THE MANAGEMENT ACCOUNTANT

ISSN 0972-3528

June 2020 | VOL 55 | NO. 06 | Pages - 124 | ₹ 100

ENVIRONMENTAL MANAGEMENT ACCOUNTING
ISSUES AND PRACTICES

Journal of

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

(Statutory Body under an Act of Parliament)

www.icmai.in

www.icmai.in

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

Statutory Body under an Act of Parliament

AWARDS 2019

Call for Nominations

Screening Committee

Chairman
Mr. Sunil Bhatia
Director (Finance)
Engineers India Ltd

Members
Mr. Inderpal Singh Sandhu
Director (Finance), HHEC Ltd

Mr. Sham Gulati
GM (Finance), HUDCO Ltd

Mr. Ratnesh
GM (Finance), NTPC Ltd

Mr. L.M. Kaushal
Joint Secretary & Advisor
(Cost), Ministry of Finance

Mr. Jayabrata Bose
Advisor, Deptt. of Expenditure,
Ministry of Finance

Mr. A. K. Dhingra
Former Joint Advisor, TRAI

Mr. Subhash Agarwal
Practicing Cost Accountant

Mr. Upendra Tiwari
Practicing Cost Accountant

Ms. Priyanka Saxena
Practicing Cost Accountant

Permanent Invitees
CMA Balwinder Singh
President

CMA Biswarup Basu
Vice President

CMA Vijender Sharma
Chairman
Professional Development &
CPD Committee

Secretary
CMA Nisha Dewan
Secretary
Professional Development &
CPD Committee

17th National Awards for Excellence in Cost Management 2019

Eligibility to Participate:
All companies (Listed or Unlisted) Including LLP
Categories:

1. Manufacturing Sector

A1) Private Sector - Mega
A2) Private Sector - Large
A3) Private Sector - Medium
A4) Private Sector - Small
A4) Private Sector - Micro
A5) Public Sector - Mega
A6) Public Sector - Large
A7) Public Sector - Medium
A8) Public Sector - Small

2. Service Sector

B1) Banking, Financial Services and Insurance
B2) Transportation and Logistics
B3) Power Distribution and Transmission
B4) Retail & E-commerce
B5) Hospitality & Tourism
B6) Healthcare
B7) Infrastructure and Construction
B8) Information Technology & Telecommunication
B9) Consulting
B10) Start-up
B11) Others

Evaluating Agency:- Care Ratings Ltd.
Submission of Nomination: By sending email at *ecma@icmai.in*
For details visit website of the Institute:
https://icmai.in/icmai/news/National-Awards.php

6th CMA Awards 2019

Eligibility to Participate:
CMAs in employment and not holding CoP for the last three years
Categories:

CMA CFO	CMA Achiever	CMA Young Achiever
(i) Manufacturing Sector - Public	(iv) Manufacturing Sector - Public	(vii) Manufacturing Sector - Public
(ii) Manufacturing Sector - Private	(v) Manufacturing Sector - Private	(viii) Manufacturing Sector - Private
(iii) Service Sector	(vi) Service Sector	(ix) Service Sector

Submission of Nomination: Online forms or by email at *cmaawards@icmai.in*
For details visit website of the Institute:
https://icmai.in/icmai/news/CMA-Award.php

CMA Balwinder Singh
President
ICAI

CMA Biswarup Basu
Vice President
ICAI

CMA Vijender Sharma
Chairman
Professional Development
&
CPD Committee
ICAI

Headquarters:

CMA Bhawan
12, Sudder Street
Kolkata - 7000016
Ph: + 91 33-22521031-34-35

For any clarifications contact Professional Development Directorate

CMA Vijay Lohan
Assistant Director
95824-61255

CMA Nisha Dewan
Additional Director
Head (Professional Development)
98914-80860

CMA Indu Sharma
Joint Director
98919-89307

Delhi Office:

CMA Bhawan
3 Institutional Area
Lodhi Road, New Delhi - 110003
Ph: +91 11 24622156-58

Last Date for submission of Nomination:- 6th July 2020

Behind every successful business decision, there is always a CMA

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

Statutory body under an Act of Parliament

www.icmai.in

- **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**

PRESIDENT
CMA Balwinder Singh
president@icmai.in

VICE PRESIDENT
CMA Biswarup Basu
vicepresident@icmai.in

COUNCIL MEMBERS
CMA (Dr.) Ashish Prakash Thatte, CMA Ashwinkumar Gordhanbhai Dalwadi, CMA Chittaranjan Chattopadhyay, CMA Debasish Mitra, CMA H. Padmanabhan, CMA (Dr.) K Ch A V S N Murthy, CMA Neeraj Dhananjay Joshi, CMA Niranjan Mishra, CMA P. Raju Iyer, CMA Papa Rao Sunkara, CMA Rakesh Bhalla, CMA (Dr.) V. Murali, CMA Vijender Sharma, Shri Manmohan Juneja, Shri Devendra Kumar, Shri Sushil Behl

Secretary
CMA Kaushik Banerjee
secy@icmai.in

Senior Director (Human Resource) and Director (Discipline)
CMA S. C. Gupta
hr.hod@icmai.in, discipline.director@icmai.in

Senior Director (Studies, Training & Education Facilities and Placement & Career Counselling, Advanced Studies)
CMA (Dr.) Debaprosanna Nandy
studies.director@icmai.in, placement.director@icmai.in, advstudies.director@icmai.in

Senior Director (Membership)
CMA Arup Sankar Bagchi
membership.director@icmai.in

Additional Director (Public Relation, Delhi Office)
Dr. Giri Ketharaj
pr.hod@icmai.in

Additional Director (Incharge of Directorate of Examination)
CMA Arunava Ganguly
exam.addldir1@icmai.in

Additional Director (Tax Research)
CMA Rajat Kumar Basu
trd.hod@icmai.in

Additional Director (Research & Studies, Training & Education Facilities and Placement & Career Counselling)
CMA (Dr.) Sumita Chakraborty
research.hod@icmai.in, studies.addldir1@icmai.in

Additional Director (PD & CPD and PR Corporate)
CMA Nisha Dewan
pd.hod@icmai.in, prcorp.hod@icmai.in

Additional Director (Technical)
CMA Tarun Kumar
technical.addldir1@icmai.in

Additional Director (Infrastructure)
CMA Kushal Sengupta
Infrastructure.hod@icmai.in

Joint Director (Journal & Publications, Studies, Training & Education Facilities and Placement & Career Counselling)
CMA Sucharita Chakraborty
journal.hod@icmai.in

Joint Director (Internal Control)
CMA Dibbendu Roy
intcontrol.hod@icmai.in

Joint Director (Information Technology)
Mr. Ashish Tewari
it.hod@icmai.in

Joint Director (Finance)
CMA Soma Banerjee
finance.hod@icmai.in

Joint Director (Admin-HQ, Kolkata)
Ms. Jayati Sinha
admin.hod.Kolkata@icmai.in

Joint Director (Admin-Delhi)
CMA T. R. Abrol
admin.hod@icmai.in

Deputy Director (Legal)
Ms. Vibhu Agarwal
legal.hod@icmai.in

Deputy Director (CAT)
CMA R. K. Jain
cat.hod@icmai.in

Deputy Director (International Affairs)
CMA Yogender Pal Singh
intlaffairs@icmai.in

Headquarters
CMA Bhawan, 12 Sudder Street
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

Delhi Office
CMA Bhawan, 3 Institutional Area
Lodhi Road, New Delhi - 110003

CONTENTS

INSIDE

COVER STORY

JUNE 2020

June VOL 55 NO.06 ₹100

*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.

The Management Accountant, official organ of The Institute of Cost Accountants of India, established in 1944 (founder member of IFAC, SAFA and CAPA)

EDITOR - CMA Dr. Debaprosanna Nandy
on behalf of The Institute of Cost Accountants of India, 12, Sudder Street, Kolkata - 700 016, P. S. New Market, West Bengal
e-mail: editor@icmai.in

PRINTER & PUBLISHER - Dr. Ketharaju Siva Venkata Sesha Giri Rao
on behalf of The Institute of Cost Accountants of India, 12, Sudder Street, Kolkata - 700 016, P. S. New Market, West Bengal

PRINTED AT - Spenta Multimedia Pvt. Ltd., Plot 15, 16 & 21/1
Village - Chikhloli, Morivali, MIDC, Ambernath (West), Dist: Thane - 421505
on behalf of The Institute of Cost Accountants of India, 12, Sudder Street, Kolkata - 700 016, P. S. New Market, West Bengal

PUBLISHED FROM - The Institute of Cost Accountants of India, 12, Sudder Street, Kolkata - 700 016, P. S. New Market, West Bengal

CHAIRMAN, JOURNAL & PUBLICATIONS COMMITTEE -
CMA (Dr.) K Ch A V S N Murthy

ENQUIRY

- **Articles/Publications/News/Contents/Letters/Book Review/Enlistment**
  editor@icmai.in
- **Non-Receipt/Complementary Copies/Grievances**
  journal@icmai.in
- **Subscription/Renewal/Restoration**
  subscription@icmai.in
- **Research/Collaboration/Association/Promotion/Events**
  research@icmai.in

EDITORIAL OFFICE - CMA Bhawan, 4th Floor, 84, Harish Mukherjee Road
Kolkata - 700 025 ; Tel: +91 33 2454-0086/0087/0184/0063

The Management Accountant technical data

Periodicity : Monthly
Language : English

Overall Size: - 26.5 cm x 19.5 cm

Subscription
Inland: ₹1,000 p.a or ₹100 for a single copy
Overseas: US$ 150 by airmail

Concessional subscription rates for registered students of the Institute:
₹300 p.a or ₹30 for a single copy

Contacts for Advertisement inquiries:

Mumbai
Rohit Bandekar
rohitb@spentamultimedia.com
+91 99872 79990

Delhi
Vikas Hajela
vikash@spentamultimedia.com
+91 98100 34830

Chennai
Shoba Rebecca
shoba@spentamultimedia.com
+91 98840 55523

Bengaluru
Sandeep Kumar
sandeep@spentamultimedia.com
+91 98868 70671

Kolkata
Pulak Ghosh
pulak@spentamultimedia.com
+91 98313 42496

The Management Accountant Journal is Indexed and Listed at:

- Index Copernicus and J-gate
- Global Impact and Quality factor (2015):0.563

EDITORIAL

Greetings!!!

Taking care of the environment has become an enormous preoccupation virtually around the world and accounting for the environment, natural resources and related issues have started gaining increasing importance and attention. Thankfully, the world is no longer willing to be a mute spectator to Mother Nature being made to pay the cost of a nation's growth and progress. Countries are exceedingly being watched and called out by the global community for environmental transgressions. Be it soil erosion, melting glaciers, the increasingly growing carbon footprint or deforestation, all these aspects are being diligently watched and documented by the competent authorities.

Mahatma Gandhi said, "Mother Earth provides enough to satisfy every man's need, but not for every man's greed." This insightful observation alone is an indication of how relevant environmental accounting is in today's context, as envisioned way back. Environmental accounting or green accounting is a concept that calculates the cost of a nation's economic impact on nature.

Environmental accounting is a broader term that encompasses the provision of environment-related information both externally and internally. It focuses on reports required for shareholders and other stakeholders, as well of the provision of management information. Environmental Management Accounting, on the other hand, is a subset of environmental accounting. It focuses on the information required for decision making within the organisation, although much of the information it generates could be used for external reporting. It is complementary to the conventional financial management accounting approach, with the aim to develop appropriate mechanisms that assist in the identification and allocation of environment-related costs.

Environmental management accounting approach is required to improve the environmental performance of a company, proper implementation of the system can assure transparency for the company to report the environmental costs clearly and help them in accessing their corporate social responsibility initiatives as well. All this, in turn, enhances the image of the company in the media as well as amongst its shareholders.

Nowadays, owing to rising pollution levels and climate change, the environment has been suffering in a major way. This, in turn, is now forcing nations across the world to adopt an inclusive approach towards economic development and ensure that industrial development is sustainable and in tune with the interests of the environment. At this outset, India must introduce a recharged and revamped system of environmental management accounting that takes a comprehensive view of how a nation can progress without paying huge environmental penalties. This new accounting system must be an end to end solution so that it encapsulates the common man on one side and the Gross Domestic Product on the other. In between, it should be able to link and audit natural resources ensuring that the methodology of their use reduces wastage. This, if done efficiently, can script a turnaround in how natural resources are used and promote accountability in their usage as well.

CMAs will have the opportunity to work in the context of integrated reporting and environmental and natural resource accounting as a consultant in providing the consultancy on environmental opportunities and risk management. The Cost & Management Accountants can apply certain tools and techniques like Life-Cycle Assessment, Hierarchical Cost Analysis, Activity-Based Costing, Balanced Scorecard, etc. for quantification and monetization of externalities and full environmental cost accounting for effective accounting and fair reporting. Further, CMAs with their multi-disciplinary and techno-commercial skills are the apt professionals to conduct Green or Environmental Audits to ensure necessary compliance of Environmental Laws, effective assessment of Environment Cost, Environment Impact Assessment and Carbon credit.

This issue presents a good number of articles on the cover story "Environmental Management Accounting: Issues and Practices" 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
July 2020	Goods & Services Tax (GST): Recent Changes and Emerging Issues	• GST Returns: Issues, Challenges and Controversies • Misconception related to disclosure of Information in Annual Return Forms • E-Invoicing & E-Way bill under GST • Advance Ruling Mechanism in GST • Input Tax Credit under GST: Practical Issues • Applicability and Procedure for effective GST Audit • Rationalization of GST Rates once a year: Key to aFive Trillion Dollar economy • Simplification of GST and preventing evasion to accelerate economic momentum and ease of living for taxpayers: Role of CMAs
August 2020	Driving India towards 5 Trillion Dollar Economy	• An Overview of the Indian Economy: Policy, Reforms and Governance • Ease of Doing Business (EoDB) score: Crucial for India to scale ambitious peak of $5 Trillion • Transforming agricultural and doubling farmer's income • Leveraging Technology to make India a global economic powerhouse • Strengthening industrial competitiveness: Special emphasis to manufacturing sector • Energy with focus on renewable energy • Infra Development: The way forward • Health for all • Skilling and Education: Critical for optimizing on India's Demographic Dividend • Mission 5 Trillion: Driving SDG through CMAs
September 2020	Insurance Sector in India: Today's reality and the path ahead	• Life Insurance in India: Promoting innovation and creativity for growth and development • Recent developments in General Insurance Sector • Insurance Risk Management: Role of Actuaries involved • Differential Customer Service: A key determinant of growth • Disruptive innovation: A path to progress • Insurtech: Re-shaping the Insurance Industry • Impact of COVID-19 in insurance sector • Cyber crime Insurance: A growing market • Securing Rural India • Agri-Insurance in India vis-a-vis Global practices • IRDAI Rules and Regulations: Challenges and impact on Insurance business • Risk management practices in insurance business - Role of CMAs
October 2020	Self-Reliant India: Pathway to a Robust Economy	• Indian Economy post Covid-19: A positive outlook • Constraints towards induction of indigenous system • Atmanirbhar Bharat: 5 Pillars To make India Self-Reliant • Intent, Inclusion, Investment, Infrastructure, Innovation: Need of the hour to bring India back on track for fast-paced growth • MSMEs: key to self-reliant India • Overhauling education structure to be self-reliant • Vocal for Local with a special emphasis to Indian pharmaceutical sector • Challenges and prospects of self-reliance in Indian Defence sector • Strengthening domestic industry by Streamlining the governance system • Made in India, made for the world • Innovation for self-sustainability: Role of CMAs

*** On 01st July 2017, the GST law came into force. So we have changed our theme of July 2020 issue to "Goods and Services Tax (GST): Recent Changes and Emerging Issues". Further, the theme "Driving India towards 5 Trillion Dollar Economy" to be considered for the August 2020 issue now.*

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.

