received materials. Preparation of Receiving report and offering for Quality checks as per the Purchase order. After clearance from Quality, materials to be received into specified locations with proper identification and relevant documents are sent to Purchase department.

Custody/ issuance to Users- Store keeping doesn't add any value to the materials, adds only cost. Materials to be stored in such a way that the total cost of maintaining materials remain optimum. Ensure all storage and material handling facilities are in proper order. Ensuring good housekeeping and cleanliness is in storage space. Checking, counting and tallying of materials before issue. Ensure correct documentation of material issues and receipts. Periodical stock verification will be carried out. Monitoring of shelf life items by FIFO.

Shipping: The process of dispatching the Completed sub-assemblies/ assemblies to other divisions/ customer places. Proper storage and Packaging will be done to avoid transit damages. Ensure Insurance coverage for transport of Goods.

Stores does the Close communication with purchase for order placement, receipt of materials, rejections, shortages, breakages, theft and loss of materials, if any. Also information will be sent with regard to slow or non moving stock, obsolete or surplus stock, scrap, etc.

Apart from above, in the long drawn process of preserving the materials till its use, some materials might get obsolete and unserviceable and may require removal from stores for clearing space for other incoming goods. This activity is known as disposal of materials for which auction etc is done. Stores department identifies such type of materials and disposes as per the guidelines.

Public Sector Undertakings Caught between stringent regulations and technological obsolescence, need to adopt innovative ways of analyzing the data and tracking the business performance parameters.

Conclusion:

Public Sector Undertakings Caught between stringent regulations and technological obsolescence, need to adopt innovative ways of analyzing the data and tracking the business performance parameters. Enterprise resource Planning solutions are to be developed for information sharing with spotlight on Time sensitivity. This will also aid to increase the operational efficiency in the procurement process.

Standardization of Procurement processes across the divisions of a Public Sector Undertaking will facilitate for better material management practices and reduction of inventory.

In order to achieve cost efficiency and increase effectiveness, the PSUs can review their supply chain in order to seek solutions for eliminating costs. The first step was to reduce the total number of suppliers as dealing with a large number of suppliers was creating additional costs. Second one is to introduce the concept of vendor managed inventory. According to this concept the OEM will outsource C- class products to the suppliers. These products would not only be manufactured by the selected suppliers but these suppliers would keep these products in their storage unless the OEM requests for delivery. This reduces inventory holding costs for OEMs

By using Data Analytics, Data from E-procurement for delivery schedules and price variations, performance of items can be analyzed for giving inputs to the Management for better decision making. These data analytics will also help to price and supplier behavior forecasting, supplier performance monitoring, vendor rationalization and standardization. MA

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IS THERE ANY NEED FOR CLIMATE CHANGE EMERGENCY?

Abstract

In the present 21st Century; the globe has been facing three biggest and most critical challenges [Climate change; nuclear proliferation; and deterioration of democracy]. Therefore; Climate change has been one of the most chronic problems across the world; affecting human beings in one form or the other. It is true to say that Climate Change has brought the globe to its knees as it has created unprecedented effects on structure and nature of the globe. For the first time in the annals that; the United Nations; in its 75th General Assembly [virtual mode] has taken the issue of climate change seriously. Some where it is further observed that if Covid-19 doesn't kill the humans; climate change will kill the people across the world. With this background, the present paper examines the emerging trends and issues that have come up due to the climate change across the world. These trends may call for reset; recalibration and rethink. Otherwise, the Climate Emergency become the need of the hour.

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Introduction:

There are three Es namely-evolution; ecology and environment are the essential segments of climate change; having far reaching effect; implications and consequences to the human civilization and its future survival [**Ramesh 2020**]. The emergence of COVID-19 has added fuel to fire as there has been ecological disequilibrium and as a result; there has been enormous loss of biodiversity; sine-quo-non for having balancing climate change.

The people are living in a world wherein climate change has become a reality. The globe has been experiencing uncertainties in respect of monsoon; the recurring extreme events; the retreating of the Himalayan Glaciers; and the rising sea levels. It is imperative to point out here that in the present scenario [21st century] health science and environmental science are two faces of the same coin as these are interdependent to each other. This is because environmental issues namely-air pollution; water pollution; increasing chemical contamination; rising degree of deforestation; enormous waste generation and accumulation; land degradation especially in developing economies [agricultural economies] and excessive use of pesticides have been responsible for health crisis.

Global Emerging Trends:

Different part of the world has been facing alarming effects. For instance; Siberia experienced warmest temperature and as a result huge chunks oof ice caps in Greenland and Canada sliding into the sea. The globe has been witnessing "aversion of environmental Armageddon" especially for island nations. Added to these; wildfires in the Western part of the USA is another off shot of climate change. There is no stopping for the nations which are slowly sinking island countries to parched African region.

Recently; the Government of New Zealand declared Climate Emergency, in order to create more pressure for needed action to face or coup with the increasing danger of global warming. It is firmly believed by the people of New Zealand that climate change is the biggest threat to pacific region in general and New Zealand in particular. Few years ago; the New Zealand Parliament passed a historic Zero Carbon Bill [ZCB] which created the framework for net zero emissions by 2025.

The silver lining is that the United States of America has decided to join again the Paris Climate Change Treaty; 2015 wherein the USA was the signatory. This means the USA is taken the issue seriously and committed to the issues of climate change. Other developed nation namely- United Kingdom; Japan; and European Union have also committed to attain 'net zero emissions' by the end of 2050. Similarly; China has fall in line with other developed economies to achieve 'net zero emission' with a difference that it would attain the same by the end of 2060. Likewise; the Chinese greenhouse gas level may be attained by 2030. The USA is the biggest emitter of Greenhouse gases and is an exception which has not made any commitment to deadline.

There are three Es namely- evolution; ecology and environment are the essential segments of climate change; having far reaching effect; implications and consequences to the human civilization and its future survival

It is firmly believed that with another 75 years from now; many 'members may no longer hold seats at the UN if the globe continues on its present pattern'. The historic Paris Agreement of 2015 on climate change seeks to have increase in world temperature within the limit of 2° C in comparison of pre-industrial era. This needed target cannot be conceived without the active and increasing role of the United States of America. But the scientists across the world are of the view that the globe is on the track to soar past that. Recently a study observed that if the globe warms up by a margin of 0.9° C, the West Antarctic ice sheet would reach at dangerous point which may prove to be irreversible melting and as a result, enormous water may lead to increase the existing sea levels by 5 meters [**Hindustan Time 2020**].

The globe has been witnessing "aversion of environmental Armageddon" especially for island nations.

The momentary decline in [carbon] emissions in the year 2020 may not be allowed to create any complacency in terms of world progress. Sparkling skies that followed lockdowns across the globe to slow down the degree of spread of COVID-19 resulted into a marginal improvement in environment. But the pollution has again come up as the restrictions eases out. Global economic powers cannot put off the responsibility of financial commitments to coup with the climate change issues. However, pledges have come up at the United Nations gathering along with China's announcement that it is aiming to have carbon dioxide emissions peak before the end of 2030 and also attaining the needed carbon neutrality by 2060.

Paris Agreement:

The Paris Agreement was considered to bring the fundamental change in the principles of Rio and for the first time brought into the all countries for a common concern to carry out the given concerted efforts to coup with the increasing climate change crisis. Accordingly, all nations were required to put forward their best efforts keeping in mind the Nationally Determined Contributions [NDCs] to strengthen the required efforts in coming years. The most important obligation for all the countries to report regularly on the progress and status of their respective emissions as well as the steps taken on implementation steps.

The most significant departure of Paris Agreement was to away from the principle of common but differentiated role and responsibilities and all the parties were placed on the equal footing or level playing field by making the agreed reduction in greenhouse gas emissions on voluntary basis. The NDCs as of now submitted may not result in the needed objective of restricting the rise of global warming to keep below 2°C.

The Paris Agreement is a step further and asked from that all parties irrespective; developed; developing and least developing countries to reduce greenhouse gas emission. But there is no specific mention on the fulfilling the commitment that the member nations who signed the agreement should make countries voluntarily fix their respective targets in respect of emission, and if not attaining these targets, no fine or penalty imposed on the defaulting country. Accordingly, the agreement set forth a requirement for the member nations to come forward with an announcement the targets in respect of reducing greenhouse gas for the next five years. There was also no mention about the specific requirement to attain the given targets.

Other side of Paris Agreement:

The other side of the PA is that the scientific community world over has shown the disagreement with the nature and contents of the PA. The scientific community is of firm opinion that PA is not meaningful solution of the climate crisis. According to them, an increase of 1.5°C temperature may have unbearable effect on the human beings in particular and planet in general which may also irreversible. For instance; at the temperature of 1.5° C 70-90 per cent of coral reefs world over may die out [***Sreenivasan 2020***]. If temperature witness a rise of 2°C no one will be left. According to Intergovernmental Panel on climate change [IPCC], even 1°C hotter cannot be considered as a steady state. IPCC further opined that "the pathways to avoiding an even hotter world would require a swift and complete transformation not just the global economy but also society too". This could only possible if the global leaders depart from the myth of nationalism and parochialism and then come out with the commitment of collaborative efforts and cooperation.

Harsh and dangerous observations:

Another United Nations [UN] report has pointed out that greenhouse gas emissions have touched upon a new high and putting the globe on the way wherein an average temperature increase of 3^{o} C. Similarly; United Nations Environment Programme [UNEP] pointed out that globe is hurtling in a big way towards extreme climate change. Since the years 2010, emissions have registered an average rise of 1.4 per cent per year. In the year of 2019; emissions of carbon dioxide equivalent [GtCO2e] has touched an alarming figure of 59.1 giga tones [**Chestney 2020**].