DIRECTORATE OF JOURNAL & PUBLICATIONS
CMA Bhawan, 4th Floor, 84 Harish Mukherjee Road, Kolkata - 700025, India
Board: +91 33 2454 0086 / 87 / 0184 Tel-Fax: +91 33 2454 0063
www.icmai.in

PRESIDENT'S COMMUNIQUÉ

CMA Balwinder Singh
President
The Institute of Cost Accountants of India

"The earth, the air, the land and the water are not an inheritance from our forefathers but on loan from our children. So we have to handover to them at least as it was handed over to us."

– Mahatma Gandhi

My Dear Professional Colleagues,

The Novel Coronavirus COVID-19 pandemic has disrupted normal economic activity and life around the world. All affected Countries including India are taking all possible steps to curb the spread of the fatal Corona virus and adopted a policy of Lockdown to battle this Pandemic. I urge everyone to follow the instructions and guidelines issued by the Government to Combat the COVID-19. I am confident that we will win this war against humanity.

In times like these, we as professionals have a much higher responsibility, especially when the entire Nation is fighting the global Pandemic COVID-19. Such a situation is also creating an environment of stress and anxiety amongst the general public.

To boost the morale of the members and students of the Institute in these challenging times ahead, I am delighted to inform you that **Gurudev Sri Sri Ravi Shankar** addressed the CMA fraternity & students on the theme **"Unveiling the Mind - Confusion to Clarity"** through WEBINT on June 6, 2020. It was a continuous request from the members to organize such an event for the benefit of CMA member and student fraternity. The event was well received and was a huge success.

I am thankful to CMA Biswarup Basu, Vice President of the Institute in supporting the excellent execution of the event. I am thankful to CMA H Padmanabhan, Chairman Regional Council & Chapters Coordination Committee, CAT Committee and AAT Board for supporting the Institute's initiative of organising this mega event and being the excellent host of the event.

Greetings to Secretary MCA

The Institute extends its heartiest congratulations and best wishes to **Shri Rajesh Verma** on his appointment as the Secretary to the Government of India, Ministry of Corporate Affairs. The Institute is fully committed to work under the guidance of Govt. for regulating the functioning of the corporate sector in accordance with law towards good governance, cost optimization, improving efficiency and ushering an era of accountability for the economic development of the Country. The senior officials from Institute's HQ office at New Delhi extended greetings in-person to Shri Rajesh Verma, Secretary, Ministry of Corporate Affairs, Govt. of India on his joining on 1st June, 2020.

Celebration of Foundation Day of the Institute

I am happy to share that the Institute celebrated the **Foundation Day** through a WEBINT with cognizance of the current scenario supporting our Hon'ble Prime Minister's vision of Self Reliant India movement - Atam Nirbhar Bharat which induced to deliberate on the theme **"New Era of Self Reliant India - Role of Cost Accountants in Reinforcing the Economy."**

The occasion was graced by the Chief Guest **Shri Suresh Prabhu** Hon'ble MP-Rajya Sabha and India's Sherpa for G20 & G7 Nations; **Shri Ram Madhav**, National General Secretary Bharatiya Janata Party; **Shri Arun Goel**, Secretary to the Government of India, Department of Heavy Industry Ministry of Heavy Industries & Public Enterprises; **Dr. Sangita Reddy**, President, FICCI; **Prof. Shamika Ravi**, Former Member, PM's Economic Advisory Council, India Director Research, Brookings Institution India Center. Chief Guest, Shri Suresh Prabhu, offered his kind support to the Institute to work together towards achieving the PM's mission of Self Reliant India.

The growth and development of every economy hinge on how resources are judiciously managed and multiplied. Cost Accounting is the back bone of economic development and growth. Cost Accountants have been continuously contributing over 76 years to the growth of the industrial and economic climate of the Country.

All the distinguished learned speakers endorsed that the Cost Accountants play a strategic role in starting and rebuilding the businesses, it's all about value creation and value addition to all the stakeholders. We are confident that the Institute and CMA Fraternity is committed to support the Government's initiatives and play a role as enabler to make Self Reliant India a reality. I congratulate and convey my best wishes to the entire CMA fraternity.

I along with CMA Biswarup Basu, Vice President of the Institute, CMA Vijender Sharma Chairman Professional Development & CPD Committee and Members' Facilities Committee and CMA H Padmanabhan Chairman Regional Council & Chapters Coordination Committee, CAT Committee and AAT Board welcomed the distinguished guests.

Live Interactive Session with Shri Nitin Gadkari, Hon'ble Union Minister for Road Transport & Highways and Micro, Small and Medium Enterprises

MSME Sector is not only the biggest contributors to employment but also one of the top contributors to India's growth in term of the economic value delivered by it in the manufacturing and services sectors. Now, the collapse of economic activities, due to the COVID-19 pandemic and the subsequent lockdown, has increased pressure on the segment.

The impact of COVID-19 pandemic on human life, society and economy can't be gauged with accuracy. The lockdown across the globe and in India is increasing uncertainty and pressure on various segments of the economy. The decline of MSMEs in large numbers may lead to economic pandemic which could be a bigger challenge for the country.

I truly express my gratitude and thanks to **Shri Nitin Gadkari**, Hon'ble Union Minister for Road Transport & Highways and MSME for accepting our invitation and taking out his precious time for the Live Interactive Session on **"Strategies for revival of MSME Sector- Post COVID-19"** on 12th May 2020. During the interaction with the Hon'ble Union Minister, the Institute extended its full support to the endeavours of the Ministry of MSME in these critical times and announced plan to open 36 MSME Help Desks across the Country in the first phase to provide assistance to the MSME sector. The Institute also submitted its recommendations for the revival of MSME Sector.

I am happy to share that the Government has already considered some of the suggestions submitted by the Institute in the measures for MSME announced recently.

MSME Help Desks

The Institute has opened MSME Help Desks across the country to provide assistance to the MSME sector. The Professional Development Committee of the Institute is ensuring the best support to the Industry at the Central Level and Help Desks at the Regional Councils and Chapters. The members are also offering their expert advise to MSME and supporting them for restarting the businesses.

Inauguration of CAT E-learning classes

The COVID-19 pandemic has affected educational systems worldwide, leading to the near-total closures of schools, universities and colleges. Most governments around the world have temporarily closed educational institutions in an attempt to contain the spread of COVID-19. Online learning has become a critical lifeline for education, as institutions seek to minimize the potential for community transmission.

The Institute has taken all the possible measures for the convenience of its members, students and other stakeholders in the present scenario, On 4th June 2020, I got the opportunity to inaugurate the e - learning classes for the students pursuing CAT Course in the presence of **CMA P V Bhattad,** Past President & Member, CAT Committee and **CMA Rakesh Singh,** Past President & Member CAT Committee. I congratulate CMA H Padmanabhan, Chairman CAT Committee for this timely initiative for the benefit of the CAT Students.

CAPA E-Meeting

I would like to share that I represented the Institute in the E-meeting of Confederation of Asian and Pacific Accountants (CAPA) held on 2nd June 2020. The meeting was restricted to member bodies to get an insight into current and proposed activities of CAPA and focus of CAPA to support member bodies during this challenging period. CAPA is regularly sharing materials and information produced by some of the member bodies including our Institute. A member body survey on the profession and PAO challenges is also being conducted by CAPA.

SAFA Board Meeting

I am pleased to share that I attended E-meeting of the 62nd SAFA Board meeting on 1st May, 2020. Member bodies were updated about the significant COVID 19 initiatives taken by SAFA member bodies in respect of member and student services and the way ahead. The initiatives of SAFA Webinars/E-Conferences and e-meetings of SAFA Board and Committees were also shared.

ICMAB Webinar

The Institute of Cost and Management Accountants of Bangladesh (ICMAB) organized an International Webinar on the theme "The Challenges and Role of Professional Accountants amid and post Covid -19 era" on 5th June, 2020. **Dr. Md. Jafar Uddin**, Secretary, Ministry of Commerce, Government of the People's Republic of Bangladesh was the Chief Guest for the Webinar. Leaders and representatives from various organisations from SAFA and other PAOs around the region presented their views and thoughts on the theme.

I was invited at the Webinar to address the participants on **"COVID-19: New challenges for Cost and Management Accountants"**. The web interaction explored various topics surrounding the role of professional accountants during this challenging period and preparing for a "new normal" post Covid-19.

Draft Valuers Bill, 2020

The Institute has submitted suggestions to the Ministry of Corporate Affairs on 28th May, 2020 in respect of Draft Valuers Bill, 2020 which was circulated for public comments. I am thankful to **CMA Amit A. Apte**, Immediate Past President & Registered Valuer, Chairman of Advisory Group formed for the purpose and other members of the group for timely finalisation of suggestions.

Accounting and Finance Services Sectional Committee of BIS

I am pleased to inform you that I represented the Institute in the meeting of Accounting and Finance Services Sectional Committee (SSD 12) of Bureau of Indian Standards (BIS) held on 15th May 2020. The Committee deliberated Strategy and roadmap for standardization in the accounting and finance service sector. Discussions included ISO/TC 295 (Audit Data Services) w.r.t. its suitability for adopting as an Indian Standard either as such or with modifications according to Indian scenario.

Exemption from Actuarial Common Entrance Test

I am pleased to inform you that the Institute of Actuaries of India (IAI) has exempted the members of the Institute of Cost Accountants of India from appearing in the Actuarial Common Entrance Test (ACET). The members of the Institute of Cost Accountants of India can now directly apply for admission as Student Member of IAI.

WEBINT on "Challenge of the Corona Virus - Economic and Financial Crisis"

I am happy to share that a Live Interactive Session on "Challenge of the Corona Virus - Economic and Financial Crisis" was organized by the Institute on 22nd May 2020. It is our great honour and privilege that **Shri D Subba Rao**, Former Governor RBI and Economist has kindly accepted our invitation and taken out his precious time for the Live Interactive Session.

The event was organised by Hyderabad Chapter of the Institute. I congratulate CMA KVN Lavanya, Chairperson, Hyderabad Chapter for the excellent organization of the event. I congratulate CMA H. Padmanabhan, Chairman AAT Board, CAT Committee and Regional Council & Chapter Coordination Committee of the Institute and CMA (Dr.) K Ch AVSN Murthy, Chairman, Journal & Publication Committee of the Institute for the excellent initiative.

Panel Discussion on "Opportunities & Threats for Recruitment – Post Covid-19"

I am pleased to inform that the Bhawanipur Education Society College (BESC), in association with the Institute organized a Panel Discussion on "Opportunities & Threats for Recruitment – Post Covid-19" on 24th May 2020. I along with CMA Biswarup Basu, Vice President of the Institute and CMA (Dr.) D P Nandy, Sr. Director of the Institute attended the panel discussion and addressed the students. The Panel Discussion was enriching and the students found the deliberation fulfilling.

World Environment Day

As you all are aware that World Environment Day is celebrated on the 5th of June every year, and is the United Nation's principal vehicle for encouraging awareness and action for the protection of our environment. In order be part of this global cause to protect our Environment, the members and students encouraged the society to move away from fossil fuels, replacing them with alternative energies like solar, wind and geothermal, promote energy conservation & efficiency, planting trees, cleaning surroundings and any other activity as they may feel appropriate aiming collectively to encourage caring for the environment by inspiring, informing, and enabling people to improve their quality of life without compromising that of future generations.

I now present a brief summary of the activities of various Departments of the Institute, in addition to those referred above:

PROFESSIONAL DEVELOPMENT & CPD COMMITTEE

Professional Development Directorate brought out a Memorandum highlighting problems & suggestions regarding "Impact of COVID-19 and Lockdown on The businesses in general with particular emphasis on Micro, Small & Medium Enterprises (MSMEs)" which is submitted to Government. The document is well appreciated.

The Professional Development Committee is supporting MSME Help Desk at Central Level and also supporting MSME Help Desks across the country to provide assistance to the MSME sector. The members are also offering their expert advise to MSME and supporting them for restarting the businesses.

During the month Professional Development and CPD Committee organised Webinars and WEBINT such as 'MSME Series : MSME Restart, Run & Sustain; 'RERA Series: Professional opportunities with RERA Act in New Era in India'; 'Practical Aspects for Practicing Cost Accountants and Members in Industry working in Costing Department'; The Challenge of the Corona Crisis Economic and Financial Issues' ; 'Holding AGM through Video Conferencing ' and "ICMAI Peace of Mind in Uncertain Times". During the month, more than one hundred, such online learning programmes were organised by the various committees of the Institute on the topics of professional relevance and importance. I am sure our members are immensely benefited. Please note that due to technical reasons, awarding CEP Hours of these Webinars and WEBINT was affected and is now being streamlined during post-lockdown. Please bear with us during this phase.

I would also like to inform you that on the representation of the PD Directorate, many companies have extended the date of empanelment. PD Directorate sent representations to various organizations for the inclusion of cost accountants for providing professional services.

Sardar Sarovar Narmada Nigam Limited, National Health Mission Uttar Pradesh, Power Grid Corporation of India Limited (POWERGRID), Kamarajar Port Limited, The Jute Corporation of India Limited, National Safai Karamcharis Finance And Development Corporation (NSKFDC), Oil India Limited, NHPC Limited, Bharat Electronics Ltd., Indian Institute of Technology Kharagpur, Deposit Insurance & Credit Guarantee Corporation (DICGC), Hindustan Organic Chemicals Limited, Assam Petro-Chemicals Limited, etc., considered the Cost Accountant in the Tenders/EOIs during the month of May 2020.

I congratulate the Chairman of the Committee CMA Vijender Sharma proactive actions.

BANKING AND INSURANCE COMMITTEE

The Banking and Insurance Committee started their maiden venture of WEBINT in the form of Panel Discussion and luminaries from the Insurance fraternity joined for the WEBINT - panel discussion on the topic of "Impact of COVID-19 and Strategies for the Insurance Sector". The moderator of the session was **CMA G. Srinivasan**, Director of National Insurance Academy and Former CMD of New India Assurance Co. Ltd. and was attended in large numbers from the insurance sector and members both in practice and in service. We had the other panelists **Shri K.B. Vijay Srinivas**, Former Joint CMD of Oriental India Insurance Co. Ltd., **CMA P. Narasimha Murthy**, Insurance Consultant, **CMA C. Veeraghavan**, Former Dy. Accountant General in C&AG and **CMA Shiba Prasad Padhi**, Former Chairman of EIRC of ICAI and Insurance Consultant.

The Committee also organized WEBINT on the topic titled "Impact of Covid-19 and strategies for the Banking Sector". The WEBINT was moderated by **CMA Mohan V Tanksale**, Strategic Consultant of SWIFT India and Former Chief Executive of Indian Banking Association and Former CMD of Central Bank of India. The speakers for the WEBINT were **Dr. Charan Singh**, Chairman (Non-Executive), Punjab & Sind Bank, **Shri Mrutyunjay Mahapatra**, OSD, Canara Bank, **Shri Ashok Kumar Pradhan**, OSD, Punjab National Bank, **Shri Samuel Joseph Jebaraj**, Deputy Managing Director of IDBI Bank and **CMA (Dr.) Shilpa Parkhi**, Practicing Cost Accountant. The WEBINT was attended by Bankers from both Private and Public Sector Banks along with members of the Institute in large numbers.

The Committee launched the Banking, Financial Services and Insurance (BFSI) Chronicle on 28th May, 2020 at the Foundation day of the Institute. The publication is for the members to acquaint them with the various issues in the BFSI arena and would be published on a quarterly mode.

The Committee organized 7 webinars in May, 2020 in diversified topics pertaining to Banking, Insurance and Foreign Policy respectively. The Banking and Insurance Committee has also prepared a Supplementary Guidance Note on the Impact of COVID-19 and future strategies Audit of General Insurance Companies which would be submitted to IRDAI and all the Insurance Companies for their benefit.

I congratulate the Chairman of the Committee CMA Chittaranjan Chattopadhyay to take such proactive action on this score.

TAX RESEARCH DEPARTMENT

The Taxation Committees and Regional Council & Chapters Coordination Committee of the Institute jointly organized a Webint on **"Issues & Challenges in GST"** on 2nd June 2020. **CMA Anil Gupta IRS**, Principal Commissioner, GST Audit, Panchkula & Principal ADG, NACIN Chandigarh graced the event as the Chief Guest and **Shri Baljit Singh Khara IRS**, Assistant Director, NACIN Chandigarh as the Guest of Honour. The members benefited immensely from the deliberations and views presented at the Webint.

In addition to the Webint, TRD had a plethora of webinars being conducted on various topics during May, 2020. The topics included (a) Accounting of Expenditure under Ind. AS and allowability under Income Tax Act in Computation of Profits and Gains from Business Income (b) GST - Amendments in Finance Act 2020 (c) Due Dates and Practical Difficulties of GST during Lock Down Period (d) Documentations and Pleading for Transfer Pricing Assessment / Audit (e) Proviso to section 92D - Master file in DT (f) Anti Profiteering in GST (g) Latest Notification & Circular in GST (h) Presumptive Taxation under Income Tax Act (i) Income Computation and Disclosure Standard - Income Tax Act (j)Treatment of Various Discount in GST (Accounted In Invoice And Credit Notes) (k) Assessment of Charitable Institution- A Comprehensive Case Study (l)Documentations and Pleading for Transfer Pricing Assessment / Audit and(m)Latest Notification & Circular in GST.

In the publications front the department came up with the revised and updated edition of the 'Handbook on E-Way Bill' which has been released. The publication on 'Taxation on Works Contract' which includes both the Direct taxation and Indirect taxation areas is up and ready for release at the earliest. Taxation portal is being updated with the latest amendments of Direct and Indirect Tax. The 63rd and 64th Tax bulletins have also been launched.

I congratulate the Chairman of the Indirect Taxation Committee CMA Niranjan Mishra and Chairman of the Direct Taxation Committee CMA Rakesh Bhalla for proactive actions.

REGIONAL COUNCIL AND CHAPTERS COORDINATION COMMITTEE

The need for online webinars for members and students have gone up due to the ongoing lockdown and disruption of normal life due to the unprecedented COVID19 pandemic. During May 2020, under the initiatives taken by Chairman of the Committee, CAT and AAT Board, CMA H Padmanabhan, the Committee along with CAT and AAT for its sixth successive month not only continued to hold series of webinars for members and students but also introduced members, students and all stakeholders to the unique concept of WEBINT (Interactive Webinar). CMA H Padmanabhan introduced and hosted a series of webints which were addressed by the champions of the government, business world and profession. Webints allowed attendees to interact with panelists and the feedbacks received from the attendees have been truly overwhelming.

I am also happy and pleased to announce that two new Chapters as recommended by the Committee, have been approved by the Council of the Institute, namely Shimla Chapter the first Chapter in the state of Himachal Pradesh and Beawar Chapter in the state of Rajasthan, both under NIRC.

I congratulate the Chairman of the Committee CMA H Padmanabhan for his continuous support in the organization of webinars since years together and now for his initiative and reform of launching Web interactive sessions and panel discussions in the form of WEBINT.

DIRECTORATE OF ADVANCED STUDIES

I am pleased to share that the Directorate of Advanced Studies has taken various significant initiatives during May 2020: Mega E-Conclave on "**Application of Data Analytics for Business Decision Making**" was organized in association with Reliance Industries Ltd. on 30th May 2020 and Business Standard was the media partner. I attended this Mega E-Conclave online along with CMA Biswarup Basu, Vice President and CMA Debasish Mitra, Chairman, Board of Advanced Studies of the Institute. **CMA Rajneesh Jain**, President and CFO of Reliance Jio was the Chief Guest. In addition, **CMA KVVS Murthy** and **CMA L Prakash** from Reliance Industries Ltd. deliberated on the topic along with the expert panellists. This Mega E-Conclave has been well appreciated and witnessed by more than 2500 participants through live streaming. A detailed report of this event has also been incorporated in this Journal.

The Board of Advanced Studies has announced a **100 hour Course on "Data Analytics for Finance Professionals**" to be commenced from the first week of July 2020.

An E-Conclave on "Opportunities for CMAs in the field of Actuarial Science" was organized in association with Institute of Actuaries of India on 31st May 2020. I attended this informative E-Conclave online along with CMA Biswarup Basu, Vice President and CMA Debasish Mitra, Chairman, Board of Advanced Studies, CMA H Padmanabhan, Chairman, Regional Council & Chapters Co-ordination Committee, CAT and AAT Board and CMA Chittaranjan Chattopadhyay, Chairman, Banking & Insurance Committee of the Institute. **Shri. Sunil Sharma**, President of Institute of Actuaries along with other Council members of IAI, elaborated the scope and opportunities of CMAs in the Actuarial arena very lucidly.

The Directorate of Advanced Studies have also conducted a series of Webinars on SAP-FICO Course.

I congratulate the Chairman of the Committee CMA Debasish Mitra for organization of Mega Conclave and for other proactive initiatives even in the period of lockdown.

DIRECTORATE OF STUDIES

I am pleased to share that the Directorate of Studies has taken various significant initiatives during May 2020. I congratulate the Directorate of Studies and CMA Biswarup Basu, Vice President of the Institute and Chairman, Training & Educational Facilities and Placement Committee for continuous support to students in this crucial time.

The Subject wise series of Webinar Classes have been conducted for the CMA Students on a regular basis to make themselves well-prepared before the forthcoming examinations.

The Regions and Chapters have been encouraged to conduct online classes for the students and various Regions and Chapters have initiated.

An initiative has been taken to upload MCQ Series in the Portal for the benefit of the Students. I acknowledge the contribution of Vijayawada Chapter of the Institute in finalizing MCQ for the benefit of students. I also acknowledge the contribution of CMA S Papa Rao, Chairman, Career Counselling & Increasing Students Strength Advisory Group and Member, Training & Educational Facilities and Placement Committee for various other initiatives for the benefit of the student fraternity.

DIRECTORATE OF CAT

In my last communiqué, I had heaped praises on my Council Colleague CMA H. Padmanabhan, Chairman (CAT) under whose able leadership the CAT Directorate is able to resolve the issues and anxiety faced by the students, ROCCs and Chapters of the Institute. I am happy to see that he is working in high spirits like a true leader does. As regards to the admission procedure to the CAT Course, the online admission facility, which is completely paperless, is already functional. I urge students and the ROCCs, to embrace online admission now onwards to the fullest to avoid the hassles recently faced by all the stakeholders and also in future to save lots of time, money and energy behind the offline work related to the offline admission.

CMA H. Padmanabhan with the team of CAT Directorate, is leveraging the synergies of the CAT Committee and other Committees in producing the effective "WEBINT" initiative. This initiative is helping the Institute in evenly reaching the members and students of villages, towns, cities, metros during ubiquitous lockdown.

The Directorate of CAT continued its endeavors to visualise the CAT course through electronic medium in present times of pandemic and released CAT e Bulletin – Volume 2 - No. 2 - April - June 2020. The e- bulletin was released on auspicious occasion of CMA foundation Day and in the gracious presence of Shri Suresh Prabhu, Hon'ble Member of Rajya Sabha and India's Sherpa for G20 & G7 nations. The release of E-bulletin in the midst of the COVID-19 pandemic is a remarkable feat by the Directorate of CAT.

MEMBERSHIP DEPARTMENT

You are aware that the membership fees for the year 2020-21 has fallen due on 1st April 2020 and is required to be paid within 30th September 2020. I call upon the members who are yet to pay to avail the Institute's online facilities to pay the dues in time. Members can pay their membership fees without login from the Institute's website the link for which is *https://eicmai.in/MMS/PublicPages/UserRegistration/Login-WP.aspx.* However, a whole host of online facilities and information can be availed in addition to payment facilities by login to respective accounts the link for which is *https://eicmai.in/MMS/Login.aspx?mode=EU.*

Members desirous of renewing their Certificate of Practice needs to apply for renewal completed in all respects latest by 30th June 2020. I urge members to make such application at the earliest and well in advance for smooth renewal preferably by online mode by the login link as provided above. An Advisory for the same is printed elsewhere in this issue of Journal for your ready reference.

I am pleased and happy to note that under the expert guidance and leadership of CMA Vijender Sharma, Chairman of the Members Facilities Committee, the membership department is taking necessary steps for faster grant of membership.

MEMBERS IN INDUSTRY COMMITTEE

I am pleased to note that the Members in Industry Committee had organized a series of webinars on various topics of extreme relevance and interest for our professional members, such as: 'Impact of Covid-19 & Lockdown on Costs, Sustainability & Business Strategy'; 'Budgeting, Forecasting & Cost Management'; 'How to WFH using Technology and be efficient using Advanced Excel'; 'Non-Financial KRAs in Performance Management System'; 'Why Target Cost Management is important'; 'Financial KRAs in Performance Management System'; 'Goldmine opportunities for CMAs to act as Arbitrators & Mediators'; 'IBC-The Way forward'; 'Ease of doing business beyond 2020 & COVID-19'; 'Covid-19 impact on Oil Industry' have been eagerly attended by the professional members. These webinars have been conducted in a very professional manner by our expert resource persons having experience in various industries. The attending participants have expressed their eagerness and happiness to be part of these professional endeavors.

I congratulate CMA Biswarup Basu, Vice President of the Institute and Chairman, Members in Industry Committee for organising series of events for learning of Industry participants and CMA fraternity.

INTERNATIONAL AFFAIRS COMMITTEE

I am pleased to inform that the International Affairs Committee under the Chairmanship of CMA (Dr.) Ashish P Thatte conducted two webinars on "Foreign Direct Investment (FDI) - Updates" on 7th May 2020 by **CS A. Sekar** and "Chinese & American Economics - an Indian Perspective" on 26th May 2020 by **CMA (Dr.) Girish Jakhotiya**, both were well appreciated by members.

ICMAI REGISTERED VALUERS ORGANISATION (RVO)

I am pleased to share that ICMAI RVO has taken the following initiatives during May 2020:

Regular conduct of online 50 hours mandatory educational courses on Valuation as per the directives of IBBI:

Third Online Batch – 4 – 10 May 2020

Fourth Online Batch – 11 -17 May 2020

Fifth Online Batch – 25 - 31 May 2020

ICMAI RVO has successfully conducted an Online CPE program to grant Certificate of Practice for its Registered Valuers on 23rd May 2020 on the theme was "Contemporary Issues in Valuation".

INSOLVENCY PROFESSIONAL AGENCY (IPA) OF INSTITUTE OF COST ACCOUNTANTS OF INDIA

I am pleased to inform you that the Insolvency Professional Agency of the Institute organised various webinars during the month for its members on "Role of IP as Administrator under SEBI regulations" on 1st May 2020, "Issues faced by IPs under IBC" on 2nd May 2020, "Professional Ethics for Insolvency Professionals" on 3rd May 2020, "Critical Issues in Real Estate under IBC" on 5th May 2020, "Role of IP as Administrator under SEBI Regulations" on 6th May 2020, "30 Hours Online Certificate Course in IBC" from 11th – 20th May 2020, "Valuation under IBC- Impact on account of COVID-19 pandemic" on 15th May 2020, "Insolvency and Bankruptcy Law- Comparison of India Vs. UK Model" on 16th May 2020, "Interactive Session on IBC" on 21st May 2020, "Impact of Covid-19 on Insolvency and Bankruptcy Law and Practice in USA" on 22nd May 2020, "Leveraging Big Data Analytics/Computer Forensics to detect fraud during Insolvency Proceedings." on 27th May 2020, and "Impact of Covid-19 on Insolvency and Restructuring Sectors" on 29th May 2020.

Stay safe and healthy!

With warm regards,

CMA Balwinder Singh

June 6, 2020

CONCEPTUAL APPROACH TO BOARD REPORTING FRAMEWORK

A POST COVID - 19 CORPORATE GOVERNANCE PERSPECTIVE

Prepared by

The Management Accounting Committee

The Institute of Cost Accountants of India

(Statutory body under an Act of Parliament)

HQ: CMA Bhawan, 12, Sudder Street, Kolkata - 700 016

Delhi Office: CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi - 110 003

This concept paper contains the following contents on the proposed Board Reporting Framework Post COVID -19:

- Objectives
- Underpinning philosophy
- Value Chain Approach
- Key themes of reporting
- Time dimension
- Beyond Financial Performance Parameters
- Futuristic Information
- Risk Impacted Assessment
- Board Reporting Framework
  - » Scenario 1: A Manufacturing Company
  - » Scenario 2: A Services Company in ITES Domain

Objectives

Almost the entire world today is reeling under the threat and aftermath of unprecedented COVID 19 pandemic. This has had a huge and significant impact on the businesses all over the world across sectors. The disruption to normal business models from the supply lines is likely to have long-lasting repercussions. Given such a scenario, companies will need to operate differently to effectively manage the crisis. COVID-19 is changing the way we live, work and use technology. As the world adjusts to its new normal, this calls for a need to rethink strategies to drive resilience and emerge from this crisis stronger. The Corporate Boards will respond to challenges resulting in revised business models evolving over time frame. The objective of this paper is to provide a conceptual Corporate Governance perspective to the Board Reporting Framework – Post COVID 19 which will serve as an internal document from the managements mirroring the renaissance of the related entity.

Underpinning philosophy

Post COVID 19 business will have a new normal and the Corporate Governance perspective and Board Reporting Framework will have to be reengineered accordingly and appropriately. There is an imperative need to have a well-defined management reporting to update the Board on the crisis and its (changing) impact on business fundamentals, with data about current and projected impacts on performance based on established key indicators and how the business is recovering. It is also important that the Board adapts its working mode to the speed of events, requiring ongoing communication between Boards and

Management Teams.

Value Chain Approach

The speed and breadth of this crisis has impacted the Value Chains of the companies both internal and external to the entity. The Current Corporate and Board Reporting Practices are entity focused. Post COVID 19 the Value Chain Approach based on sustainability and the Integrated Reporting Architecture would be more relevant which is also endorsed by the Global Management Accounting Bodies.

The COVID-19 pandemic has destabilized supply chains like no other event in recent history. Effective inventory management including efficient warehousing keeping the customer value expectations in focus the managements will be compulsorily be required to relook the entire value chain and work out appropriate strategies and action plans to deal with the new emerging business order. The focus will be on faster ramp up and sustained growth of the organization.

As the Corporate Managements can reset their business models only by looking outside the boundaries of an entity, reporting to the Board should also follow that path of the value chain. Therefore Value Chain Approach and not the entity level should be the touch stone of Corporate Reporting.

Key Board Reporting Themes

Once the pandemic is over, Boards and Management should take the opportunity to review the situation and discuss lessons learnt including how the business was disrupted (historical impact) and likely future implications for the business. This requires a facilitative management reporting framework focused on capturing the historical impact and offering a perspective and handle on projected impacts on operational and financial performance of companies. The Boards should get this right and it presents a unique opportunity to establish and build trust within their stakeholders. The key themes on which the management attention and indulgence is inevitable are –

- Rebuilding Stakeholder value
- Supply Chain – Inbound
- Production / Operations
- Marketing
- Supply Chain – Outbound
- Financial Resources Management
- Infrastructure Management
- Human Resources
- Information Technology
- Sustainability

Time dimensions

Once the pandemic is over, Boards and management should take the opportunity to review the situation and discuss lessons learnt including how the business was disrupted (historical impact) and likely future implications for the business in immediate, short, medium and long term. In the current scenario, the Time Dimension of short, medium and long term have a different connotation than what is normally understood, explained elsewhere in this paper.

This requires

a) Impact assessment (Historical analysis),

b) Short term action Framework (1 month to 3 months),

c) Medium term action Framework (3 months to 6 months),

d) Long term action Framework (6 months to 1 year),

The Boards will have to keep tab on the various aspects of business on continuous basis informally, even though the structured / formal reports may be presented in the Board meeting(s) held periodically.

Beyond Financial performance parameters

The philosophy of a good company is not only to provide a fair return on investment to the shareholders, which is financial consideration, but also to take care of the expectations of other stake holders through non-financial measures like: providing good working condition, providing for career growth and development, recognizing creativity, encouraging meritocracy, value based management system, increase in productivity, improved standard of living, new customer retention, customer satisfaction, and consideration of social & environmental issues in strategic decision making. Non–financial performance parameters can act as leading indicators because if the company is doing good job in these dimensions, most probably it will generate good results with respect to financial indicators, like profit, growth, sales etc. Through all these measures, the company will not only earn a good reputation, which is an intangible asset, but also will improve productivity, thereby creating competitive advantage.