A rise of 3^{o}C in world temperatures may create catastrophic weather linked events across the globe and it is firmly believed that if the globe wants to avoid such situation; there is an urgent need to encourage "green recovery" particularly by those countries that are facing the Covid-19 crisis. However, the critical issue is that, it does require an investment in zero emissions technology and also in hard and soft infrastructure along with cutting fossil fuel subsidies; stopping new coal plants and promoting further nature-based solutions. There is an estimate that such measures may bring down a 25 per cent predicted emissions by the end of 2030. This may result into 66 per cent chance of keeping warming below 2^{o} C figure. This is what the PA has suggested in 2015.

US and China and Environmental Issues.

The US and the emerging China are the two largest economies in the world. Their role and contribution to global environmental issues are of paramount significance. However, both the countries have contrasting view and approaches. Despite this, the US and China are sharing aims on world climate change issues. The good thing is that both the nations have realized and hence; recognized that environmental issues are the sin-quo-non for emerging out the news world order which is the need of the hour.

China has come out with concept of 'ecological civilization' where as the US has put the climate issues as the 'heart' of international and local discourse on environmental issues. There is a possibility that both the US president and Chinese President could meet and may discuss the issues relating to climate change which is the need of day or inevitable. Both the heads of state should keep head down and take the issues seriously.

A new dimension has emerged out at then global level in regard to tackle the issues relating to environmental issues. Recently; the governments of US and China have taken along with them Japan and European to put the required quantum of pressure on other countries both developed and developing to take into consideration the emerging and inevitable issue of climate change. These major economies are asking the countries to recognize their respective energy output and consumption and accordingly; adopt new technologies. They are also of the view that other developed and developing nations to restructure their respective economies keeping in mind the significance of facing the environmental issues.

Recently the Chinese authorities have evolved a new template known as 'coercive environmentalism' for dealing with the climate change issues. In the early years of 21st Century; Chinese planners and policy makers put the concept of growth and development above the ecological sustainability. This has bought into a sea change in evolving and adopting approaches for meeting the persisting challenges relating environmental issues.

The prime aim of the Chinese authorities is to create a 'harmonious and elegant society' wherein the concept of development and environment are two faces of the same coin. Much emphasis is being given to reduce the existing tensions between development and environment. There is also a commitment on the part of the Chinese Government to bring the required degree of meaningful and purposeful relationship between nature and human beings so that the dream of creating 'ecological civilization could become a reality.

On the side, the US government [President elect] is of the firm view that the country must go for modernizing and implementing 'liberal environmentalism'. Accordingly; he has intention to integrate environmental issue with internal policy agenda. President elected further opined that environmental rules; procedures and regulations which have either discarded and diluted by the outgoing President must be enforced. The new concept is also being evolved namely- 'climate justice' wherein it is observed that environmental issues are having severe impact on the poor and minorities.

The most astonishing thing is that coercive [China] and liberal [USA] approaches for managing the environmental issues are different in terms of nature and contents. However, both the countries sharing the significant aims and goals. But the fact remains that both the economies have recognized the urgency of the climate change challenge. Keeping in mind the significance of the challenge of climate change; both the largest countries have started concerted efforts with zeal and sincerity to develop new technologies for achieving the distant dream of 'green economic future'.

Possibility of Climate Emergency:

Recently, UN chief [Mr. Anonio] has come out with a view that the global leaders should declare the needed 'climate emergency' and required green growth sin-quo-non for saving the planet or earth. This assertion of the UN chief came up in the online Ambition Summit held at UN Headquarter. He also pointed out that the existing commitments to deal with the rising global temperatures are insufficient. He further observed that that the commitments made out in PA in 2015 were also not far enough to meet the challenge. It was further opined that if did not take it seriously and adequately, then the world is heading towards worst possible temperature crisis. There is an immediate need to attain carbon neutrality.

Silver lining:

The newly elected president of the United States of America Mr. Joe Biden; courageously came out with the proposal of rejoining PA 2015 with most progressive intentions for climate change issue. Accordingly, the president has already formulated 'clean energy and infrastructure plan. Added to this, he has also evolved an aim of achieving 'net-zero emissions by the end of 2050. This could be tested verified from fact that the US president has appointed a former secretary of state namely- John Karry as a special ambassador to tackle the most burning contemporary issue of global world. This is a clear indication the US is serious to this issue. Mr. John Karry was one of the architects of PA in 2015. The biggest advantage in appointing Mr. Karry as a special envoy is that Mr. Kerry knows pros and cons of PA of 2015.

Green Recovery:

Five years since Paris Agreement [December 12; 2015]; major players namely the USA; China and EU came forward to attend 2020 Ambition Summit wherein these countries retreated the needed recognition and accordingly resolving the issues of climate change for having the better; safer and more resilient globe with zero emissions. Climate change analysts across the world are of the firm opinion that can we afford to let the environmental or climate challenges worsen? I think that no one at the landscape of the earth may go against this notion.

There is an urgent need of working together for attaining the required degree green recovery. Recently; the European Un ion [EU] has come out with proposal of 'green deal' which is meant for a new model of growth and evolved a blue print for achieving the climate neutrality by the end of 2050. Accordingly; the EU has earmarked half a trillion Euros for tackling the issues of environmental challenges.

Indian Scenario:

This is an undisputed fact that India has been facing environmental crisis especially air pollution. The scene is grim. The most noticeable thing which has come up in the ending year 2020 that the alarming degree of environmental issues. Climate change is no longer then looming threat that it was once. It is as real as it can be and the toll that it has taken on our planet is for everyone to see [**Gurjar 2020**].

India has been witnessing different types of environmental crisis. The climate change has created the following facets to be looked at seriously and also tackle these on war footings.

1. Agriculture;
2. Air pollution;
3. Plastic pollution;
4. Food waste; and
5. Ineffective and inefficient management.

Agriculture has been one of the causes and effects that responsible for creating dangerous level of environmental crisis in the country. This is because this sector has been adopting practices which are adding fuel to fire. There has also been the implementation crisis. This is not only in India. Across the world, agricultural operations are not sustainable and as a result the Sustainable Development Goals [SDGs] have become a distant dream. There is an urgent need for carrying out the resilient agricultural operations.

In the country, the bigger cities have been facing the crisis of clean air. The worst example is New Delhi. The cities have been facing problem of smoke affecting greatly the respiratory system of the people resulting into health hazards.

The third important segment of environmental crisis is plastic pollution in India. This has been due to the fact that consumerism has been on then rise and accordingly then use of plastics on an increasing scale. The most significant issue to be mentioned here is that in 1950 there was a consumption of 2 million tones of plastics. These days this meager figure has touched upon an all-time high figure 419 million tones. Such alarming rise has become the killer for marine life and ecosystem [sin-quo-non] in the country. The government initiatives in this direction has become infructuous. If the planners and the policy makers [Ministry of Environment]; Government of India did not pay added attention to this ever-rising problem then there is no doubt; that the country may face a disaster effect of it.

Food waste is another issue of climate change needing the immediate attention of then government and society. According to the data available on food waste; about 1.3 billion tones of food is becoming a waste which country like India can not afford. The most important issue is that existing level of food waste loss contributing for yearly greenhouse gas emissions at the figure of 4.4 gigatones. This is an alarming figure keeping in mind the India ranking in Global Hunger Index [GHI] which is stood at 94. Recently a data has come out which indicates that in India 40 perv cent of food waste take place at the stages of post-harvest and processing.

Among five segments responsible for Indian environmental crisis, the most significant contributory factor is lack of effective and efficient governance. There has been continuous demand for to implement the policy of taxing greenhouse gas emissions operations on the one hand and on the other explore and adopt innovative low-carbon practices and operations. Many developed nations such as European Union [EU]; Japan and Canada have already implemented NCT. India has to follow the suit soonest.

Conclusion:

From the above discussion it has become abundantly clear that globe in general and India in particular has been facing the environmental crisis. If this is not checked then the future of the globe is in dark or doldrums. If the appropriate steps have not been taking then there will be untold and unbearable damages to planet. Hence, there is a possibility the United nations may impose 'Climate Change or environmental emergency. The rejoining the US to Paris agreement of 2015 may provide a hope for better and effective implementation of policies; regulations and procedures in regard to climate change crisis. MA

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NON PERFORMING ASSETS (NPA) IN BANKS – CONTROL IS A PANACEA FOR BANK'S PROFITABILITY AND INDIA'S ECONOMIC REVIVAL – HOW IS POSSIBLE?

Abstract

In this competitive era, interest margins of banks are squeezed and hence maintenance of good quality of advances is absolutely imperative to improve the net interest margin (NIM) and profitability. Almost all the Public Sector Banks are having their Gross NPA ratio of more than 5% and in some banks it goes beyond 10% or so. To improve the profits, it is imperative to maintain Gross NPA ratio to less than 2%. This article will highlight the common causes of NPAs and the measures to control the NPAs.

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Introduction

In our Country, most of the Commercial banks, especially PSBs, are either incurring losses or earning very low profits since 2015 or so when their NPA levels have started shooting up like anything. There are various factors contributing to these losses which comprises of high NPAs, reduction in interest margins, reduction in non-Interest income, increase in staff costs & other operating costs, low staff productivity and social banking schemes etc. But the higher level of NPAs of these banks is one of the major contributor factor. In this article, we would only discuss the NPA factor affecting the interest margins & consequently causing low profitability to the banks. Banks which are in profits are mainly due to the effective control of NPA levels.