Futuristic Information

As the reporting will now seek to inform the Board not only the historic impact but also futuristic information, the managements need to be on sound footing in estimating future costs which will form a part of short, medium and long term indicators. Moving beyond the accounting norms of good estimates and provisions, measurement tools need to be in place to forecast the costs impact in foreseeable future using Cost and Management Accounting tools like Life Cycle or Technology Based Costing.

Risk - Impact and Management

Business risk involves the possibility of financial and operational difficulties in the business environment. The COVID-19 pandemic demonstrates the unprecedented levels of global connectivity we work and live with; and how seemingly unrelated issues like the resilience of businesses, dependence on supply chains, and normal social interactions can be simultaneously severely compromised. The businesses in future will need to develop comprehensive and robust Risk Management Architectures with a view to affording risk shield to their operations and an ability to steer the entity towards achieving organizational objectives. This calls for a relook at the way the companies were managed in pre COVID-19 scenario. Financial and Non-financial information may need to be viewed through the lens of risk management before they are presented to the Board.

Board Reporting Framework

Based on the concepts suggested as above, a suggested template **Board Reporting Framework** is presented below. The template is purely suggestive and the indicators need to be populated based on the strategic and operational context of an individual entity. However what we have attempted is to populate the template under two scenarios.

1. **Scenario One is that of a manufacturing company**
2. **Scenario two is that of a services company in ITES domain.**

Scenario One: Financial Parameters of a Manufacturing Company

Themes	Indicators*	Strategic (S) Operational (O)	Historical	Short Term	Medium Term	Long Term
Rebuilding Stakeholder Value	Market Capitalisation Drop	S	50%			
	Reduced dividend distribution planned	S		75%		
Inbound Supply Chain	Value of inventory lost in Lock Down	O	3 Crores			
	Expected increase in Raw Material Cost % to Cost of Goods Sold	O		8%	10%	5%
	Budget for relocating China source	S			2 Crore	
	Increase in logistics cost as a % of Material Cost	O		10%	5%	
Manufacturing	Increase in manufacturing cost post COVID norms	O		15%	12%	
	Decrease in power cost due to load shed	O		10%	8%	5%
	IT investments in IOT and AI in manufacturing	S			1 Crore	3 Crore
	Capital invest due to machine spacing	S			2 Crore	3 Crore
	Expected increase / decrease in prices of raw material	S				
	Impact on material mix due to non-availability / substitution of imported with indigenous material	S				
	Restarting expenses after lock down	O		5 Crores		
	Loss of contribution in lock down	O		10 Crores		
Marketing	Increase in branding cost as a % of Cost of Sales	O			5%	10%
	New Product Development (NPD) budgets for new products post COVID	S		<5 Crores	2 Crore	5 Crore
	Budget for rebuilding customer base	O		1 Crore		
	Budget for E marketing	O				
Supply Chain Outbound	Increase in out bound freight costs	O		5%	3%	2%
	Increase in space cost for hub and wheel	S		5 Crores	2 Crore	
	Budget for increase in dealers / distributors	S		5 Crores	2 Crore	3 Crore
	IT investments for dealer connectivity	S		1 Crore	2 Crore	2 Crore
Human Resources	Manpower cost during lock down	O	2 Crores			
	Increase in manpower cost - Social Distancing	O		5%	10%	15%
	Restraining local manpower skills	S		25 Crores	1 Crore	1 Crore
	Increase in welfare costs	O	2 Crores	1 Crore	2 Crore	2 Crore
Information Technology	Budget for server capacity increase	O		2 Crores		
	Disaster recovery Management System	S			5 Crore	
	Digitisation of all operations	O		5 Crores	5 Crore	

Themes	Indicators*	Strategic (S) Operational (O)	Historical	Short Term	Medium Term	Long Term
Sustainability	Increased cash requirement operational	O		1 Crore	2 Crore	
	Government Revenue Grants / aid as % of sales	O		5%	5%	
	Impact of delayed receivables	O				
	Impact on Working Capital	O				
	Impact on Debt service obligations	O				

**The indicators of financial and non – financial performance as referred to above are generic in nature and used only for illustrative purposes. Each corporate entity may suitably modify the same in accordance with its nature and scope of activities / operations.*

Scenario One: Non-financial Parameters of a Manufacturing Company

Themes	Indicators*	Strategic (S) Operational (O)	Historical	Short Term	Medium Term	Long Term
Rebuilding Stakeholder Value	Health / relief Camps organised in Villages Adopted	O	10			
	Health / relief Camps proposed in next 3 months	O		25		
Inbound Supply Chain	Equivalent months of Inventory lost in Lock Down	O	2			
	Time required for vendor restoration by 50%	O		2 Months		
	No of new vendors to be added replacing Chinese	S			8 Months	
	Capacity lost during Lock Down	O	30%			
	Time required for restoring bottle necks by 50%	O		2 Months		
Manufacturing	OEM Supplies of equipment expected delivery	O			6 Months	
	Assessment and delivery of Equipment for NDP	S				12 Months
	Increased space required for rebuilding layout	S			50%	
Marketing	Drop in market share to pre COVID base	O	50%			
	Time to reengage within the current customer base	O		2 Months		
	Likely drop in customer base due to logistics	S			25%	
	Loss of market share in premium product range	S			50%	
Supply Chain Outbound	No of Dealers who have shutdown business	S	25			
	No of Distributors who have shutdown business	S	10			
	FG Inventory lost in Lock Down	O	1 Month			
	Time to rebuilding channels to 50%	O		2 Months		
	Increase in space required for logistics	S			50%	
Human Resources	Migrant Labourers drop due to shut down	S	100%			
	Probable shortage in labour - Social Distancing	O		25%		
	Increase in deployment levels of local labour	O		20%		
	Reskilling required of the evolving labour force	S			20%	30%
Information Technology	Disruption with vendors and customers due to IT	O	30%			
	Time required for future work from home scenario	S				12 Months
	Time required for expanding server capacities to 50%	S			10 Months	
Sustainability	Reduction in Carbon footprint due to lock down	O	70%			
	Proposed reduction in Fossilised power	S			30%	

**The indicators of financial and non – financial performance as referred to above are generic in nature and used only for illustrative purposes. Each corporate entity may suitably modify the same in accordance with its nature and scope of activities / operations.*

Scenario Two: Financial Parameters of a Services Company in ITES domain

Themes	Indicators*	Strategic (S) Operational (O)	Historical	Short Term	Medium Term	Long Term
Rebuilding Stakeholder Value	Market Capitalization Drop	S	50%			
	Dividend Distribution Plan	S		75%		
Infrastructure Management	Growth rate impact on infrastructure	O		8%	10%	5%
	Cost of Infrastructure with WFH concept increasing	S			2 Crores	
	Increase in the cost of hardware due to WFH	O		10%	5%	
Operations	Cost of Bench due to lockdown	O		15%	12%	
	Delays in executing the existing Projects	O		10%	8%	5%
	Capital Investment due to Social Distancing	S			1 Crore	3 Crores
	Restarting expenses after lock down	S			2 Crores	3 Crores
	Cost of Bench due to Customers situation	O				
Marketing	Impact on the Growth Rate due to lock down	O		10 Crores		
	Pricing Pressures	O			5%	10%
	Loss of New contracts due to changed scenario	S		<5 Crores	2 Crores	5 Crores
	Loss of Customers due to Lockdown	O				
	Budget for rebuilding customer base	O				
	Value of orders lost due to Customers Position	O				
	Impact on Products for certain verticals	S				
Supply Chain	Increase in cost of Technical Services	O				
	Increase in cost of other Services :	O				
	Maintenance					
	Communication and Internet					
Human Resources	Manpower cost during lock down	O	2 Crores			
	Increase in manpower cost social distancing	O		5%	10%	15%
	Retraining Manpower	O		25 Crores	1 Crore	1 Crore
	Increase in welfare costs	O	2 Crores	1 Crore	2 Crores	2 Crores
Financial Management	Currency Fluctuations	O				
	Increased Cash requirements	O				
	Capital required – Short / Long term	O				
Sustainability	M&A opportunity to increase the presence	S				
	Cash Flow Situation	O				
	Expected delayed receivables	O				
	Working Capital Requirement	O				
	Debt service obligations	O				
	Expand Locally based on the Client presence	S				
	Output and Outcome models Impact Salaries	S				
	Data Leakages	S				

**The indicators of financial and non – financial performance as referred to above are generic in nature and used only for illustrative purposes. Each corporate entity may suitably modify the same in accordance with its nature and scope of activities / operations.*

Scenario Two: Non-financial Parameters of a Services Company in ITES domain

Themes	Indicators*	Strategic (S) Operational (O)	Historical	Short Term	Medium Term	Long Term
Rebuilding Stakeholder Value	Health Camps Adopted	O	10			
	Health Safety and Environment Policy	S		25		
Operations	Release Dates missed	O	2			
	Time required for restoration of production	O		2 Months		
	Capacity lost during Lock Down	O				
	Automation of IT Development and Operations	S				
	Performance of Technical Contractors	O				
Supply Chain	Impact on Hardware and Software supplies	O				
	Impact on Technical Services	O				
Infrastructure Management	Impact on Construction and Capital supplies	O				
	Time required for restoring bottle necks	O	30%			
	Time required to shift from 100% Infra model to 50%	O		2 Months		
	Space required to rebuild with WFM strategy				6 Months	
Marketing	Probability of Domestic demand due to Digitization	O				
	Drop in market share to pre COVID base	O	50%			
	Time to relook at the Verticals that matter more	O		2 Months		
	Likely drop in customer base	S			25%	
	Loss of market due to Customer conditions	S			50%	
Human Resources	Probable shortage in labor - Social Distancing	O		25%		
	Increase in deployment levels of local workforce	O		20%		
	Reskilling required of the evolving workforce	O				
	Robotic processing to impact Low level IT staff	S			20%	30%
Sustainability	Business continuity Plans	S				
	Agility and Adaptability of the organization to meet the new challenges	S	70%			
	Globally Networked Distribution work spaces	S				
	Location Independence Model	S			30%	

**The indicators of financial and non – financial performance as referred to above are generic in nature and used only for illustrative purposes. Each corporate entity may suitably modify the same in accordance with its nature and scope of activities / operations.*

ICAI-CMA SNAPSHOTS

Message on COVID-19 of Aurangabad Chapter of the Institute

Message on COVID-19 of ROCC Streamline Academy Thrissur of the Institute

Message on COVID-19 of Bhopal Chapter of the Institute

Message on COVID-19 of Nagpur Chapter of the Institute

Message on COVID-19 of Ranchi Chapter of the Institute

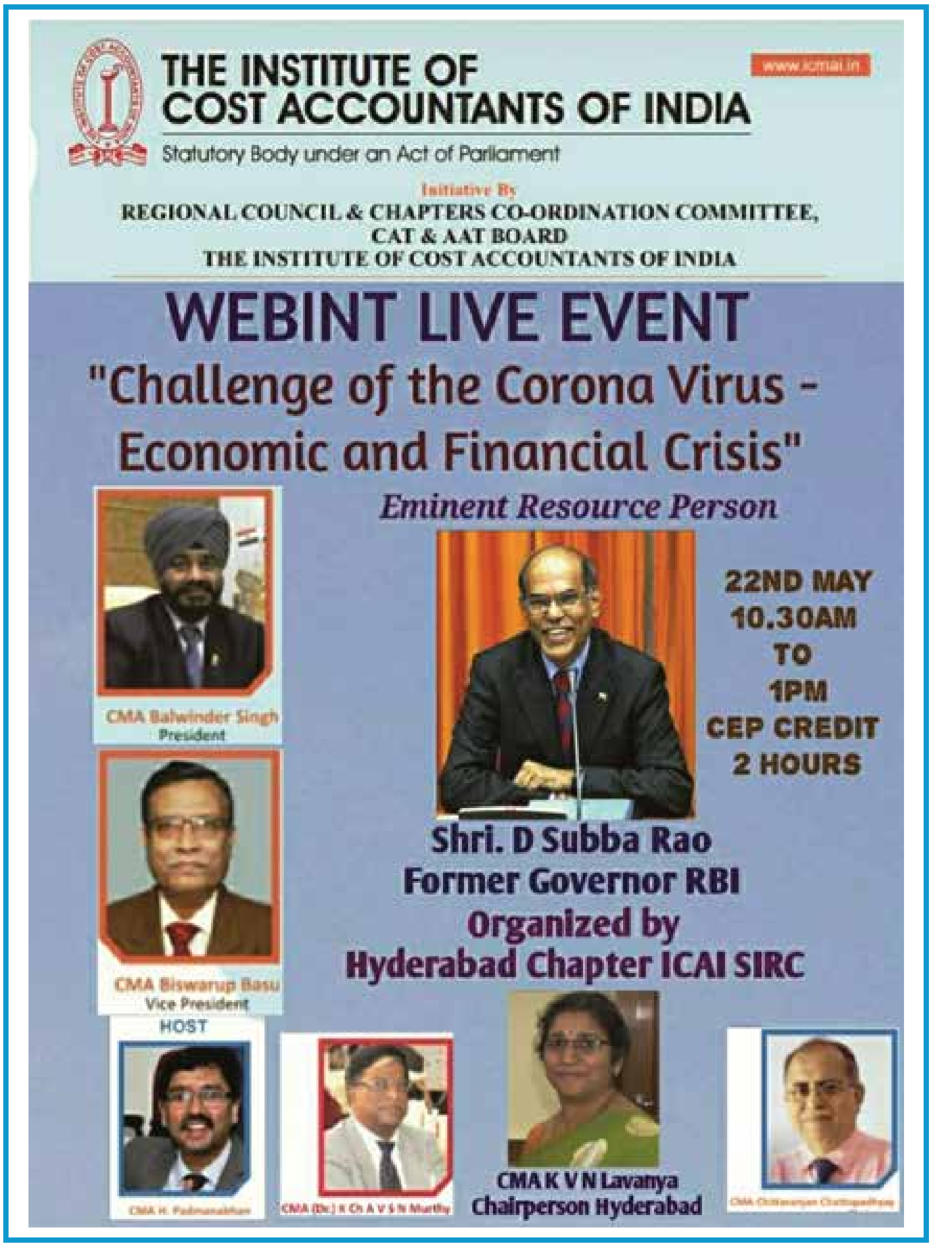
WEBINT LIVE EVENT
"CHALLENGE OF THE CORONA VIRUS - ECONOMIC AND FINANCIAL CRISIS"

Initiative By

REGIONAL COUNCIL & CHAPTERS CO-ORDINATION COMMITTEE,
CAT & AAT BOARD
THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

Organized By

Hyderabad Chapter of ICAI, SIRC



The Institute of Cost Accountants of India, jointly with its Hyderabad Chapter has organized a webinar on "Challenge of the Corona Virus - Economic and Financial Crisis" on 22nd May 2020 at 10.30 AM which was addressed by the former Governor of RBI Sri Duvvuri Subbarao. This event was initiated by the Hyderabad Chapter, organized by the Institute on an online platform and was attended by international participants as well.

This event was attended by CMA Balwinder Singh, the President of the Institute who gave the Presidential address. Council Members CMA (Dr.) K Ch AVSN Murthy & CMA H. Padmanabhan who have given the brief of the programme and welcomed the guest, Council Member CMA Chittaranjan Chattopadhyay and the first lady Chairperson of the Hyderabad Chapter CMA KVN Lavanya on the video conference.

The veteran former RBI Governor started his talk emphasizing the importance of Cost and Management Accountants in the decision making of a nation. He opined that the inputs from cost Accountants were useful for many important decisions,as for example fertilizer subsidy, which is given on cost basis. He also expressed that as an incharge of financial departments he was engaged in determining the viability for public private partnership projects and here again cost accounting exercise was very much useful in determining the viability gap funding. He suggested that in order to be useful and relevant, we CMAs, have to move with the times and be familiar with determining costs in a digital economy. We have to move from goods and services production to a digital economy .Determining the cost of intangibles, costs in a digital economy is a challenge where several non- market forces act together.