2. While analysing the composition of income of any bank, we find that about 60-65% of total income of the bank arises from interest income on loans & advances, 20-25% from interest income on investments made in bonds & securities (both of Govt and Pvt. Sector) and 10-15% comprises non-interest income by way of Commission & Exchange charged on various non fund or fee based facilities given by the banks. Since banks earn more than 60% of their total income from interest on Loans and advances, NPAs in Loans and advances are the main factor of affecting their profitability. NPAs under investment portfolio, on the other hand, remains negligible. However, average Yield on Advances always remain high in comparison to the yield on investment portfolio, ignoring the impact of NPAs. This is the main reason that banks prefer higher advances portfolio than the investments. But share of high NPA in the advances portfolio distorts their real income from such portfolio.

3. NPAs of the banks affect the profits in many ways viz. No or low interest income, requirement of loan loss provision (for principal loss), hindrance in re-cycling of funds and turning away of such customers to other banks for their other banking needs. To understand the impact of NPAs on bank's profitability, we have compared the results of State Bank of India (SBI), (which is the largest Public Sector bank) with the HDFC Bank, (which is the largest Private Sector Bank), for the financial year 2019-20. We may see that higher level of Gross NPA ratio of SBI has impacted its profitability very badly. As at the end of March, 2020, Gross NPA ratio of SBI stood 6.15% whereas HDFC Bank Gross NPA ratio was just 1.26%. Consequently, Net profit of SBI, despite having higher Operating profits in totality, stood substantially lower than HDFC bank mainly due to higher loan loss provision requirements on NPAs. Due to higher Gross NPA ratio, Interest

margin and return on Assets ratios also stood lower in SBI when compared with HDFC Bank. The break-up of various items of income and expenditure of SBI and HDFC banks for the FY 2019-20 are as under[1]:

(Rs in Crore)

	Particulars	State Bank of India (Standalone)		HDFC Bank	
		March, 2020	(% age to total)	March, 2020	(% age to total)
1	Interest / discount on Advances / bills	179749	60.66%	91788	66.48%
2	Income on Investments and other interest income	77575	26.18%	23025	16.68%
3	Total Interest Earned (1+2)	257324	86.84%	114813	83.16%
4	Non -interest Income i.e. Commission & Exchanges	39006	13.16%	23261	16.84%
5	**TOTAL INCOME (3+4)**	**296330**	**100%**	**138074**	**100%**
6	Interest Expenses	159239		58626	
7	Employee Costs and Other Operating expenses/ overheads	45715		9526	
8	Other Operating expenses/ overheads	29459		21172	
9	**Total Expenses (6+7+8)**	**234413**	**100%**	**89324**	**100%**
10	**Operating Profits (Before Provisions & Contingencies (5-9)**	**61917**	**100%**	48750	100%
11	Provisions & Contingencies	-43070		-12143	
11a	Out of the above, Provision against NPAs	-42776	69.09%	-6394	13.12%
12	Exceptional item (Income)	6216		0	
13	Tax Expense/ Provision	-10575		-10350	
14	**Net profit / Loss(10-11-12-13)**	**14488**		**26257**	
A	TOTAL ADVANCES	2185876		993703	
B	Gross NPA Ratio(%age of Gross NPAs to Gross Advances)	6.15%		1.26%	
C	Interest Income to Working Funds	6.55%		8.93%	
D	Return on average Assets/ assets	0.38%		2.01%	

4. From the Table above, we may observe that SBI with Operating Profit of Rs.61,917 crore in March, 2020 could earn Net Profit of Rs. 14,488 crore (including an exceptional item of Rs.6,216 crore), whereas HDFC bank with lower Operating profit of Rs. 48,750 crore has earned Net Profit of Rs.26,257 crore, almost the double of SBI profits. Due to higher NPA levels & ratio, SBI provided Rs. 42,776 crore as loan loss Provision on NPAs (69.09% of total Operating Profit) whereas HDFC Bank provided Rs. 6,394 crore (13.12% of Operating Profit). Even in the previous financial year of 2018-19, SBI provided loan loss provision of Rs 54,529 which stood higher than their total Operating Profit of Rs. 53,875 crore. Since Gross NPA ratio also affects the interest income/ margin, the Return on Assets/ Avg. Assets stood 0.38% in case of SBI whereas HDFC bank achieved 2.01% for the FY 2019-20.

Causes of NPAs/ higher NPAs and how to control it.

Many times, it is argued that the banks, whose Gross NPAs ratio is lower like HDFC Bank, Axis Bank, ICICI Bank, Kotak Mahindra Bank etc. are new generation banks and actual impact will be better known in the long period. Similarly, it is also argued that Public sector banks have to pursue the Government sponsored Schemes or Social banking loan schemes in a big way, which also result into higher NPAs. Although, these arguments stand true to some extent but causes of higher NPAs need greater deliberations. Faults / shortcomings lie both at the bankers level and the borrowers level.

A. Bankers / Lenders Role

a) Quality lending: This is an important role of every Banker to identify and chose the best customer while taking a decision of financing. Banks must understand that market is full of customers and there is no scarcity of good customers. The success story of HDFC bank mainly lies on this issue. HDFC bank try to choose quality customers where chances of turning their accounts into NPAs are rare. Although all the banks have different Credit risk assessment models to identify quality customers but still having higher NPA ratio indicate that their models need continuous improvement. The motto of 'Timely delivery at Competitive rates' definitely help the banks to attract quality customers.

b) Technical and Economic viability of the Project: Every loan proposal must be examined in detail to ensure that unit is technical and economical viable. Almost all the banks are having prescribed system, but to evaluate the technical & economic viability of the high value projects is a very cumbersome task. In this regard, banks generally take the help of outsider professionals and legal experts from different fields. However, it has been observed that sometimes these professionals disclose the deficiencies with superlative technical words that bankers are not able to understand or draw any conclusion. Bankers should examine these reports thoroughly and should not act upon blindly or file the reports as a formality of obtaining such reports.

Cost of the Project must be assessed realistically. Interest obligations during the construction period and instalment & interest due up to the break-even stage of the project, must be made part of the project cost, so that working capital funds are not eroded in any way. Funds requirements to complete and run the project at optimum level of capacity must be assessed periodically and must be revised immediately wherever required from time to time.

c) Margin and Security availability

Regarding margin & Security, banks are having prescribed norms which speak about the minimum desired level. But here, greater scrutiny is required in the case of margins made available by the borrowers. Sometimes it is observed that amount of margin is arranged by the promoters by way of borrowings from other associate concerns and / or from friends & relatives. This practice is accepted by the banks with some riders that this amount will not be returned back without the prior permission of the bank or till the repayment of the loan. But, this type of margin made available by the borrowers, in real terms, is not a margin. It is another type of borrowings and normally such types of borrowings are arranged at higher rate of interest than the rate of interest charged on loans by the banks. Such borrowings are repaid on priority and many times without any approval from the banks.

In one of the case, where a loan was sanctioned to a builder, promoters contribution was shown invested by one of the reputed foreign investor. Loan was sanctioned by the Bank by mentioning this fact in the appraisal note that certain percentage of margin has been contributed by a reputed foreign investor. When that loan turned into NPA, it was observed that foreign investor invested in the Project @ 17.5% p.a. plus profit sharing. Borrowers generally repay such amounts first and banks become helpless just to mention the facts in their internal notes and issue the letters to the borrowers to avoid it in future. Margins contributed by associate concerns need greater examination , which can impact their project subsequently.

Obtention of Personal guarantee of the promoters should be explored so that they remain more accountable to run the business.

d) Sanction, Disbursement and Post Disbursement Role

After sanction and documentation, process of disbursement of loans commences. It has been observed that when banks sanction the cash credit limits, it becomes priority of the banks that borrowers avail these limits at the earliest. Sometimes, the bankers at the end of each quarter and at the end of financial year, advise borrowers to avail their unutilised portion of cash credit limits to show good financial results. The borrowers withdraw the amount from their cash credit accounts and usually place the amount in the Current account either in the same bank or in other banks. This is a highly dangerous practice which facilitate the borrowers to take away the funds out of the business for some other use resulting into misutilisation of funds.

Each withdrawal or payment from cash credit account must increase Net working Capital (Current Assets- Current Liabilities) of the unit in direct proportionate. Bankers can catch the borrowers for any misutilisation in Cash Credit limits at an early stage by giving proper attention for withdrawal & utilisation of funds from these cash credit accounts and calling necessary reports of current assets and current liabilities at more frequent intervals.

Similarly, Term loan disbursement to the borrowers should be made in direct proportion to the work done. Progress in regard to the amount disbursed up to the previous instalment(s) must be verified before disbursement of next instalment. Sometimes in big projects, utilisation and completion certifications are obtained from the appointed Chartered Accountants and Engineers. The certificates given by these professional should be thoroughly examined. The personal visits of the bank officials should also be made independently to verify the proper utilisation and progress made.

It has been also observed that some promoters route the funds through their associate concerns to complete the projects and higher profit margins are booked in those companies where they hold higher stake.

An early check on diversion of funds will minimise the chances of turning the account into NPAs to a large extent. Stock & Receivable audit, Verification of debtors and creditors lists at more frequent intervals should be ensured especially at large / complex projects.

At the time of repayment of interest / instalments , banks generally debit the cash credit accounts of the borrowers. The banks continue doing so without analysing whether the unit is generating sufficient profits or not. Repayment of interest on term loans and instalments out of cash credit accounts, where the unit has not been able to generate profit to that extent erodes the working capital availability, which in turn affect the level of activity & capacity utilisation of the plant. Many times, it has been observed that this process goes on for the initial 2-3 years and this way, the availability of entire working capital advance to the unit wipes away. Ultimately, the unit goes bad and account turn into NPAs. Hence, while processing the proposals and thereafter analysing the actual results, the repayment of interest and instalments of the term loans must be provided separately in addition to the working capital advance so that working capital is not affected on this count.

e) Remedial /Corrective measures

Bankers need to monitor, review and assess the working and performance of the Unit at regular intervals more effectively and deficiencies, if any, be discussed with the borrowers to find out suitable solutions. Although maintaining financial discipline is the responsibility of the borrower, but banks must ensure it through proper monitoring, educating and guiding the borrowers . Banks must monitor the capacity utilisation of the Unit at more frequent intervals and any fall in capacity utilisation must raise an alarm. Additional financial requirements for working capital and or expansion & replacement must be examined with a positive attitude and timely help must be ensured. The delayed decision may result disruption / stop of production, cost overrun and many times good opportunities are also missed.

However, if any malafide action is observed against the borrower by the bank, suitable action, as per the provisions of law, be initiated immediately against such borrowers to recover the bank dues.

h) Staff responsibility and accountability

Sometimes, compromise with the quality of the loans is made to achieve budgetary targets and to get incentives & promotions. Pressure of booking the cross selling business like life insurance, General insurance and Mutual Fund business etc. also affects the selection of good quality customers. These approaches are highly risky, resulting into higher NPAs at the later stage and needs to be supervised by the bankers, RBI and other Regulators in the larger interest of the banking industry. Proper staff responsibility and accountability should also be examined under these parameters in addition to other usual parameters of pre sanction and post sanction deficiencies.

An early check on diversion of funds will minimise the chances of turning the account into NPAs to a large extent.

Moreover, banks should also develop a data bank of staff involved in appraising, recommending and sanctioning of those high value loans which turned into NPAs so that weaker spots are identified and greater responsibility is put on the staff.

B. Borrowers' Responsibility

Borrowers are also the sufferer if their project fails and accounts turn into NPAs. Creditability & reputation of NPAs borrowers suffer a lot. Their names also appear in the records of CIBIL and other credit information / rating agencies and it becomes difficult to take loans for other genuine needs. We have seen that some borrowers have left their cities or even countries in the past when their business failed and they could not repay the loans. In a few extreme cases, some borrowers have even committed suicide also.

We give hereunder some of the issues, which each borrower must examine and act upon proactively to avoid the failure of his business and resultantly avoiding the turning of the accounts into NPAs.

a) Proper knowledge of the Project

It is utmost important that each promoter should attain proper knowledge of the project, which he is going to set up or expand. Cost of the Project must be assessed realistically and strictly avoid inflating or deflating the project cost. Promoters should never accept lower finance from the banks to set up the project with the hope that they will get deficit finance in due course. In many cases, it has been seen that promotors start the expansion or installation of new project with their funds with the hope that they will get bank loans subsequently by showing the progress. It is highly risk thought. If due to any reason, bank loan is not sanctioned, their existing business also suffer badly.

b) Adequate Margin from own sources and not from borrowings

Promoters should contribute margin from own sources (may be out of past profits or surplus in the existing business) but not by way of borrowing from other associate concerns and friends

& relatives. High leveraged business can put him in problem at any time.

c) Proper use of funds

After getting the loan sanctioned, proper utilisation must be ensured. Any mis-utilisation/ diversion will make their existing units as well as the proposed units non- viable. The need for additional funds for working capital or fixed assets, whenever required, should be discussed and brought into the notice of the bank and tied up accordingly.

d) Higher stress on working capital management rather than Capex

Mis-management of working capital is one of the important factor of turning any unit into NPAs. Every industrialist normally remains over ambitious towards expansion or capex. They want big offices, big factory buildings and more landbank for future expansion. It has been seen in many cases

Mis-management of working capital is one of the important factor of turning any unit into NPAs

that after getting the loan sanctioned, the promoters goes on buying extra land adjacent to the factory land which becomes available subsequently, may be at a higher price than the market rates. All these steps distort the project costs and increases the obligation of interest costs and instalment of borrowed amount.

The use of working capital funds for acquiring fixed assets is a suicidal effect on the business. The promoters must understand that working capital funds facilitate running the business smoothly up to the optimum level of plant capacity and in turn generate profits out of the sales. Only out of the operating profits, the business can pay the interest and instalment of the term loans. Hence, expansion or capex must be undertaken strictly on need basis and only when additional operating profits are sure of serving the enhanced burden of interest and instalment of term loans. Tendency of Over- ambitiousness must be controlled and 'slow and steady progress' should be the motto of the business for a stronger and longer life of the business empire.

C. Conclusion

We have discussed some of the practical issues in the above paragraphs which can definitely help to control the level of NPAs in the banks and banks & industry in turn will be in a more profitable position. This will also strengthen the overall economy of the country. MA

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GREEN FINANCE: A NEW NORM FOR BANKING SECTOR IN INDIA

Abstract

COVID 19 has brought about significant monetary and non- monetary changes in the economy with banking sector undergoing an unplanned structural and behavioral changes. The bank moratorium scheme, injection of funds in the economy, easing out monetary policy especially in the first half of its financial year has led to significant transformation in the financial and non-financial operations of the banking sector. A short-term disruption, prolonged loss of potential customers and high probability of default from SME's and micro entrepreneurs are the challenges placed before the policymakers. But in the midst of COVID -19 the foreseeable opportunity is diversion of resources to green investments which in long run would accelerate the off sets of COVID 19. Green finance remained undermined in the Indian economy since long but banks can now play a catalytic role by bridging the wide gap in need and actual lending of green finance requirements in the country. The study attempts to portray the green finance landscape in the country along with role of banking sector in accelerating the recovery path. The study uses mixed methods of research to provide a comprehensive report along with concrete suggestions for policy makers..

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Introduction:

The global banking sector post US Crisis in 2008 faced severe setbacks leading to restructuration of markets in advanced and emerging economies both. The basel norms underwent a significant makeover post crisis to curb the predicaments of non- performing assets. Stabilization was achieved, markets were picking and the world once drowned under the black swan of the century – COVID 19 – Pandemic. Not circumscribed to a country or two the entire global markets are turmoiled even after one year of the first case which emerged in Wuhan City of China and today the end still remains a mystery.

Despite the ricochet is anticipated in financial year 2021 – 2022 the pre-crisis levels would be difficult to be recuperated in next 5-10 years conditional upon the level of trade -offs between human resources and capital resources. As the crisis advance liquidity shocks and insolvencies are expected to morph the banking ecosystem. Moreover, the countries with weakened tail of formal banking ecosystem, financial vulnerabilities would be inevitable. The global banking sector has been once again put to test with all the Central Banks in most of the pandemic hit countries turned out to ease their monetary policy and inject its reserves to soothe their falling economies. Each Government Central Bank and financial institutions have offered cushion to their flattening economies in form of stimulus packages. With Collaborative efforts the adherence of 3 key Principles of Responsible banking have been emerged out during this pandemic enumerated by UNEP Finance Initiative 2020 as below

1. Supporting companies, large and small, to sustain their business during and beyond this crisis in line with Principle 3 of the Principles for Responsible Banking which commits banks to "work responsibly with clients and customers to encourage sustainable practices and enable economic activities that create shared prosperity for current and future generations."
2. Partnering with governments in managing the economic and social

impacts of the measures taken to contain the spread of the virus in line with Principle 4, to "proactively and responsibly consult, engage and partner with relevant stakeholders to achieve society's goals."

3. Ensuring access to the key financial services and infrastructure that society relies on for everyday life.

The strenuous efforts of the Indian banking sector have payed off well in upsurging the digital platform thereby including the excluded ones but remains at the brink while meeting its environmental substantiality goals.

India ranks fifth in the Global Climate Risk Index where in near about 3% of India's GDP being impacted due to climate change. This vulnerability in the coming years once again impact the financial and non-financial ecosystem in the country leaving an irreparable loss. India though as emerged out to be rising star in the global economy, with no part of globe excluded from the pandemic COVID 19, recession has taken blow in the country today. The GDP of the country has contracted by 7.5% with downslide expected in the coming years. In other words any such disaster could impact drastically to India's path towards recovery. Currently India is the fifth most vulnerable country in the global when it comes to Climatic Risk , even before the pandemic the capital of country faced severe climatic concerns leading to partial closure of the economy. India being an agrarian economy, any climatic disruptions could lead to fall in the farm output and its allied industries eroding the entire supply chain. ILO estimates that 34 million jobs could be lost, primarily the farmers which are at the edge of survival by 2030 due to climatic changes in the country. Whereas India's Economic Survey 2018-19 that the farmers income would decline by 15-20% if climatic changes persists. Thus the need to sensitize India to curb the vulnerability due to climatic changes in the long run is mandated. The study therefore conducts risk assessment of India's financial sector in wake of climatic risk index and examine the present scenario of green finance in India in terms of composition structure and growth. It put forth the challenges confronting the banking sector in this arena.

Literature Review:

The concept of green financing being evolving even today, the clear definition of what comprises green finance is the major hindrance experienced while striving towards goals. The study reviews the various definitions of green finance and the initiatives taken in this arena globally to provide a comprehensive overview of green finance landscape.