He started with the big picture of India's challenges. The growth rate of India for the year 2021 will be 1.9% as predicted by IMF. Most of the analysts believe that the growth is going to be negative and that our economy is going to contract. In fact, our economy was expanding at 5% last year, for this year the growth may be at 0% . This is the contraction that is seen. This contraction can be very tough even for a large economy. For a country like India with millions below the poverty line, this can be very challenging. The financial stability of many people and organizations is becoming vulnerable in this extraordinary crisis situation. This is a state where the government has to balance between saving lives and saving livelihoods. Now we underst that we have to live with this virus for a few months. The government is worried about the fiscal deficit. We are worried about the health of banks, the health of our industries and non performing assets. It appears that the financial sector will face much more stress by the time we get out of this crisis.

Yet, we have some silver lining here - for example our currency depreciation is lesser compared to many other countries like Brazil, Indonesia, South Africa, etc. Reserve Bank of India has enough reserves to take care of the volatility in the currency. This relative stability of our sector is the first silver line. The second silver lining is that our agriculture that contributes 15% to our GDP is very stable .Around 55% of our population depends on agriculture. This tells us that this population is not very much affected by the the virus.

The Challenge of the Corona Crisis
10 Issues

1. *The Rs. 20 trillion stimulus package – what will it accomplish?*
2. *Is this the time for reforms?*
3. *What is the government's fiscal problem?*
4. *What has RBI done so far?*
5. *Why are banks not lending in spite of RBI's monetary easing?*
6. *Will bank NPAs go up?*
7. *How to restart the economy?*
8. *Atmanirbhar Bharat*
9. *Is this crisis management an example of co-operate federalism?*
10. *Is India's long term growth story intact?*

He focussed on 10 issues starting from the Rs. 20 trillion package given by the government, on which there was a lot of expectation from the industry.The package has lot of guarantee schemes for the industry where the spend by the government is around 2 trillion or 1% of the GDP. This is very inevitable as the government is very much constrained by fiscal numbers. The package has relief measures for survival during the lockdown that includes financial support for vulnerable households and MSMEs. This also includes direct cash transfers, liberalisation policy and some structural reforms.

The government is financially stressed; it knows that it has to borrow more to spend more. The budgeted fiscal deficit for the central government and state governments together is around 6.5%. Revenue loss due to lock down and decline in the tax collections will take the fiscal deficit to anywhere which is more than 10%. Then our economy would be susceptible to the negative vulnerabilities of Fiscal deficit like inflation, unstable Balance of payments. These are capable of denting our prospects in the short-term and long-term.To gain market confidence in this scenario the government has put a limit on its borrowings, announced a reform package as the game plan to return the economy to its normal. The RBI has reduced rates and induced liquidity. The RBI has announced a moratorium on loans of borrowers and has given a regulatory forbearance for not treating these as non performing assets. RBI has also given liquidity to banks by cutting CRR in the open market operations.The RBI has taken actions to support the non banking Financial Institutions, MSME , and microfinance organisations.

He opined that the NPAs might go up in the current scenario. Banks will have to restructure the loans to have better NPA ratios. He compared the crisis to a Chakravyuh. To be successful one should know how to manage it and also know to take an exit from it. He appreciated the initiatives of the government in ensuring cautious ease of lock down in phases. Our members were delightful in receiving answers for their questions at the end of the session.

Mega E- Conclave

on

"APPLICATION OF DATA ANALYTICS IN BUSINESS DECISION MAKING"

organized by

BOARD OF ADVANCED STUDIES OF THE INSTITUTE

in association with

RELIANCE INDUSTRIES LTD.

The Mega E-Conclave was organized by the Institute of Cost Accountants of India in association with Reliance Industries Limited through live streaming on 30th May 2020 and the media partner of the event was Business Standard. Theme of the E-Conclave was "Application of Data Analytics in Business Decision Making" to explain the importance of Data Analytics and its application in today's business environment. There were more than 2500 attendees from different parts of the country including members and students of the ICAI, finance and other professionals of Reliance and other organizations.

In his welcome note CMA Debasish Mitra, Chairman, Board of Advanced Studies, emphasized on the importance of insightful Data Analytics in improving business performance and Institute's commitment for advancement of new age learning. He also highlighted modern age new courses that are being introduced by Board of Advanced Studies to cater professional needs of the members, students and other stakeholders.

CMA, Balwinder Singh, President, ICAI has spoken about the requirement of educated finance professionals in the field of data analytics. He has formally announced a 100 hours course in Data Analytics for Finance Professionals by the Institute of Cost Accountants of India to be commenced from first week of July 2020 and highly appreciated the role of Board of Advanced Studies of the Institute towards fulfilling academic and professional need of the members and students.

CMA Rajneesh Jain, President & CFO, Reliance Jio, was the Chief Guest of the Mega E-Conclave. Mr. Jain recalled there were lots of business analytics content in ICAI curriculum at the time when he was a student of this great Institute, which is also equally relevant today namely marginal costing, contribution analysis, standard costing, zero based budgeting etc. He emphasized on finance professionals adopting new technologies, new skills to remain relevant in the coming days. He shared a beautiful presentation covering an excellent insight on how the performance of a company is so different with the adoption of a culture of data analytics vis-a-vis companies don't have that. He also explained Jobs Landscape in 2022 which predicted the topmost emerging area for the job hunters is going to be the role of Data Analysts and Scientists. He vividly appreciated and welcomed the timely move of ICAI to launch a certificate course on **"Data Analytics for Finance Professionals"** and proudly said **"Behind every successful business decision, there is always a CMA"**, the tag line of ICAI.

CMA Dr D.P. Nandy, Sr Director of the Institute announced the course contents namely Introduction to Data Analytics, Statistical Concepts and its application in data analytics, Analytics by using Advanced Excel, Introduction to Power BI tool, Introduction to Python and the art of Data storytelling.

Technical Session was started with the opening remarks by CMA KVVS Murthy of FC&A Academy, Reliance Industries Ltd. He highlighted the importance of artificial intelligence in this process. Then the session was taken up by the Team Vriksh. CA Pallab Sen, Management Consultant shared how the business environment has been evolved in past 6 decades in India, fulfilling the need of talented financial professionals in the field of Data Analytics. Mr Sen also spoke about how the recommendation algorithms helped Netflix to turnaround from a DVD renting company to leading Content Streaming Company today. CPA CA Prithwiraj Mukherjee, Director in Analytics Consultancy spoke about Data Literacy – why, how and where data being used. Mr. Mukherjee eloquently explained the concepts of Data Culture, Data Management, Algorithms, Artificial Intelligence and the art of Data Storytelling. The last speaker of the technical session was CA Hirak Bhattacharjee, Data Analyst. Mr. Bhattacharjee demonstrated data analytics using Power BI Tool and explained how data can be presented in a meaningful way to help management towards effective business decision making.

The contents and proceedings of Mega E-conclave on "Application of Data Analytics in Business Decision Making" were well received by the large number of participants and CMA L Prakash, Head SCM Platforms (Hydrocarbons), Reliance Industries Limited has concluded the program with vote of thanks. He summarized that considering the technological development in Data Analytics field, availability of data is no longer a problem. Data is new 'Oil', but if unrefined it cannot be really used. As organizations nowadays rely heavily on data to drive decision-making, latest business intelligence and data analytics tools are to be used judiciously to meet the need for meaningful data analysis.

This Mega E-Conclave can be viewed through this link: https://youtu.be/zalpUO0ABDY

BANKING & INSURANCE COMMITTEE

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

For Kind Attention of Members !!!

For issue of "**DILIGENCE REPORT** in Banking Industry" i.e., Lending under Consortium Arrangement / Multiple Banking Arrangements (Vide RBI/2008-2009/183 DBOD No. BP. BC.46/ 08.12.001/2008-09 dtd: September 19, 2008), Cost Accountants are also Eligible.

Please contact regularly with Credit Intensive Branches / Regional Offices / Head Offices / Credit Departments / Asset Recovery Branches / Stressed Assets Resolution Branches etc. for above the Assignment.

For Kind Attention of Members !!!

For empanelment of ***"Agencies for Specialized Monitoring (ASM) for the Banking Industry"***, Cost Accountant Firms having 3 Years of Experience are Eligible to apply for ASM for the Banking Industry.

Please closely monitor for the Advertisement in this regard in "Indian Banks Association Web-site".

For Kind Attention of Members !!!

For empanelment of ***"Forensic Auditors in Banking Industry"***, Cost Accountants are Eligible to Apply.

Please contact regularly with Credit Intensive Branches / Regional Offices / Head Offices / Credit Departments / Asset Recovery Branches / Stressed Assets Resolution Branches etc. for "Forensic Audit Assignment" Assignments (including **Forensic Audit, if required for the Cases filed under IBC, 2016 i.e., Stressed Accounts filed with NCLT).**

The Banking and Insurance Committee of the Institute has brought out **the 1st Quarterly issue of the "Banking, Financial Services and Insurance (BFSI) Chronicle". It has been uploaded at the Institute's website as per the following link:**

https://icmai.in/upload/BI/BFSI_Chronicle_May2020.pdf

Suggestions are welcome from the readers at *bi@icmai.in*

CMA Chittaranjan Chattopadhyay

Chairman
Banking and Insurance Committee
The Institute of Cost Accountants of India
Email: bi@icmai.in

WE HAVE ONE EARTH AND ONE CHALLENGE 'THE CLIMATE CHANGE'

CMA (Dr.) P V S Jagan Mohan Rao
Advisor and
Immediate Past President
South Asian Federation of Accountants (SAFA)

What is Climate Change! Climate change is any significant long-term change in the weather of a region (or the whole Earth) over a significant period – Wikipedia.

Climate change impacts the entire globe - all of us, manifested and not manifested. Our existence is interdependent. For better comforts we started overdoing, causing harm to the others in the system. Have we not ignored that living together in harmony is the law of the nature and that is our real comfort! A person and the globe are one and the same. A person is a microcosm of the macrocosm, the globe. The globe is the macrocosm of the microcosm, a person. Harm to one is naturally the harm to the other.

As one family, we subsist on our only house the earth. All of us include both manifested and not manifested. On this common property as we all, are interdependent, actions of any one of us on the planet have impact on all of us.

Are we sincere to the prosperity of the mother earth who blesses us with all we need! Our sincerity ensures wellbeing of *everything* and *everybody*.

Swami Vivekananda said "The brave alone can afford to be sincere" (VI. 110)

Swamiji also said "Civilisation is the manifestation of that divinity in man" (V.308)

Climate change is a wider topic which includes global warming and indiscriminate use of natural resources. So, are we not over doing! Are we not over drawing!

What is climate change! As per Wikipedia "Climate change means the difference in the Earth's global climate or in regional climates over time"

The world needs growth and development, but it must be sustainable. Then what is Sustainability Development!

"sustainability development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" -- Timeforce

Change.

The Karma siddanta, say ancient scriptures, we come back through future births. So, we only must face and suffer whatever wrong we do today, to our mother nature.

Professional Accountants through their interaction with stakeholders can play an important role for this global cause through bringing all people and all countries to one reality, that "*climate change is real" and "we need to work together"*. We need common devotion and commitment, with honest and strong resolve.

Vulnerable, less developed and developing nations need support, moral and financial. Major polluters voluntarily taking responsibility and honouring their obligations facilitates.

"Concerted Global Research" for growth & prosperity without tampering the environment is essential. Polluting business houses need to have honest commitment.

Stringent environmental regulations and strict enforcement are necessary. But effective would be voluntary ethical oriented compliance. Professionals can play a catalyst role.

Carbon credits, carbon taxes or penalizing polluters are frequently talked about. They, at the most bridge some gaps but will not be powerful in effectively controlling emissions.

United Nations plays an important role. Actions taken like Rio Environment Summit 1992, United Nations Framework convention on climate change, Conference of Parties (COP) are facilitating, promoting, enabling, and accelerating actions to mitigate climate change. They help exchange of information, entering treaties and protocols. The important COP 3, was held in Kyoto, Japan in 1977. Former US Vice President's film, "An Inconvenient Truth" highlights impacts of climate change. World Environment Day on 5th June and World Earth day on 22nd April every year boosts and raise awareness.

Paris Agreement, within the UNFCCC, gets all nations together to address on mitigating the effects of the Climate Change. Members agreed to ensure reduction of emissions below 2 degrees. This combined effort requires transparency, disclosures, and serious commitment to the cause of believing we are one family on the globe.

यच्चापि सर्वभूतानां बीजं तदहमर्जुन ।
न तदस्ति विना यत्स्यान्मया भूतं चराचरम् ॥
Yac c'āpi sarva-bhūtānāṁ bījaṁ tad aham Arjuna /
na tad asti vinā yat syān mayā bhūtaṁ car'ācaram // 10/39

Krishana is telling that I am behind everything in the universe, whether manifested or not. He is the seed in every being. There is nothing without Him. He is everything.

Millions of trees are cut every day indiscriminately. Devine understanding helps avoid exploitation.

About duty to society, a kural (a verse) from the Tirukkural by the ancient saint Thiruvalluvar says:

குறள் 211:
கைம்மாறு வேண்டா கடப்பாடு மாரிமாட்டு
என்ஆற்றுங் கொல்லோ உலகு.

Kural 211

kaimmaaRu vaeNtaa katappaatu maarimaattu
en-aatrung kolloa ulaku

Meaning of this verse is compassion and kindness do not seek a payback. Clouds give us plenty. But what are they getting back from the world!

It is ethical for us as part of the whole scheme to be duty bound and not to overdraw from the nature. Let us take care of the nature and trust the nature takes care of us.

Swami Ranganathananda former President of Ramakrishna Math and Ramakrishna Mission says "out of mutual trust only can human excellence be unfolded". Let us all in the world have that mutual trust and re-establish excellent environment on our earth as heaven to live in.

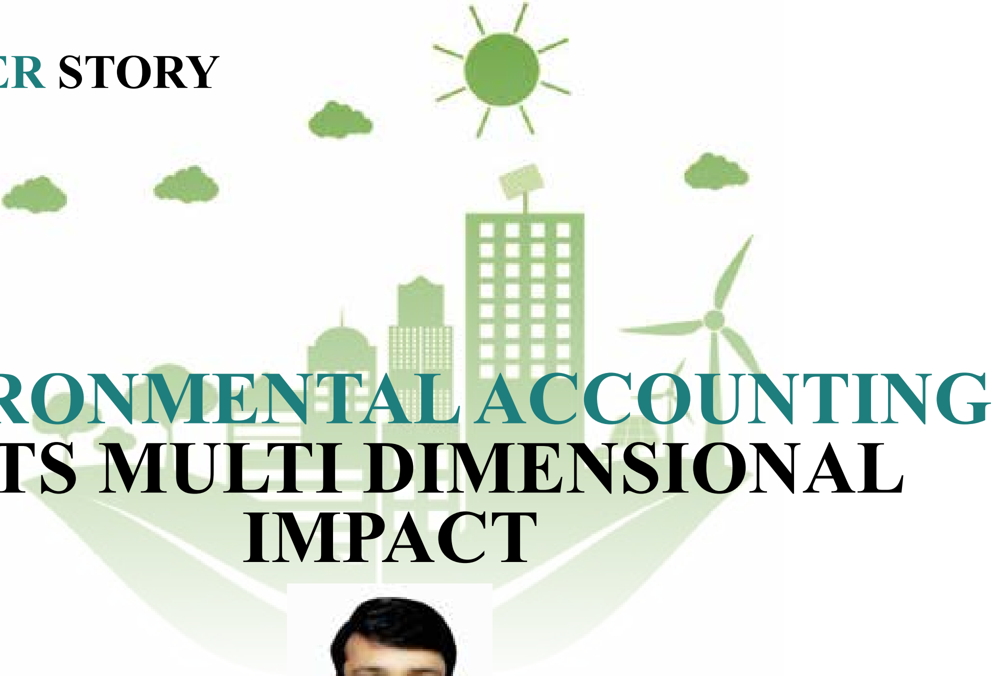
ॐ द्यौः शान्तिरन्तरिक्षं शान्तिः
पृथिवी शान्तिरापः शान्तिरोषधयः शान्तिः ।
वनस्पतयः शान्तिर्विश्वेदेवाः शान्तिर्ब्रह्म शान्तिः
सर्वं शान्तिः शान्तिरेव शान्तिः सा मा शान्तिरेधि ॥
ॐ शान्तिः शान्तिः शान्तिः ॥

This is a Shanthi (peace) mantra a prayer verse from Vedic literature. Meaning of this verse is let there be peace everywhere, in the heaven, in the sky, on the earth, in the water, in the plants, in the trees in the Gods, in me, in all and everywhere.