Höhne et al (2012)[1]: "Green finance is a broad term that can refer to financial investments flowing into sustainable development projects and initiatives, environmental products, and policies that encourage the development of a more sustainable economy. Green finance includes climate finance but is not limited to it. It also refers to a wider range of other environmental objectives, for example industrial pollution control, water sanitation, or biodiversity protection. Mitigation and adaptation finance is specifically related to climate change related activities: mitigation financial flows refer to investments in projects and programs that contribute to reducing or avoiding greenhouse gas emissions (GHGs) whereas adaptation financial flows refer to investments that contribute to reducing the vulnerability of goods and persons to the effects of climate change."

Zadek and Flynn (2013)[2]: "Green finance is often used interchangeably with green investment. However, in practice, green finance is a wider lens including more than investments as defined by Bloomberg New Energy Finance and others. Most important is that it includes operational costs of green investments not included under the definition of green investment. Most obviously, it would include costs such as project preparation and land acquisition costs, both of which are not just significant but can pose distinct financing challenges."

Pricewaterhouse Coopers Consultants (PWC) (2013)[3]: "For the banking sector, green finance is defined as financial products and services, under the consideration of environmental factors throughout the lending decision making, ex-post monitoring and risk management processes, provided to promote environmentally responsible investments and stimulate low-carbon technologies, projects, industries and businesses.

Böhnke et al "According to our definition, ["Green Finance" comprises all forms of investment or lending that take into account environmental impact and enhance environmental sustainability. A key element of GF is sustainable investment and banking, where investment and lending decisions are taken on the basis of environmental screening and risk assessment to meet environmental sustainability standards.[4]

Thus there is no common consensus what is green finance ? before the policy makers and implementors to adopt target based plans and strategies. The common elements which need to be kept in mind while defining green finance is investing in recurring as well as capital costs of the industries striving towards clean energy such as waste recycling, solar panels, waste treatment plants, etc.

The study also reviews various initiatives undertaken in disclosure of green finance globally represented as below –

Institute	Initiatives
UN Environment Finance Initiative (UNEP FI)	Drafted the three principles for integration of sustainable finance to be included into Central Bank's Fiscal and Monetary Policy. These frameworks act as benchmark while adhering to global commitments on climate changes. Largely supports Sustainable Stock Exchange initiatives.
Task Force on Climate related Financial Disclosure (TCFD)	Quantified the climate risks on financial stability of the economy. It put forth the scenario analysis if the climate conditions are not met. It put forth framework for various financial intermediaries such as investors, regulators and bankers to be implemented while adhering sustainable finance.
International Development Finance Club	Green Finance Mapping Reports are published to implement green and climate finance progressively. The report quantified the parameters for measuring green finance investments and categorized the sectoral taxonomy.
International Platform on Sustainable Finance (IPSF)	The Platform was established to re direct the capital flows towards financing of infrastructural facilities of green finance. It set standards and disclosure norms on green financing initiatives.

Sustainable Banking Network (SBN)	This institution laid down principles and framework for green financing in low income countries and developing countries of the world. It recognized the financial risk involved while designing the broad framework in low income countries.
RBI's Initiative in India	In 2013, the Indian Companies Act, 2013 mandated corporates to contribute 2% of their average net profits towards designated activities which included use of renewable and clean source of energy to maintain environmental balances. In 2015, RBI included lending to social infrastructure and small renewable projects under priority sector lending targets.

Despite the need for adhering to green financing has been well carved out throughout the globe, the actual penetration has been difficult to absence of standardized norms. Moreover India's participation in this arena has been quite unsatisfactory with no complete guidelines. Only frameworks are provided, policy documents are still vague.

Research Objectives

1. To understand the landscape of green financing in India
2. To suggest and recommend various initiatives for inclusiveness of green finance at a wider scale in financial sector.

Methodology

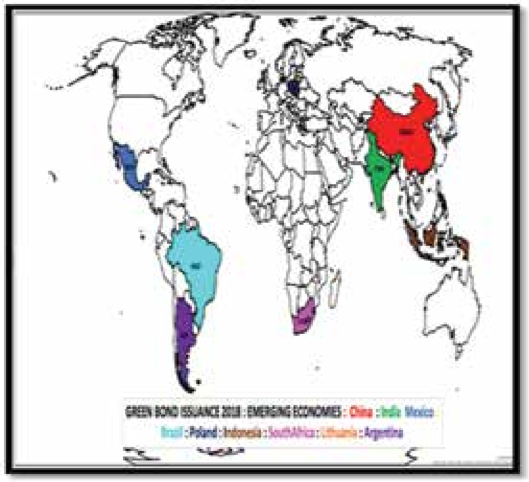
The research study extracts its data from RBI data and reports published OECD to assure authenticity of the information used. The subject being naïve the in depth data suitable for advanced tools and techniques of statistical analysis is unavailable. To probe deeper into the subject semi structured interviews of bank officials from private and public sector were recorded. (5 in number). Thus the study adopts mixed method of research using both qualitative and quantitative data for apt interpretation and analysis.

Results and Discussions

The impact of climatic changes such as increase in temperature, rise in sea levels, increased CO2 emissions, natural disasters not only cause loss of human and livestock but more exorbitantly disturb the financial ecosystem and FDI in the economy. The preparedness of the economy stature to avoid these climatic conditions have been well realized by the policymakers, what lacks is penetrating the haphazard at ground level. The financial regulators need to have a lion share in steering the economy towards sustainable path at micro level. Though the initiatives have been harmonized it has failed to provide the desired results. The study analyses the role play of India's banking sector towards green financing through following subsets –

A. India's Share in Issuance of Green Bonds (Secondary data)
B. Green Financing Gap and its Sectoral Distribution (Secondary data)
C. Barriers Confronted (Excerpts from Interview)

A. **India's Share in Issuance of Green Bonds**



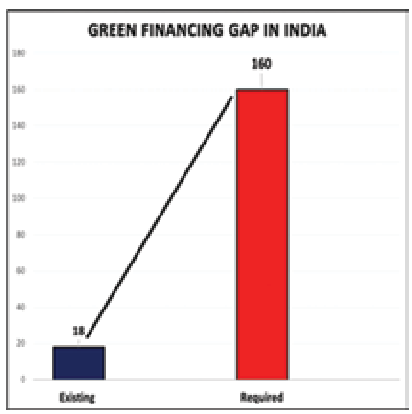
Source: Emerging Market Green Bonds Market Report 2019. (Figures in Billion $)

India though ranks second in the issuance of the green bonds as way of financing its green investment it is far low than its immediate counterpart China. Where there has always been a debatable issue who shall dazzle the crown in the world economy, it can be vividly seen China has planned its efforts to sustainable economy in the right direction whereas India's lags behind in a huge way. India's most of the green bonds are issued by the Indian Renewable Energy Development Agency (IREDA) and the Indian Railway Finance Corporate (IRFC). Whereas in 2018, SBI entered the market with 3 billion investment alone there is a long way ahead. On other hand China accounts for 18% of the global green bond issue.

B. **Green Financing Gap and its Sectoral Distribution (Secondary data)**

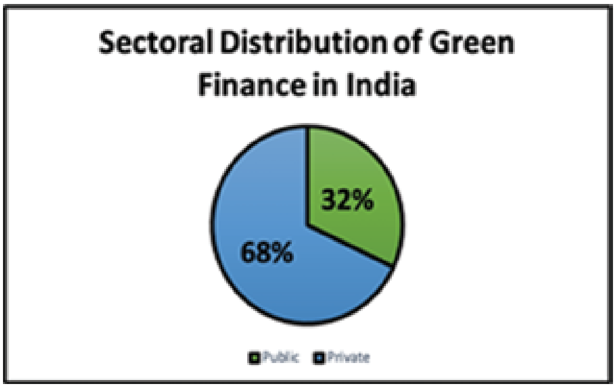
Capital Mobilization is important for India's transition towards low carbon economy and reduction in CO_2 emissions. Adhering to India's commitment towards SDG's requires an investment of 2.5$ trillions by 2030. However as per CPI reports 2020, India's investment in the current sector is mere 18$ billion as of March 2018 as against its annual requirement 160$ billion. The graphical representation is as below –

Graph no 2 : Green Financing GAP in India



Source – RBI Reports, 2019-20

Graph 3 – Sectoral Distribution of Green Finance in India



Source – RBI Reports, 2019-20

As illustrated above, 68% of green financing comes public sector while private sector has failed to adhere the guidelines. The impetus in public sector to finance green investments is also felt after inclusion of small projects on renewable energy in priority sector lending in the year 2015. But the gap which exists is enormous due to lack of integrated focus and poor policy document. It further directs to sensitize India's financial sector through apt policy interventions.

The impetus in public sector to finance green investments is also felt after inclusion of small projects on renewable energy in priority sector lending in the year 2015.

C. Barriers Confronted

The key barriers as extracted from the excerpts of the semi structured interview from top management levels of the various public sector and private sector financial institutions are as below –

1. Minimal clarity on sectors/ projects to be classified under green economic activities. The concept is still quite arbitrary in nature.
2. Poor mechanism to identify, track the deployment of resources in this arena.
3. Though included in PSL, no quota is defined and hence remains insignificant. Moreover the concept of green economy has not reached down at grassroot level.
4. Fear of Non-performing assets due to untested business models and early state technologies.
5. Limited research analysis on technical and financial feasibility of the study.
6. Underdeveloped market for green products and long gestation period involved limit the scaling up of small business in this sector.

Recommendations

1. A well-defined taxonomy on green finance should be implemented with a separate set of rules and regulations rather than an umbrella act.
2. Regulators should also incentivise sustainable finance by lowering the funding costs of green and low-carbon assets, and increasing the funding costs of brown and polluting assets.
3. Aligning Green finance with target based national goals in the country and Mapping the green finance flows from source to end.
4. Usage of Climate Budget Tagging tool.
5. Create the market for green products by pinning down at grass roots level and changes in the educational and marketing frameworks to let its people realize the financial risks due to climatic changes.

Conclusion

India in its Financial Budget 2020 has been vocal about its transition towards green economy but the approach is fragmented. It follows an avant garde style while tagging its green budgets. The large variations is granularity and undermined role of financial institution has led to major fallout in green tagging budgets. Poor public policy, lack of quality and depth of green finance centres and poor infrastructure has added to the ambiguity. The mechanisms to identify gaps, measure progress and optimise resource utilization are poorly developed at policy level ultimately leading to unsatisfactory transition towards sustainable growth. The need for transformational upscaling of green finance is necessitated. Further with India experiencing recession due to COVID 19 the recovery path is eroded. The failure to mitigate the impact of climatic changes on the economy in the long run shall lead to great depression. On other hand if Banking sector is regularized and streamlined it can lead to transformation and quick revival of economy. MA

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Down The Memory Lane

February 1971

The Thirteenth All India Cost Conference, Madras on 5th to 7th February 1971.

Shri T A Pai, Chairman, LIC, delivering the inaugural address

Shri N.N. Wanchoo, ICS(Retd) Chairman Bureau of Industrial Cost and Prices New Delhi addressing the third technical session

February 1991

Practitioners' Convention IV Technical session on 9th February 1991

Shri J. Mukherjee, T.R. Loganathan, D.C. Bajaj, K.K. Rao

February 2001

Sanat Kumar Das and Malay Kumar Nayak, members of Agartala Chapter, N.G. Das Chairman, D.C. Bajaj President, ICWAI and Bibhabananda Majumder meet Badal Choudhury, Finance Minister, Govt of Tripura

February 2011

In the SAFA Meeting, Shri A.N. Raman, President SAFA, is seen with Shri B.M. Sharma, President ICWAI & Mr. Gopalakrishnan, Vice President, ICWAI

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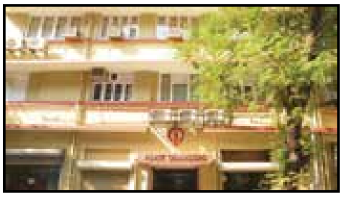

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NEWS
FROM THE INSTITUTE

EASTERN INDIA REGIONAL COUNCIL

A Virtual Seminar on "Sensitization of Nidhi Companies towards compliance of provisions of Section 406 of Companies Act, 2013 and Nidhi Rules, 2014 as amended vide Nidhi (Amendment) Rules, 2019" organized by EIRC on 2nd December 2020. CMA Arundhati Basu, Vice Chairperson, EIRC and Chairperson, Seminar & Workshop Committee welcomed the guests, speakers, members, students and other dignitaries. She highlighted that being a Professional body it is the basic responsibility of the Institute to spread awareness for exercising adequate care & caution before investing in Nidhi Companies among the Investors and also help the Nidhi Companies in maintaining due diligence and transparency. CMA C.R,Chattopadhyay, Central Council Member, addressed in the programme. He mentioned that a salient feature of the Nidhi Companies is to cultivate the habit of thrift and savings amongst the members and receiving deposits from and lending to its members for mutual benefits. Shri D Bandopadhyay, Regional Director (ER), Ministry of Corporate Affairs, Govt. of India was the Hon'ble Chief Guest. He highlighted the features of the Nidhi Companies, conditions for incorporation and the basic objective of Nidhi Companies to incorporate cultivating habit of thrift and savings amongst the members, and receiving deposits from and lending to the members for their mutual benefit, and also duly complying with the rules formed by the Central Government. CMA B. Manjula, Chairperson, Bangalore Chapter of Cost Accountants also graced the occasion. CMA Dr P.V.S Jagan Mohan Rao, Immediate Past President, SAFA, Former President of ICSI & Former CCM of the institute was the Guest Speaker. CMA Aparna Biswas, Company Secretary, WBSEDCL had also graced the occasion.

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA BHUBANESWAR CHAPTER

The Chapter has organised and hosted a WEBINT in Association with All Other Chapters at Odisha on **21.12.2020** in the theme **"Ind-AS- 23 – Borrowing Cost, Ind-AS-116- Leases** and **Ind AS -37: Provisions, Contingent Liabilities and Contingent Assets"**. **CMA Ramsankar Mishra**, Manager (Fin), M/s Mangalore Refinery and Petrochemicals Ltd., Mangalore graced and delivered on the topic as "**Resource Person". CMA Saktidhar Singh**, Chairman, Professional Development Committee introduced the guests and **CMA Sanjay Kumar Dey**, Chairman, ICAI-Balasore Chapter extended formal vote of thanks. **CMA Mukesh Chaubey**, Chairman, Bhubaneswar Chapter and **CMA CMA Antaryami Acharya,** Chairman, Talcher Angul Chapter also addressed on the occasion. Chapter has organized and hosted a **WEBINT on "Restructuring Cost Audit for Value Creation" on 26th December, 2020. CMA A. N. Raman, President, SAFA (2011)** delivered on the topic as **"Resource Person" and CMA Antaryami Acharya,** Chairman, Talcher Angul Chapter moderated the WEBINT. **CMA Mukesh Chaubey**, Chairman of the Chapter delivered keynote address. **CMA Saktidhar Singh**, Chairman, Professional Development Committee introduced the guests and **CMA Ajay Kumar Samal**, Secretary of the Chapter extended formal vote of thanks. This Chapter has organized an e-Career Counselling Programme in Association with S K C G Autonomous College, Paralakhemundi, Gajapati, Odisha on 29.12.2021. The theme of the WEBINT was **"Academic and Professional Career Opportunities for Commerce Graduates"**. **Dr. Rabindra Kumar Swain**, Asst Professor, PG Department of Commerce Utkal University, Bhubaneswar delivered on Career Planning on Academic Prospects, **CMA Ajay Kumar Samal**, Secretary**, ICAI-Bhubaneswar Chapter delivered on Professional Career Planning. CMA Mukesh Chaubey**, Chairman of the Chapter highlighted about Career Prospects in CMA Course and facilities provided by the Bhubaneswar Chapter. On the Occasion other dignitaries such as Dr **J N Pattnaik**, Coordinator –IQAC, **Shri Shiba Prasad Sethi**, Asst Professor and Head P G Department of Commerce, SKCG (Autonomous College), **Shri Sumanta Behera**, Asst Professor, PG Department of Commerce, S K C G (Autonomous) College, Paralakhemundi also addressed and guided the students. The 65th Oral Coaching Class inaugural ceremony held on 02.01.2021. **CMA Bibhuti Bhusan Nayak**, Regional Council Member, EIRC graced the occasion as **"Guest of Honour". CMA Santanu Kumar Rout**, Chairman, Coaching Committee, **CMA Ajay Kumar Samal**, Secretary and **CMA Mukesh Chaubey**, Chairman of the Chapter blessed the newcomers and highlighted about the facilities provided by the Chapter to excel in their examination. The Chapter has organized and hosted a **WEBINT on "Tariff Model and Transformation of Power Sector" on 10th January, 2021. CMA K C Nanda, DGM (Fin), TPWODL and Chairman, Sambalpur Chapter** and

CMA Bikram Keshari Das, G.M (Finance)-In Charge, NLC India Ltd. delivered on the topic as **"Resource Person".** and **CMA Saktidhar Singh**, Chairman, Professional Development Committee introduced the guests and extended formal vote of thanks. CMA **Mukesh Chaubey**, Chairman of the Chapter delivered keynote address. This Chapter has organised and hosted a WEBINT in Association with All Other Chapters at Odisha on **16th January, 2021 (Saturday)** in the theme **"Financial Fraud, Forensic Audit and Role of CMA". CMA Aloke Kumar Bardhan, Asst. Director, Serious Fraud Investigation Office (SFIO), Ministry of Corporate Affairs, Govt. of India** delivered on the topic as **"Resource Person". CMA Praveen Nigam**, Chairman, ICAI-Rourkela Chapter and CGM (Fin) cum CFO, Rourkela Steel Plant, Rourkela moderated the WEBINT and also delivered on the topic as **"Resource Person". CMA Mukesh Chaubey**, Chairman of the Chapter delivered keynote address, **CMA Saktidhar Singh**, Chairman, Professional Development Committee introduced the guests and **CMA Ajay Kumar Samal**, Secretary of the Chapter extended formal vote of thanks.

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA RAJPUR CHAPTER

The Chapter of ICAI organized a webint on MSP AND FARM COSTING on 16th January 2021 at 6.00 pm. to highlight the government policy decision and enactment of three laws on MSP and open market operation of agri products. The webint was started with the explanation by CMA S.N.Das, Secretary, of the Chapter on the importance of subject matter in the present day situation and the role of cost accountants in helping government for policy decision on cost and price of farm outputs. The webint was inaugurated by CMA Manas Kr. Thakur, former President, ICAI who explained need for incentive to farmers for more and more production of food grain to tackle rising population. Dr. Debasish Chakraborty, Scientist, Agricultural Meteorology, ICAR, Umiam, Meghalaya was the main speaker. At the end a research booklet on NATIONAL EDUCATION POLICY 2020 published by the chapter.