Let us pray and work for creation of real wealth with better environment through preserving our mother earth uncompromised. MA

Sources: *Company Secretary corporate Governance and Bhagavad Gita, and Climate Change written by Dr P V S Jagan Mohan Rao published by Asia Law House, Hyderabad, internet resources including Wikipedia and publications referred at Sri Rama Krishna Math library.*

pvsjmr@yahoo.co.in



ENVIRONMENTAL ACCOUNTING & ITS MULTI DIMENSIONAL IMPACT

CMA (Dr.) Niranjan Mahendranath Shastri
Associate Professor
NMIMS Deemed to be University
Indore Campus

Vanshika Shaw
Scholar - SOC
NMIMS Deemed to be University
Indore Campus

Mannat Oberoi
Scholar - SOC
NMIMS Deemed to be University
Indore Campus

Abstract

Accounting has many branches. Environmental Accounting is one of the recent braches of accounting that have emerged recently. In this article an attempt has been made to clarify the concept of environmental accounting, its types and sub-types. Environmental accounting is performed not only at corporate level but also at national and global level. The impact of environmental accounting has also been discussed in this article, which is found multi dimensional and positive for the corporate entity, the nation and the world as a whole.

1. The Concept of Environmental Accounting:

Accounting is the art and science of recording, classifying, summarising, analysing and interpreting transactions which can be measured in monetary or quantitative terms. Accounting can be classified into various branches based on the purpose for which they are developed such as financial accounting, cost accounting, management accounting, tax accounting, responsibility accounting, inflation accounting, human resource accounting, and social accounting. Further based on who develops the accounting record, accounting can again be reclassified into various branches for example sole accounting, partnership accounting, corporate accounting, society accounting, trust accounting, fund accounting, government accounting, national accounting, global accounting etc.

"Environmental accounting is a subset of accounting proper, its target being to incorporate both economic and environmental information" (Wikipedia). Environment accounting is one of the recently emerged sub branch of social accounting which is doing one or more of the accounting tasks i.e. recording, classifying, summarising, analysing and interpreting transactions relevant with environment which can either be measured in quantitative or in monetary terms.

2. Types of Environmental Accounting:

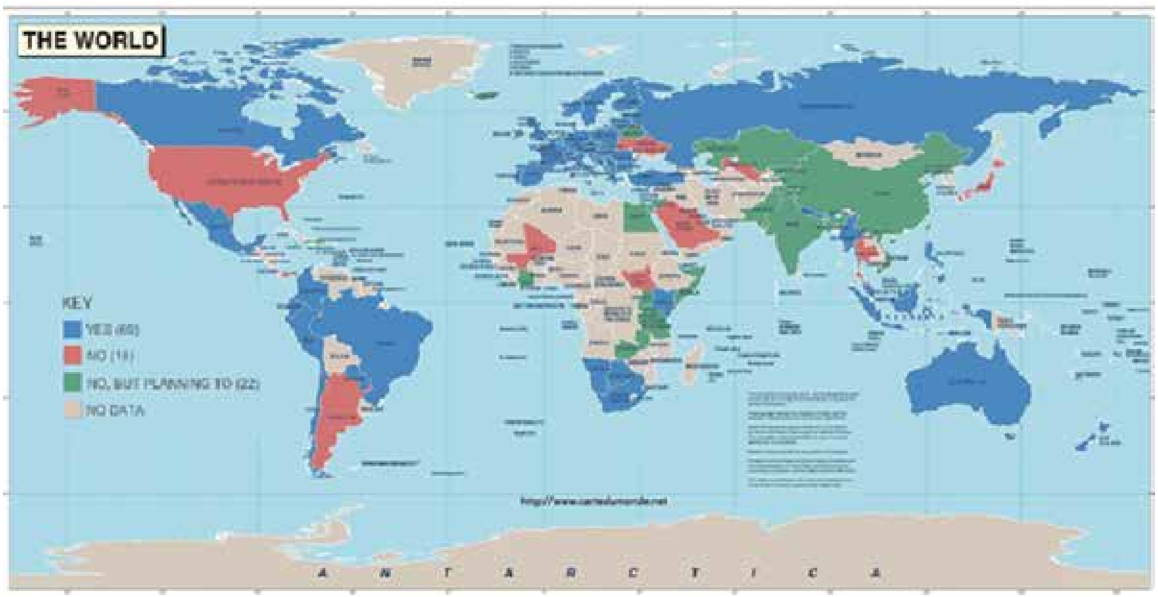
Based on who prepares and reports, Environmental Accounting can be classified into following different types:-

2.1 Global Environmental Accounting:

In this type of environmental accounting, areas like energetic, ecology and economics are dealt with at a worldwide or multi country level (Wikipedia). When global organisations like United Nations, International Monetary Fund, World Bank, World Health Organisation, World Trade Organisation, etc. are involved into accounting of environmental issues, it represents Global form of Environmental Accounting.

2.2 National Environmental Accounting:

In this type of environmental accounting, environmental issues are dealt at a national level of economy (Wikipedia). "Environmental accounting, also called green accounting, refers to modification of the System of National Accounts to incorporate the use or depletion of natural resources" (Iyyanki V.Muralikrishna, 2017). The following picture depicts "presence of environmental - economic accounting programmes in countries according to the 2017 Global Assessment" (United Nations, 2017)



"The 2017 Assessment was sent to the national statistical offices of 193 Member States as well as 22 territories to assess progress of SEEA Central Framework implementation. According to the Assessment, 69 countries have programmes on environmental - economic accounting" (United Nations, 2017). "The System of Environmental Economic Accounting (SEEA) organizes and presents statistics on the environment and its relationship with the economy. The SEEA is a statistical system that brings together economic and environmental information into a common framework to measure the condition of the environment, the contribution of the environment to the economy and the impact of the economy on the environment. The SEEA contains an internationally agreed set of standard concepts, definitions, classifications, accounting rules and tables to produce internationally comparable statistics" (United Nations)

2.3 Corporate Environmental Accounting:

In this type of environmental accounting, focus is on environmental performance at corporate level (Wikipedia). Corporate Environmental Accounting can further be classified into following sub-categories as "Environmental accounting is meant to be used for both internal and external users" (Baba, 2012):-

2.3.1 Environmental Financial Accounting:

In this type of environmental accounting, a corporate entity integrates environmental accounting with its financial accounting framework to be reported to external stakeholders. Environmental financial accounting can further be subdivided into mandatory and voluntary environmental accounting. When law of the land requires certain disclosures to be reported to external stakeholders, it is known as mandatory environmental accounting e.g. Corporate

Social Responsibility Accounting post Companies Act 2013 era. On the contrary when the corporate wishes to follow better disclosure practices, it voluntarily undertakes to account and report certain environmental issues; this is called voluntary environmental accounting and reporting e.g. Triple Bottom Line Reporting.

2.3.2 Environmental Management Accounting:

In this type of environmental accounting a corporate entity integrates environmental accounting into its management accounting framework so as to link their strategic and general management decision making considering impact on environmental issues. "The basic premise of environmental management accounting is that conventional accounting practices and existing operational and financial management within organizations obscure environmental information" (Bainbridge, 2006).

3. Impact of Environmental Accounting:

Environmental accounting is believed to generate positive impact with respect to several dimensions of the corporate as well as nations desired objective. Some of the important implications of environmental accounting are discussed hereunder:-

3.1 Investor Trust:

"Environmental management is becoming an increasingly important dimension of firm management and operations strategy. As such, strong environmental performance is increasingly valued by financial market" (Klassen & McLaughlin, 1996). "Companies with fuller disclosure win more trust from investors" (Eccles, 2001); for example, it was found by (Shastri, Shastri, & Agrawal, 2015) that mandatory cost audit has the potential to directly enhance investor trust, if investors and its reports are made public through innovation in reporting mechanism. Thus the higher is the level of disclosure; the more is the trust of investors. Environmental Accounting "provides information regarding the performance of an economic entity which leads to a better relationship between partners and the external environment" (Baba, 2012). Economic performance is positively impacted by environmental information disclosure (Zhongfu, Jianhui, & Pinglin, 2011) (Iatridis, 2013). Since environmental accounting system is likely to enhance investor trust as it provides more disclosure and transparency in reporting system.

3.2 Human Resources, Firm Value & Corporate Governance:

"Businesses increasingly understand that employees prefer to work for companies with strong pro-environment policies" (Totty, 2018). Hence it is evident that Environmental Accounting has a micro focus on various aspects of business management including human resource management (HRM). HRM is significant for organizations either trying to grow organic or inorganic, for example, better synergy in Mergers & Acquisitions needs higher coordination in HR issues (Shastri & Shastri, 2014). One important HR issue viz. Employee engagement positively impacts firm value (Shastri & Rajpurohit, 2017). Openness and transparency in communication can play a significant role in engaging employees who are millennial (Shastri & Rajpurohit, 2018). Thus disclosures through environment accounting have potential to play a significant role in improving levels of employee engagement and in turn enlarging value of firm by inculcating better HRM practices, and in fact it is a must because inferior HRM and unethical practices may even lead to corporate frauds (Mittal & Shastri, 2018). Thus environmental accounting may play a significant role in good corporate governance and citizenship.

3.3 Cost Management:

"Externalities, such as the costs of polluted air, are transferred back to the firm to achieve environmental improvement, thus raising operating costs and hurting profitability. However, some anecdotal evidence links strong environmental performance to lower manufacturing costs, often by eliminating waste." (Klassen & McLaughlin, 1996). Environment accounting contributes to a better management of energy, water and raw material costs (Baba, 2012). "Environment accounting helps mangers make decisions that will reduce or eliminate their environmental costs. It also helps them to better track environmental costs that may have been previously obscured in overhead accounts or otherwise overlooked and to better understand the environmental costs and performance of processes and products for more accurate costing and pricing of products. Many environmental costs can be significantly reduced or eliminated as a result of business decisions, ranging from operational and housekeeping changes, to investment in greener process technology, to redesign of processes/products. Many companies have discovered that environmental costs can be offset by generating revenues through sale of waste, by-products or transferable pollution allowances, or licensing of clean technologies. Understanding the environmental costs and performance of processes and products can promote more accurate costing and pricing of products and can aid companies in the design of more environmentally preferable processes, products, and services for the future" (Ray, 2017).

3.4 Innovation and Success:

"Environment accounting provides useful information regarding decision making for: level and structure of production, value of investment, environmental costs. It identifies, collects and analyses data about raw materials, energy and other information about the environmental impact of the business, that will lead to more informed decision-making, with consequent implications for improved profitability and environmental protection" (Baba, 2012). "By clarifying inputs, outputs, and impacts, environmental management accounting can help companies and organizations develop innovative solutions to changing resource constraints, regulations, and public pressure" (Bainbridge, 2006). "Environmental performance is one of the many important measures of business success. Competitive advantage with customers can result from processes, products, and services that can be demonstrated to be environmentally preferable" (Ray, 2017).•

3.5 Natural Resources:

"Environmental accounting is a vital tool to assist in the management of environmental and operational costs of natural resources. Valuation of natural resources is an essential input into both social cost-benefit analysis and some approaches to environmental accounting" (Iyyanki V.Muralikrishna, 2017).

3.6 Social Cost Benefit Analysis of Projects:

Environment accounting provides pathway for social cost benefit analysis of any project. "This analysis takes a wider view than simply estimating net monetary returns. The focus is on the project effect on the well-being of the people. It differs from financial analysis because of the prices used in the analysis and the cost and benefits that are included. While financial analysis employs the actual price at which inputs are purchased and outputs are sold, the social cost benefit analysis uses economic efficiency prices thus removing any distortion. Social cost benefit analysis looks at a wider set of effects than financial analysis. Things like off-site environmental impacts, which affect social welfare and which cannot easily be valued in monetary terms are included" (Kio, Kio, & Abu, 1993).

4. Conclusion:

Environmental accounting is one of the most recent advancement in the field of accounting. While the world is fighting a war with COVID 19 pandemic, the voice for environmental prevention and ecological prosperity is going to be more bold and loud. In light of this, the significance of environmental accounting is most likely to shoot up by leaps and bounds. Even before COVID 19 era, environmental accounting has brought significant positive multi dimensional impact, the important aspects of which have been discussed in the previous section of this article. In nutshell it can be concluded that not only the corporate, but the nations as well as the entire world will have to sooner or later, honour the unavoidable need of giving more emphasis on environmental accounting. Those corporate, who will understand this early, will win the cut throat competition. Those nations, who will understand this early, will create wealth for its citizens and the globe who understands it early will leave a beautiful planet for generations to come. Here the recent slogan recited by our honourable PM Shri Naredra Modi Ji is worth reproducing 'JAAN HAI TO JAHAN HAI'. MA

References

1. *Baba, M. C. (2012). Advantages of Implementing Environmental Accounting within an Economic Entity. Anale. Seria Stiinte Economice. Timisoara , XVIII (Supplement), 19-24.*
2. *Bainbridge, D. A. (2006, October). Adding Ecological Considerations to "Environmental" Accounting. Wiley on behalf of the Ecological Society of America , 7.*
3. *Eccles, R. (2001). The Value Reporting Revolution.*
4. *Iatridis, G. (2013). Environmental disclosure quality: Evidence on environmental performance, corporate governance and value relevance. Emerging Maret Reiew. , 14, 55-75.*
5. *Iyyanki V.Muralikrishna, V. M. (2017). Environmental Accounting. In V. M. Iyyanki V.Muralikrishna, Environmental Management (pp. 113-134). Elsevier Inc.*
6. *Kio, P. R., Kio, P. R., & Abu, J. (1993). Environmental accounting and mechanism for reconciling land use pressure on forests. Commonwealth Forestry Association , 72 (4), 272-278.*
7. *Klassen, R. D., & McLaughlin, C. P. (1996, August,). The Impact of Environmental Management on Firm Performance. Management Science , 1093-1227.*
8. *Mittal, S., & Shastri, N. (2018). Risk Analysis in Banking Sector Stocks in Indian Capital Market. The Management Accountant , 53 (4), 48-52.*
9. *Ray, D. (2017). Environmental Accounting – Necessity in This Dynamic Business Environment. Retrieved from Harvest: http://www.harvestjournal.net/wp-content/uploads/2017/07/Debayan-4.pdf*
10. *Shastri, A., & Shastri, N. (2014). HR Disclosures by SBI and its Listed Associates. The Management Accountant , 49 (12), 38-41.*
11. *Shastri, N., & Rajpurohit, N. (2017). Employee Engagement Analytics: Enhancing the Firm Value. The Management Accountant , 52 (11), 31-35.*
12. *Shastri, N., & Rajpurohit, N. (2018). Engaging the Millennials: Need of the Hour for Indian PSBS. The Management Accountant , 53 (1), 22-26.*
13. *Shastri, N., Shastri, A., & Agrawal, N. (2015). Mandatory Cost Audit and Investor Trust. The Management Accountant , 50 (9), 41-45.*
14. *Totty, M. (2018, February 28). Environmentally conscious companies that also instill teamwork and quality enjoy higher output. Retrieved June 1, 2020, from UCLA Anderson School of Management: https://www.anderson.ucla.edu/faculty-and-research/anderson-review/green-productivity*
15. *United Nations. (n.d.). about-seea. Retrieved May 31, 2020, from seea.un.org: https://seea.un.org/content/about-seea*
16. *United Nations. (2017). global-assessment-environmental-economic-accounting. Retrieved May 31, 2020, from seea.un.org: https://seea.un.org/content/global-assessment-environmental-economic-accounting*
17. *Wikipedia. (n.d.). Environmental accounting. Retrieved May 31, 2020, from Wikipedia, the free encyclopedia: https://en.wikipedia.org/wiki/Environmental_accounting*
18. *Zhongfu, Y., Jianhui, J., & Pinglin, H. (2011). The study on the correlation between environmental information disclosure and economic performance-With empirical data from the manufacturing industries at shanghai stock exchange in China. Energy Procedia , 5, 1218–1224.*

niranjan.shastri@nmims.edu
vanshika.shaw50@nmims.edu.in
mannat.oberoi39@nmims.edu.in

STRUCTURAL FRAMEWORK OF ENVIRONMENTAL ACCOUNTING: A CONCEPTUAL ANALYSIS OF GLOBAL REPORTING INITIATIVES (GRIs)

Dr. Parameshwar
Assistant Professor
Department of Commerce, Mangalore University
Mangalore

Abhishek N
UGC-Senior Research Fellow
Department of Studies in Commerce, University of Mysore
Mysore

Abstract

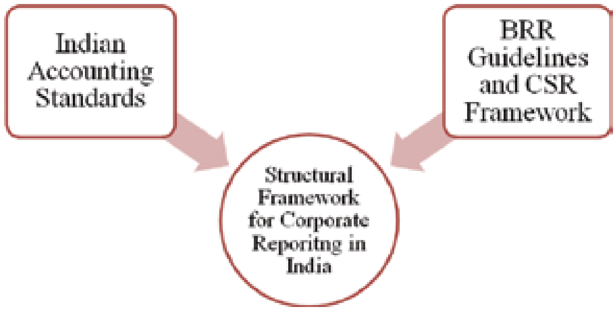
The present paper discusses the role Global Reporting Initiatives in providing the structural framework for environmental accounting, reporting and communicating the environmental aspects of business organisations in Indian scenario and also explains how harmonisation of environmental accounting can be done through GRI SRs (Global Reporting Initiatives Sustainability Reporting Standards).

Background

Indian Business Environment is dynamic in nature and attracting the stakeholders across the globe to carry their business operations in the country. When the country is having this type of positive environment then it will become the greater opportunity for every business organisations. To take the fruitfulness of environmental opportunity business organisation must be efficient while accountable to its stakeholders such as investors, employees, customers, regulatory authorities and the public at the larger interest. The efficient accountability of business can be achieved through proper reporting and communication of wide range of dynamic information for the decisional usefulness of various stakeholders. Communication of information means not only communication of financial performance-related information but also required to accounting, reporting and communication non-financial/ environmental performance-related information. The process involved in recognizing, measuring, reporting and communication of non-financial information of business is termed as environmental accounting. Today accounting and communication of both financial and non-financial information by the business organisations are vital. Communication of financial information shows the level of operational efficiency of business whereas communication of non-financial information shows the effort of the business organisation to promote sustainable development in the country in which it is operating. To streamline both financial and non-financial information reporting and communication by the business organisations it is necessary to have some structural frameworks which will give a strong methodology to carry the reporting function. At the global context, IFRS (International Financial Reporting Standards) developed by the International Accounting Standards Board is giving strong guidelines and methodology to streamline financial reporting. In the same way, GRI SRs is providing guidelines, methodology, policies and procedures to report and communicate environmental accounting information. By following these two set of standards elimination of diversity in reporting both financial and non-financial information and bring uniformity is possible. This would enable the stakeholders for easy analysis of both financial and non-financial information communicated by the business organisation.

In the Indian context also there is a structural framework for both financial and non-financial reporting. IndAs (Indian Accounting Standards converged with IFRS) are the standard which provides systematic policies, procedures and methodology for recognition, measurement and disclosure of financial information by the business organisations. BRR Guidelines (Business Responsibility Reporting) and CSR framework provide the structural framework for accounting, reporting and communication environmental performance-related information by the business organizations. Both the guidelines such as IndAs for financial reporting and BRR guidelines for environmental reporting are playing a vital role in corporate reporting environment in India. The present paper involves discussing the role of GRI SRs in providing a structural framework for environmental accounting in the Indian context. Environmental accounting is also called in different synonyms such as *Non-financial Reporting, Sustainability Reporting, CSR reporting, Triple Bottom Line reporting etc.,* in this paper we frequently used these synonyms interchangeably.

Figure: 01. Structural Framework for Corporate Reporting in India



Source: Author Compiled

Evolution of Environmental Accounting in India

The concept of corporate reporting was emerged during the 1960s only through communicating operational and financial results of business by way of financial statements. The real wave of environmental accounting and reporting is started only during the 1980s. During this period along with financial statements business organisation were started to communicate other information about Management Discussion and Analysis, Governance related issues and Environmental performance-related information. During the year 2000, the financial reporting of the business organizations were more advanced by including more peculiar information along with Financial Statements, MD&A, Governance and Environmental performance information further information on the activities undertaken by the business organisations which are directly supported to the sustainable development of the country which is popularly termed as sustainability reporting. Thereafter in the year 2009, the MCA (Ministry of Corporate Affairs) had provided voluntary guidelines for reporting the aspects of corporate social responsibility by Indian companies and this was the first structural framework on environmental accounting. In the year 2011, nearly 43 companies were witnessed by reporting environmental performance-related information as per GRI guidelines and these companies made good effort to reach the global level of environmental reporting. In the year 2013 MCA mandated select class of companies to spend at least 2% of their net profit for undertaking sustainable developmental programmes and this had created the mandatory responsibility on the companies to undertake environmental-related activities and to disclose the information related to such activities. This mandate created the environment in which all select class of companies will be efficiently responsible and accountable towards society. At present sustainability reporting is getting more prominence in the corporate reporting environment. So, the future of environmental accounting and reporting will be merged with financial reporting within a single business report which is termed as **I**ntegrated **R**eports.

Structural Framework for Environmental Accounting and GRI in India

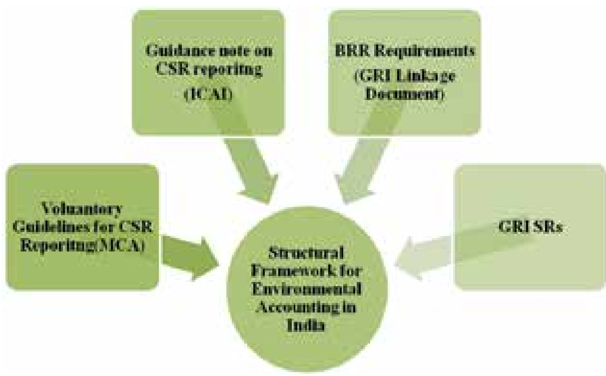
To harmonize environmental accounting system in the country, the structural framework for Environmental Accounting is most essential. The structural framework provides the policies, guidelines and procedures to recognize measure and disclose the environmental performance-related information in a unified manner. The Strong framework will enable the firm to report the transactions which are identified as sustainable activities consistently undertaken by the business organisation. This enables the stakeholders for easy comparison of the sustainability performance of business organisations across and within the industry.

The importance of environmental accounting was emerged due to various initiatives undertaken by the government to enable the firms to spend on socio-economic sustainable developmental activities. When the firm is needed to spend some of the portion of its revenue on these activities mandatorily there will be the question of its accountability. The accountability of corporate spending on environmental sustainability initiatives can be ensured only through proper accounting of spending to such initiatives. For proper accounting of these spending by the corporate, there is a need of well-accepted standards. At the global level, there are several standards which provide the structural framework for environmental reporting such as Sustainability Accounting Standards issued by SASB(Sustainability Accounting Standards Board), IIRC Framework (International Integrated Reporting Council) for integrated reporting, GRI SR (Global Reporting Initiatives Framework for Sustainable Reporting) and so on. In Indian context also there are frameworks which have tried to streamline the environmental accounting practices in the country such as National Voluntary Guidelines for Corporate Social Responsibility Reporting issued by Ministry of Corporate Affairs in the year 2009, Guidance Note on CSR reporting issued by ICAI in 2015, BRR guidelines issued by the SEBI in 2015.

To address the uniformity, consistency, reliability and comparability of non-financial reporting of companies at the global context SEBI (Securities Exchange Board of India) entered an MOU with GRI (Global Reporting Initiatives) to develop a standard for environmental reporting in India and which should fulfil the requirements of National Voluntary Guidelines for CSR reporting, BRR and GRI to match the Indian environmental accounting practices with global practices. Both SEBI and GRI involved in developing a document called 'Linkage Document' which provides a comprehensive standard for non-financial /environmental accounting in confirmation with GRI and BRR guidelines.

Now a select class of listed companies in India are following standardised method for accounting environmental performance along with that of financial performance. GRI based guidelines that are BRR guidelines issued by SEBI are bringing uniformity in environmental reporting by the companies and the corporate reporting of the country is in line with the global context. Because some of the companies already started to adopt GRI standards in their environmental accounting practices. GRI is only the tool for harmonizing environmental accounting practices across the globe and these standards provide clear guidelines for environmental accounting practices made by the different sector of industries. Environmental accounting involves in identifying the activities undertaken by the business organisation which positively impact on the environment and society in which it is operating. GRI provides sector-specific standards to report the firm's performance towards sustainable development. The standards may be related to economic, environmental and social aspects. By using these standards business organisation can ensure transparency in environmental accounting and its disclosures. GRI is the first non-profit organisation involving in setting up of standards for sustainability reporting around the world. The standards set by GRI are based on United Nations Sustainable Developmental Goals (UN SDGs) and they not only provide guidelines for sustainability reporting but they also suggest the areas in which different sector-wise industries can undertake sustainable developmental activities. In India also many companies' environmental accounting practices are based on GRIs guidelines and BRR requirements which means Indian corporate reporting is somehow matching with global standards and companies trying to contribute to UN SDGs through undertaking more sustainable developmental activities.

Fig: 02 Structural Frameworks for Environmental Accounting in India



Source: Author Compiled

Future of Corporate Reporting in India and Role of CMAs

The future of the business environment is more dynamic than actually, we are seeing today. So future corporate reporting will also become more dynamic which needs the efforts of financial accounting experts, management accounting experts and environmental accounting experts. Because the form of future corporate reporting should enable the firms to communicate wide range information such as information on the activities undertaken by the business organization impact on the environment and society in which it is operating. So in future corporate reporting becomes more complex. For this reason, it is necessary to promote 'Integrated Reporting'. Integrated Reporting allows the companies to disseminate the big picture of company's performance in multiple angles such as financial information, governance disclosure, risks and opportunities, environmental performance etc., in simple it helps companies to narrate its story comprehensively. Further, integrated model of corporate reporting allows the firm to combines both financial and non-financial information in a single report.

Over the period of time investors and other stakeholders, confidence on corporate reports is diminishing. Therefore it is the time to focus on providing assurance on financial and non-financial information communicated by the firms. Today we can see that corporate are disclosing socio-economic, environmental risks and opportunities in their reports. But they should also disclose how they are managing the opportunities to mitigate the risks raised from the environment. In this context, CMA's will have the opportunity to work in the context of integrated reporting, environmental accounting, as a consultant in providing the consultancy on environmental opportunities and risk management.

Conclusion

A structural framework for environmental accounting plays a vital role in removing diversity and complexity in non-financial reporting practices by the companies and in ensuring uniformity, comparability and compatibility with global standards. As discussed earlier GRI based structural framework for environmental accounting makes environmental accounting practices more advance and caters the information needs of various stakeholders and also it eliminates the complexity of business and financial information reporting and disclosure process. Finally, we will conclude that GRI based environmental accounting practices are more favourable to companies as it helps to practice business reporting under integrated reporting model and firms along with professional experts like CMAs should focus on reporting and disclosing the manner through environmental opportunities can be enjoyed by mitigating risk instead of only disclosing socio-environmental opportunities of the firm. Further, the role of professionals who are identified as an environmental accountant is most vital in achieving UNs sustainable developmental goals. MA

References

1. *https://indiacorplaw.in/wp-content/uploads/2016/01/38254asb27888csr.pdf: Retrieved on 24/04/2020*
2. *https://greentick.taxsutra.com/experts/column?sid=29 : Retrieved on 25/04/2020*
3. *I Erol, B Demirel(2016), Investigation of integrated reporting as a new approach of corporate reporting International Journal of Business and Social Research, volume 6, issue 10, p. 32 – 46.*
4. *K Ereshi, R G Desai(2017), Environmental concern in corporate sector: A study selected companies in India, Indian Journal of Accounting, issue 2, p. 1 – 09*
5. *N, Abhishek and M. S., Divyashree, Global Reporting Initiatives: A Study of Environmental Accounting Practices in Indian Electric Companies (January 17, 2019). FOCUS: Journal of International Business Volume 5, Issue 2, July-December 2018, pp. 79-92, doi: 10.17492/focus.v5i2.14385 . Available at SSRN: https://ssrn.com/abstract=3317753*
6. *https://www.globalreporting.org/standards/gri-standards-download-center/ : Retrieved on 25/04/2020*
7. *http://www.ursindia.com/business_responsibility_reports.aspx : Retrieved on 25/04/2020*

abhishekalmighty93@gmail.com

Ref No: G/82(126)/05/2020 May 28, 2020

NOTIFICATION

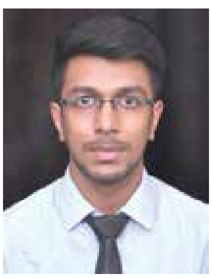
In pursuance of Regulation 146 of the Cost and Works Accountants Regulations, 1959, the Council of the Institute at its 324th Meeting held on 17th and 18th May 2020 by virtue of power conferred therein has constituted the following Chapter of the Institute of Cost Accountants of India covering the area of Shimla District in the State of Himachal Pradesh.

The Institute of Cost Accountants of India – Shimla Chapter
28/1 Krishna Lodge, Lakkar Bazaar,
Shimla - 171 001.
Himachal Pradesh

CMA Kaushik Banerjee
Secretary

ESG DISCLOSURES AND INVESTING IN INDIA - AN OVERVIEW

CMA Rajiv V. Shah
Professor
T A Pai Management Institute, Manipal
Karnataka



Aayush Saraogi
PGDM Student
T A Pai Management Institute, Manipal
Karnataka

Abstract

Environmental, Social and Governance (ESG) factors are the focus of current reporting trends and are viewed as a means of inculcating the principles espoused by Triple Bottom Line into corporate culture. This article looks at the background and context of ESG and its positioning in international corporate reporting practices. The state of acceptance and action in the Indian context is also studied, where it is found that this concept has recently begun in India and is slowly catching up with the reporting levels in some of the more advanced economies. There are areas for improvement and the reasons for these barriers are also discussed. Finally, it is suggested that EGS needs to be introduced in India using a basic level of regulation along with creation of a higher level of awareness about this concept, which could lead to investors demanding such information from corporates before taking an investment decision.

Introduction and Background of ESG Disclosures

There is an increase in global awareness about not only the way corporates are being governed, but also about their impact on the environment and on society. This awareness led to the creation of the concept of Triple Bottom Line (TBL) in 1994, which measured the economic, social and environmental contributions of businesses (Elkington 1994). This was followed by another framework: Corporate Social Responsibility (CSR) which has become even more popular and is mandated in many countries. Over a period, it is argued that the concept of TBL in its original form needs to be updated (Elkington 2018) and CSR has, more often than not, become a regulatory instrument which is followed out of fear rather than concern for society and environment. In order to keep the spirit of giving back to society and nature emanating from a feeling of responsibility, some corporates have suggested that financial and nonfinancial factors be measured under an umbrella standard known as 'Environment, Social and Governance Factors' or ESG factors. These factors would be voluntary, to begin with, and would be outside the framework of Accounting Standards. Importantly, there would be an important component of non-financial factors which could make the reporting and impact more powerful.