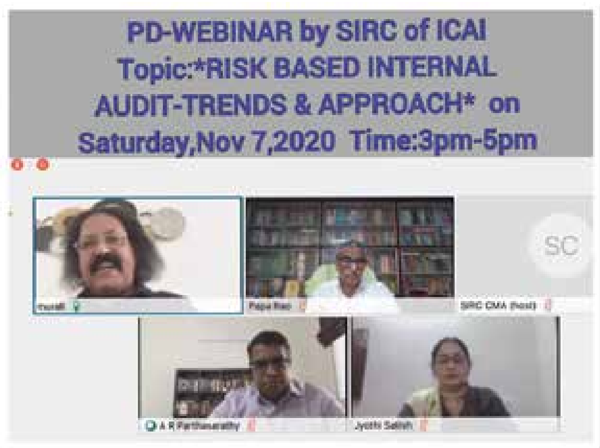
NORTHERN INDIA REGIONAL COUNCIL

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA JAIPUR CHAPTER

The Chapter organised Webinar on 9th January 2021 on the Topic "Issues under GST Audit". In the beginning of the Seminar, CMA Swapnil Bhandari, Chairman of the Chapter welcomed the Key Speaker and participants. Key Speaker of the Webinar was CMA Anil Sharma former Chairman of NIRC. He explained in detail about various issues related to GST Audit. At the end of the program CMA S.L. Swami, immediate Past Chairman of the Chapter thanked all he participants. The program was conducted by CMA Purnima Goyal, Executive Member.

SOUTHERN INDIA REGIONAL COUNCIL

Due to COVID-19 Pandemic alerts and as per the guidelines received from our HQ from time to time, SIRC has organised its Professional Development Meetings through Webex Meeting App. On 7.11.2020 PD Webinar on the topic "Risk Based Internal Audit – Trends and Approach" was organised. Speaker was CMA CA A.R. Parthasarathy, Partner RGN Price & Co. Webinar on the topic "Forensics For CMAs was conducted on 5.12.2020 and speaker was Shri Raman Narasimhan, Head Internal Audit, Sundaram Finance Group. Webinar was organised on the topic "Demystifying E – Invoicing under GST" on 12.12.2020 and speakers were CMA Malav Dalwadi, Founder Director, Microvista Technologies Private Limited and CMA Bhogavalli Mallikarjuna Gupta, GST and Management Consultant. On 26.12.2020 Webinar on the topic "GST E Invoice - Relevance, Process & The Way Forward" was organised. Speaker was Shri R. Srivatsan, Senior Faculty & Additional Assistant Director (Trainings), NACIN, Chennai.



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA TRIVANDRUM CHAPTER

The Chapter on 18.12.2020 in Co-operation with the Sree Chithra Institute of Medical Science and Technology conducted voluntary blood donation camp. The Blood Donation camp was inaugurated by CMA Pramode Chandran P G, Chairman of the Chapter by donating blood. 15 members and students have joined in donating blood. Sri Madhusoodhanan Nair, the Councilor of the area have attended the inaugural session. CMA Pranav Jayan, Secretary was also present. CMA Nisha Habi, Vice Chairperson of the Chapter has also joined in donating Blood.

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA COIMBATORE CHAPTER

The Chapter Chairman conducted online career counselling programs on 21st December, 2020 to the students of Kongunadu Arts & Science College, Coimbatore. National Farmers' Day was celebrated on 23rd December,2020 by conducting an online PDP on the topic "Strategic Agri Cost Management and the Farmers Agreement of Price Assurance" by Dr. P. Murali Senior Scientist (Ag.Economics) ICAR-Sugarcane Breeding Institute GOI. The Chapter signed a MoU with Kongunadu Arts & Science College, Coimbatore for Foundation Course Satellite Centre on 7th January, 2021. Chapter commenced 91st Session of Oral Coaching classes for Foundation, Intermediate and Final level from 18th January, 2021. In view of the COVID 19 situation, all the classes are planned to be conducted online until the normalcy returns.

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA HYDERABAD CHAPTER

The Chapter conducted a programme on 1st December 2020 on Onshore and Offshore Market for Indian Rupee – The way forward. There was a very informative session with CMA (Dr.) Siva Rama Prasad Puvvala on the topic " Onshore marketing and Off - shore marketing". He explained about NDFs – The New Model Market, Price Discovery Mechanism ₹ Vs $, Details of Stock Exchanges, Foreign Exchange, Foreign Exchange Market Rates, Factors Determining Foreign Exchange Rates, Forward Contracts in Foreign Exchange, Desperate Times Call for Desperate Measures, Onshore and Offshore Currency Trading, Trading Rupee Derivatives in the offshore Markets. On 6th December 2020 a programme was organised on E- Mail Etiquettes. Ms. Komal Washawan articulated everything so nicely. A programme was conducted on 8.12.2020 on Quarterly Returns & Monthly Payment Scheme in coordination with the staff of Hyderabad GST Commissionerate. CMA B. Manasa Reddy has provided very valuable information on "Quarterly Returns overview of QRMP Scheme, Eligibility for the Scheme, Exercising option for QRMP Scheme, Furnishing of details of outward supplies under section 37, Quarterly filing of Form GSTR – 3B, Monthly payment of Tax, Applicability of Interest & Late fee etc. The Chapter organized a discussion seminar on 11.12.2020 on the exposure draft and submitted the compiled views/ suggestions to the technical cell. CMA A.V.N.S. Nageswara Rao, Past Chairman, SIRC & Practising Cost Accountant, CMA M. Kameswara Rao - Past Chairman, Hyderabad Chapter & Practising Cost Accountant, CMA C. Vajralingam Practising Cost Accountant, CMA P. Chandra Sekhar Reddy, MC Member and some other Practising Cost Accountants expressed their views and suggestions. A programme was conducted on 13.12.2020 on Social Media Communication for CMAs. The chapter has conducted discussion seminar on the topic on 14.12.2020 "Different Types of Agriculture Activities & Role of CMAs" and planned to form a permanent committee to carry forward the tasks.

WESTERN INDIA REGIONAL COUNCIL

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA PIMPRI CHINCHWAD AKURDI CHAPTER

The Chapter has conducted Career Counselling program on 7th December 2020 at Dnyandeep College of Science and Commerce, Tal-Khed, Dist-Ratnagiri through Google Digital Platform. CMA Jayant Hampiholi, Chairman of the Chapter has interacted with all the participants given introduction about the Chapter. CMA Suraj Tatiya has delivered lecture informing students about Foundation, Intermediate and Final levels of the course. He informed students about large employment opportunities in Govt. and Private sector after completing the CMA Course. Principal Dr. Umesh Bagal of Dnyandeep College and Prof. Sunjog Jadhav and few other Professors were present for this program. Prof. Sanjog Jadhav gave a vote of thanks. The Chapter conducted the webinar on "Stress Management" on Saturday, December 12, 2020 at 6:00pm to 8:30pm through Google Digital platform. CMA Ashish Deshmukh, Past Chairman of the Chapter has introduced and welcomed audience and introduced the speaker CMA Dhananjay Kumar Vatsyayan, Vice-Chairman of Chapter. A webinar on "Reverse Auction; What it is and How does it work" was conducted on Saturday, December 19, 2020 at 6:00pm to 8:30pm through Google Digital platform. CMA Pradeep Deshpande, Secretary of the Chapter has introduced and welcomed audience and introduced the speaker CMA (Dr.) Sunil Kumar Gupta, Managing Director, RVO – The Institute of Cost Accountants of India. CMA Dr. Gupta in his speech focused on perspective behind the subject. The Chapter jointly with WIRC of ICAI conducted the webinar on "Farmers Producer Organisation (FPO) constitution - Benefits and Concerns & GST on Agriculture Inputs Mechanism" to observe the National Farmer's Day on 23rd December 2020 at 4:00pm to 5:00pm through Google Digital Platform. CMA Mahendra Bhombe, Treasurer WIRC of ICAI welcomed the participants and introduced the speaker Shri. Vivek Kapadnis, Managing Director, Alligo Horizon Pvt Ltd., Nasik. CMA Ashish Deshmukh, Past Chairman of the Chapter said, the lots of Farmer producer companies are being floated, but there are no SOPs in place. Shri. Vivek Kapadnis in his speech first of all congratulated all CMAs who have chosen this topic. He has focused on important role of CMAs in this field. Further he discussed on various -issues related to FPO. The webinar on "Mutual Funds in India – Growth and Opportunities" was conducted on Saturday, December 26, 2020 at 6:00pm to 8:30pm through Google Digital platform. CMA Ashish Deshmukh, Past Chairman of the Chapter has welcomed all the participants and introduced the speaker Mr. Sarath Bhamidipathi, Executive Director, IDBI Mutual Fund & Founder of Lotus Financials. Mr. Sarath Bhamidipathi in his speech started with What is Mutual Fund and Why Mutual Fund. Then he moved towards the challenges involved investing directly in Capital Market and Key Investment Considerations. CMA Avinash Foujdar, Practicing Cost Accountant gave a vote of thanks.

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA SURAT SOUTH GUJARAT CHAPTER

The Chapter organized a Webinar on **"E- invoices under GST"** on 5th December, 2020 through the google meet. The Speaker of the Program was **CMA Malav Dalwadi.** The Vice **Chairman, CMA Nanty Shah** presented a welcome address and **CMA Bhanwar Lal Gurjar** Vice Chairman of the chapter introduced the Speaker to the members. **CMA Malav Dalwadi** commenced the session and explained about the procedure to generate E- invoices under GST. **CMA Bhanwar Lal Gurjar** Vice Chairman of the Chapter presented a formal Vote of Thanks.

DIRECT & INDIRECT TAX UPDATES - JANUARY 2021

DIRECT TAXES

- **Notification No. 92/2020 dated 31st Dec 2020:** In exercise of the powers conferred by section 3 of the Direct Tax Vivad se Vishwas Act, 2020 (3 of 2020), the Central Government hereby makes the following amendment in the notification of the Government of India, Ministry of Finance, (Department of Revenue), Central Board of Direct Taxes, number 85/2020, dated the 27th October, 2020.

  In the said notification, in clause (a), for the words, figures and letters "the 31st day of December, 2020", the words, figures and letters "the 31st day of January, 2021" shall be substituted.

- **Notification No. 93/2020 dated 31st Dec 2020:** In exercise of the powers conferred by sub-section (1) of section 3 of the Taxation and Other Laws (Relaxation and Amendment of Certain Provisions) Act, 2020 (38 of 2020) (hereinafter referred to the Act) and in supersession of the notification of the Government of India in the Ministry of Finance, (Department of Revenue) No. 88/2020 dated the 29th October, 2020.

  (A) clause (a) of sub-section (1) of section 3 of the Act,

  (i) the 30th day of March, 2021 shall be the end date of the period during which the time limit specified in, or prescribed or notified under, the specified Act falls for the completion or compliance of such action as specified under the said sub-section; and

  (ii) the 31st day of March, 2021 shall be the end date to which the time limit for completion or compliance of such action shall stand extended.

  (B) clause (b) of sub-section (1) of section 3 of the Act, where the specified Act is the Income-tax Act, 1961 (43 of 1961) and the compliance for the assessment year commencing on the 1st day of April, 2020 relates to

  (i) furnishing of return under section 139 thereof, the time limit for furnishing of such return, shall

  (a) in respect of the assessees referred to in clauses (a) and (aa) of Explanation 2 to sub-section (1) of the said section 139, stand extended to the 15th day of February 2021; and

  (b) in respect of other assessees, stand extended to the 10th day of January, 2021: Provided that the provisions of the fourth proviso to sub-section (1) of section 3 of the Act shall, mutatis mutandis apply to these extensions of due date, as they apply to the date referred to in sub-clause (b) of clause (i) of the third proviso thereof

  (ii) furnishing of report of audit under any provision of that Act, the time limit for furnishing of such report of audit shall stand extended to the 15th day of January, 2021.

- **Notification No. 1/2021 dated 6th January 2021:** In exercise of the powers conferred by sub-section (1) of section 280A of the Income-tax Act, 1961 (43 of 1961), the Central Government, in consultation with the Chief Justice of the High Court of Tripura, hereby designates the Court of Chief Judicial Magistrate, West Tripura Judicial District, Agartala as the Special Court for the State of Tripura for the purposes of the said sub-section.

- **Notification No. 2/2021 dated 12th January 2021:** In exercise of the powers conferred by sub-section (2A) of section 274 of the Income-tax Act, 1961 (43 of 1961), the Central Government hereby makes the Scheme, namely this Scheme may be called the Faceless Penalty Scheme, 2021. The penalty under this Scheme shall be imposed in respect of such territorial area, or persons or class of persons, or income or class of income or cases or class of cases, or penalties or class of penalties as may be specified by the Board.

- **Notification No. 3/2021 dated 12th January 2021:** In exercise of the powers conferred by sub-section (2B) of section 274 of the Income-tax Act, 1961 (43 of 1961), for the purposes of giving effect to the Faceless Penalty Scheme, 2021 made under sub-section (2A) of section 274 of the said Act, the Central Government hereby makes the following directions, namely: The provisions of section 2, section 120, section 127, section 129, section 131, section 133, section 133C, section 136 and Chapter XXI of the said Act shall apply to the procedure for imposing penalty in accordance with the said Scheme subject to the exceptions, modifications and adaptations.

- **Circular No. 1/2021 dated 15th January 2021:** Rule 10V of the Income-tax Rules, 1962 (the Rules) has been amended, w.e.f. 01.04.2019, vide Notification No 29/2020 dated 27.05.2020 by way of, inter alia, insertion of subrules (12) and (13) therein. Sub-rule (12) provides for the amount of remuneration to be paid by the fund to a fund manager. 2nd proviso of the said sub-rule provides that the fund may seek Board's approval in case where the amount of remuneration is lower than the amount so prescribed. In this regard, representations have been received expressing inability to comply with the provisions of sub-rule 12 of rule 10V of the Rules regarding the amount of remuneration to be paid by the fund to a fund manager for the financial year 2019-20 as the said Notification No 29/2020 was notified after the financial year got over and the financial year 2020-21 had already commenced. In exercise of powers conferred under section 119 of the Act, has decided to provide that for the financial years 2019-20 and 2020- 21 in cases where the remuneration paid to the fund manager is lower than the amount of remuneration prescribed under sub-rule (12) of rule 10V of the Rules, but is at arm's length, it shall be sufficient compliance to clause (m) of sub-section (3) of section 9A of the Act. It is stated that the remuneration to be paid to the fund manager, for the financial year 2021- 22, shall be in accordance with sub-rule (12) of rule 10V of the Rules and the application for lower remuneration in terms of 2nd proviso for this year, if any, may be filed not later than 1st February, 2021.

INDIRECT TAXES

CUSTOMS

- **Notification No. 1/2021-Customs dated 28th January 2021:** Seeks to confirm the provisional Bilateral Safeguard measure on imports of " Polybutadiene Rubber excluding titanium and lithium grades " originating in Korea RP and imported under the India-Korea Comprehensive Economic Partnership Agreement, and to further amend notification no. 152/2009 dated 31.12.2009 to modify the rate of duty of customs on said imports, on recommendation of final findings of Directorate General of Trade Remedies under India-Korea Comprehensive Economic Partnership Agreement (Bilateral Safeguard Measures) Rules, 2017. In the said notification, (I) In the Table, (i) against serial number 342B, for the entry in column (3), the entries "All goods other than those mentioned against serial number 342A or 342C", shall be substituted;

  (ii) after serial number 342B and the entries relating thereto, the following serial numbers and entries shall be inserted, namely: -

(1)	(2)	(3)	(4)
"342C	400220	Polybutadiene Rubber excluding titanium and lithium grades	7.50";

- **Circular No.01/2021-Customs dated 14th January 2020:** Reference is invited to CBIC Circulars No.45/2005-Customs, dated 24.11.2005 and No.8/2019-Customs, dated 26.02.2019 dealing with transhipment of import and export cargo and carriage of coastal cargo. It is seen that Circular No.45/2005, dated 24.11.2005 waives the requirement of execution of bank guarantee for the purpose of transhipment in respect of:

  Carriers of containerized cargo, who are handling more than 1000 TEUs as import containers in a financial year. This waiver would apply not only to shipping lines but also to ICDs/CFSs/other carriers and for carriage in all modes of transhipment, irrespective of their movement by road, coastal shipping or rail. Further, jurisdictional Commissioners of Customs in deserving cases have been empowered to exempt the requirement of furnishing Bank Guarantee in respect of carriers having annual transhipment volume below the limit of 1000 TEUs, but having good track record.

  Further vide Circular No.8/2019-Cus, dated 26.02.2019 movement of coastal goods through foreign territory of Sri Lanka and Bangladesh has been provided for, with a view to promote the movement of coastal goods through foreign territory. In view of the above, Board has decided to extend the exemption from requirement of furnishing of Bank Guarantee by the carriers for carriage of EXIM cargo for transhipment through foreign territories of Sri Lanka and Bangladesh. This relaxation would apply, if the carrier fulfils the requirement of waiver of Bank Guarantee in a like manner, as provided for by Circular No. 45/2005-Customs, dated 24.11.2005.

- **Circular No. 02/2021-Customs dated 19th January 2020:** Posting of staff at Customs areas and collection of Cost Recovery Charges.

GST

- **Notification No. 01/2021 Central Tax dated 1st January 2020:** In exercise of the powers conferred by section 164 of the Central Goods and Services Tax Act, 2017 (12 of 2017), the Central Government, on the recommendations of the Council, hereby makes the following rules further to amend the Central Goods and Services Tax Rules, 2017.

  In the Central Goods and Services Tax Rules, 2017 (hereafter in this notification referred to as the said rules), in rule 59, after sub-rule (5), the following sub-rule shall be inserted namely:- "(6) Notwithstanding anything contained in this rule

  (a) a registered person shall not be allowed to furnish the details of outward supplies of goods or services or both under section 37 in FORM GSTR-1, if he has not furnished the return in FORM GSTR-3B for preceding two months

  (b) a registered person, required to furnish return for every quarter under the proviso to sub-section (1) of section 39, shall not be allowed to furnish the details of outward supplies of goods or services or both under section 37 in FORM GSTR-1 or using the invoice furnishing facility, if he has not furnished the return in FORM GSTR-3B for preceding tax period

  (c) a registered person, who is restricted from using the amount available in electronic credit ledger to discharge his liability towards tax in excess of ninety-nine per cent. of such tax liability under rule 86B, shall not be allowed to furnish the details of outward supplies of goods or services or both under section 37 in FORM GSTR-1 or using the invoice furnishing facility, if he has not furnished the return in FORM GSTR-3B for preceding tax period.".

- **Notification No. 02/2021 Central Tax dated 12th January 2020:** Notifying amendment to jurisdiction of Central Tax officers.

Sources:
incometax.gov.in, cbic.gov.in

RNI NO. 12032/1966

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'D' Number MH/MR/TECH/47/10/2020-21
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