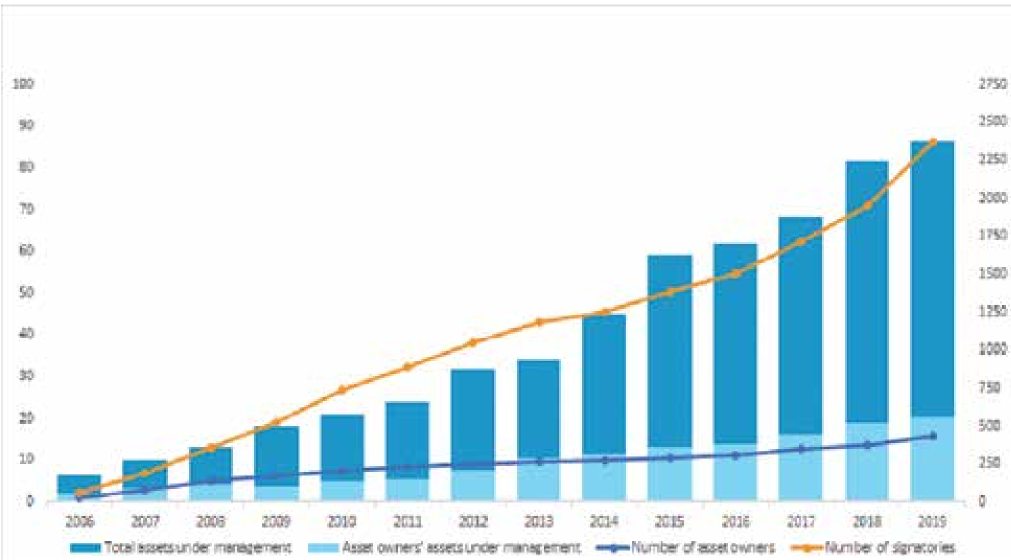
ESG and UNPRI

The Principles for Responsible Investment (PRI) are a set of six principles developed by a group of international institutional investors in 2006 to promote responsible investing. The principles have been developed voluntarily under the aegis of the United Nations to be included in the investment process and which reflect the increased focus on environmental, social and governance issues. These principles are:

Principle 1	*We will incorporate ESG issues into investment analysis and decision-making processes.*
Principle 2	*We will be active owners and incorporate ESG issues into our ownership policies and practices.*
Principle 3	*We will seek appropriate disclosure on ESG issues by the entities in which we invest.*
Principle 4	*We will promote acceptance and implementation of the Principles within the investment industry.*
Principle 5	*We will work together to enhance our effectiveness in implementing the Principles.*
Principle 6	*We will each report on our activities and progress towards implementing the Principles.*

(*Source: https://www.unpri.org/pri/about-the-pri)*

As of 2019, the PRI had 2372 signatories with over US$ 86 trillion as assets under management, as displayed:



(Source: https://www.unpri.org/pri/about-the-pri)

ESG reporting, while attracting interest from corporates, suffers from an absence of universally accepted norms and standards guiding the reporting activity. The World Business Council for Sustainable Development, a grouping of about 200 leading businesses debated on the framework for discussing universally accepted norms. They identified six major questions that could help create universally acceptable reporting standards: what is the objective of reporting ESG information, who could be the potential audience for this information, which reporting channel would be most appropriate to achieve the desired objectives, what is the scope of information to be reported, which available methodologies and guidance or principles should be used to report this information, and; how much of information should be reported in order to keep the data clear and concise without diverting attention from other important information (WBCSD, 2019).

The three investment benefits typically sought by investors are utilitarian, expressive and emotional benefits. Utilitarian benefits are usually characterized by financial returns. Expressive benefits are those which help the investors express their values, status or tastes to themselves and to others. These could include the expression of concern for society and the environment. Finally, emotional benefits are those which help the investors understand how they feel. Genuine concern for the environment and society would also come under this category (Statman, 2010). The UNPRI, among other measures, has shown a new direction for positively impacting society and environment through investment activity. Instead of a mandate, as in CSR, if there is a demand from investors for corporates to behave and report responsibly, there could be a pull factor for positive impact. In the long run, this has the potential to spread overall awareness and responsible behaviour patterns which can help improve social and environmental conditions in addition to generating profits.

ESG Disclosures in the Indian Context

India's rapid economic development has coincided with deterioration of environmental quality. India features nine of the ten most polluted cities in the world. The Kerala and Chennai floods and the recent droughts in some districts of Maharashtra and Karnataka are examples of the changing environmental scene. In this context, the environmental and social impact of businesses has come into focus. These impacts pose an immense amount of risk to businesses. For example, an organisation with its core business of crude oil extraction and distribution may have to formulate strategies for diversifying into clean fuel as the Indian government pushes for transition into electric vehicles. As Indian businesses are trying to innovate themselves to mitigate these risks, concerns related to governance have emerged in recent times. In view of these factors and the associated risks, the investors have become cautious of their investment in businesses that are highly exposed to such risks. Accordingly, the NSE 100 ESG index was formulated in 2011. The weight of each company in the index is constituted from its respective ESG score and market capitalisation. Although the ESG index was constituted nine years ago and the world markets were already on the ESG track, Indian markets have seen its emergence only in recent times, with the commencement of ESG focused mutual funds.

BSE, in 2018, has published a detailed guidance note on ESG disclosures suggesting over 30 Key Performance Indicators (KPI). The broad KPI relating to ESG are reproduced as under:

Environmental	Social	Governance
Environmental Policy	Full time Employees	Gender diversity on Board
Environmental Impacts	Monetary and non - monetary benefits for employees	Board - Independence
Energy Consumption	Attrition Rate	Board - Separation of Powers
Energy Intensity	Training and development Hours	Voting Results
Carbon/GHG Emissions	Health care benefits	Gender Pay Ratio
Primary Energy Source	Human Rights Policy	Incentivized Pay
Renewable Energy Intensity	Human Rights Violations	Business Ethics and Code of Conduct
Water management	Child & Forced Labour	Supplier Code of Conduct
Waste Management	Gender parity ratio at Workforce	Bribery/Anti-Corruption Code
	Community and social Work	Corporate Governance
	Local Procurement	

(Source: BSE guidance document on ESG disclosure, 2018)

SEBI had mandated disclosure of responsible business practices adopted by companies to all its stakeholders, in the Business Responsibility Report (BRR) along with the annual report in 2012, for the top 100 listed companies. This could act as a catalyst for the listed entities to incorporate ESG parameters into their core business practices.SEBI has outlined nine guiding principles for the BRR:

Businesses should conduct and govern themselves with Ethics, Transparency, and Accountability
Businesses should provide goods and services that are safe and contribute to sustainability throughout their life cycle
Businesses should promote the wellbeing of all employees
Businesses should respect the interests of, and be responsive towards all stakeholders, especially those who are disadvantaged, vulnerable and marginalized
Businesses should respect and promote human rights
Businesses should respect, protect, and make efforts to restore the environment
Businesses, when engaged in influencing public and regulatory policy, should do so in a responsible manner
Businesses should support inclusive growth and equitable development

Businesses should engage with and provide value to their customers and consumers in a responsible manner

(Source: SEBI circular noCIR/CFD/CMD/10/2015 dt. 04/11/2015)

A study in the context of ESG in Nifty100 companies was published in a Nifty100 ESG Indices White Paper in March 2018 using three parameters: Preparedness, Disclosure and Performance. Preparedness referred to the corporate's policies, programmes and structures. The effectiveness of the standard and reporting process was captured by the Disclosure parameter. Similarly, the controversies and responses of the corporate were measured by the Performance parameter. A score of 100 was assigned based on these parameters. The average score of the companies was 58 and only two companies scored above 80. About three-fourths of the companies had a score between 50 and 80. The remaining 23 companies scored between 40 and 50.

However, when the analysis was made for all 250 companies studied (including the Nifty100 companies), it emerged that 40% of the companies lay in the second quartile and 57% of the companies were placed in the third quartile. This led to the conclusion that companies not falling under Nifty100 lagged far behind in terms of ESG factors (IISL 2018).

As disclosures regarding ESG gain momentum, investors in India are seeking better quality disclosure. Mutual fund houses in India have stepped up to incorporate ESG dedicated funds. Some of them have incorporated the PRI into their investment practices. Kotak Mahindra Asset Management Co. was the first Indian MF to sign the PRI in April 2018. These funds also look to generate additional alpha, as the companies which value sustainability the most are expected to outperform the rest.

Reasons for slow adoption of ESG disclosures in India

There are not enough companies reporting ESG related data, and even this is not comparable as there are different measurement and reporting standards, with different KPIs in some cases. Lack of uniformity can also lead to differing levels of credibility about the data that is eventually published. There is a need for more coherence in the ESG disclosures which might lead to upgradation of quality of disclosures and motivate the companies to incorporate better practices, thereby maintaining consistency. Recommendations from investor groups such as the PRI could also be considered, thus giving companies insight into what can impact their valuations. Improved communication among the various stakeholders in the ESG universe, ie. regulators, investor groups, companies and ultimate beneficiaries could improve the ESG process in India to bring it at par with other markets and create a more sustainable world.

There is also a mindset among investors that financial performance can only come at the cost of social and environmental action. This mental trade-off can lead to reduced interest from investors, and consequently, reduced reporting from corporates. There needs to be more action to educate investors that these factors are not mutually exclusive and, in some cases, a regulated focus on society and environment can lead to technological innovation, which in turn can improve financial performance (Porter and van der Linde 1995). ESG focussed mutual funds have been recently launched in India and it would take time for investors to draw the correlation between the 'E' and 'S' with long term wealth creation.

Conclusion

As ESG reporting and investing is slowly growing in the Indian context, there needs to be a balanced approach in creating a conducive atmosphere for its further growth. Over-regulation, which could lead to companies treating it as another compulsion, should be avoided. This is not to advocate a wholly voluntary and unstandardized approach for ESG reporting. Instead, a carrot-and-stick approach could be experimented with, where a base level of regulation (such as the BSE and SEBI frameworks mentioned earlier) supplemented with independent research about the importance of this concept, could lead to investors demanding detailed information to enable them take the investment decision. This awareness on the part of investors would encourage corporates to go beyond the scope of regulatory compliance and enable them to play a positive and constructive role in creating true wealth, which includes social and environmental wealth. MA

References

1. *Bhavnani, C., & Sharma, A. (2019). ESG Investing Scenario in India. Responsible Banking, YES BANK.*
2. *BSE. (2018). Guidance Document on ESG Disclosures. Mumbai.*
3. *Elkington, J. (1994). Towards the sustainable corporation: Win-win-win business strategies for sustainable development. California Management Review, 36(2), 90.*
4. *Elkington, J. (2018). 25 Years Ago I Coined the Phrase "Triple Bottom Line." Here's Why It's Time to Rethink It. | Expressworks International. Harvard Business Review, 1–6.*
5. *IISL. (2018). NIFTY100 ESG Indices-white paper series#10. IISL.*
6. *Porter, M. E., & Van der Linde, C. (1995). Green and Competitive. Harvard Business Review, 73(5), 120–134. https://doi.org/10.1016/S0148-2963(01)00310-1*
7. *SEBI circular no. CIR/CFD/CMD/10/2015, Format for Business Responsibility Report, dt. 04/11/2015*
8. *Statman, M. (2010). What Investors Really Want. Financial Analysts Journal, 66(2), 8–10.*
9. *WBCSD. (2019). ESG Disclosure Handbook, (June), 1–34.*
10. *Website: https://www.unpri.org/pri/about-the-pri*

rajivvshah@yahoo.com
aayush.21@tapmi.edu.in

ENVIRONMENTAL ACCOUNTING AND SUSTAINABILITY ANALYSIS OF SELECT PETROLEUM COMPANIES IN INDIA – A STUDY

Abstract

Environmental Accounting is the significant method for the better understanding of the job performed by the Natural environment in the economy of the nation. Environmental Accounts supplies the information which emphasize both the contribution of natural resources for the better functioning of the economy and the costs demanded by pollution or degradation of resources. In this paper, I have discussed about the Environmental accounting aspects as well as sustainability report elements of two petroleum corporations they are, BPCL & ONGC.

Dr. Mohammad Khwaja Moinoddin
Head & Professor, Dept. of Business Administration
SRM Group of Institutions
Karimnagar

INTRODUCTION

Environmental Accounting (EA) is the activity of producing environment related costs pellucid with corporate accounting mechanism and reporting. For the first time the concept of EA used by Norway in the year 1970's. In our country, very few industries such as oil and petroleum, cement, power, electronics, natural gas, steel engineering and textile industries are applying the environmental accounting.

OBJECTIVES OF THE STUDY

1. The primary objective of the study is to know the concept of Environmental Accounting.
2. The secondary objective is to analyze the Sustainability report of the BPCL & ONGC.

RESEARCH METHODOLOGY

The data for the analysis secondary in nature, has been collected from the Websites of Bharat Petroleum Corporation limited and Oil and Natural Gas Commission of India and the annual, sustainability reports of the said companies. For the analysis of the data, 5 years data i.e from 2015 to 2019 taken into the consideration.

ANALYSIS

FORMS OF ENVIRONMENTAL ACCOUNTING

Environmental Accounting can be divided under three forms:

i. Environmental management accounting (EMA):

This form can deal with the information of material, energy and environmental related costs data.

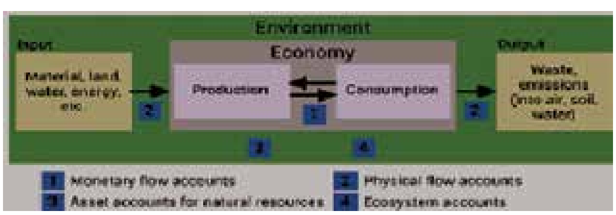
ii. Environmental Financial Accounting (EFA):

It works on costs of environmental liability and financial accounting costs reporting.

iii. Environmental National Accounting (ENA):

It concentrates on natural resources stocks, flows, and environmental costs.

ENVIRONMENTAL ACCOUNTS



LEGAL FRAMEWORK FOR ENVIRONMENTAL ACCOUNTING IN INDIA

The environmental clearance from various government authorities has taken the centre of attraction with the abolishing of industrial licensing for all practical purposes. The country also made various acts to ensure the protection of environment. The various laws pertinent to environmental protection in the country are listed below under two different heads:

1. Directly related to the protection of Environment

» Water Act - 1974

» Water less Act - 1977

» Air (Prevention & control of pollution)Act 1981

» The forest conservation Act -1980

» Environmental (Protection) Act - 1986.

2. In Directly related to the protection of Environment

» Indian Fisheries Act -1987

» Indian penal code

» The Motor vehicle Act - 1991

» The Factories Act - 1948

MEASUREMENT TECHNIQUES

In 2003, the UNDSD came out with four Environmental management accounting techniques such as input/output analysis, ABC (Activity based costing), Life cycle costing, and flow costing for the identification and allocation of environmental costs.

Other techniques are mass balance method, shadow prices of pollutants, sniffing method, optical method and contingent valuation methods etc.

BHARAT PETROLEUM CORPORATION LTD, INDIA

Table - 1

Contribution Towards clean Environment (By Pipeline Entity)

Years	Pipeline	Rail	Saving
2015	24,046	1,39,701	1,15,656
2016	26,603	1,54,394	1,27,791
2017	26,749	1,55,307	1,28,558
2018	28,582	1,64,684	1,36,102
2019	30,448	1,79,219	1,48,772

Source: www.bharatpetroleum.com

There are different kinds of initiatives undertaken to conserve energy and also BPCL adopted few loss control policies implemented in the year 2018-19. These policies resulted in efficient fuel savings. The transport via BPCL network has been resulted in reduction of carbon footprint by 1,48,772 MTCO2e, through other oil and gas marketing firms pipeline network 40,600 MTCO2e and through LPG Pipeline 8481.20 MTCO2e.

Table-2
Economic Value Added (Retained)

Years	EVA
2015	6026.68
2016	7174.23
2017	5277.63
2018	9548.55
2019	5818.80

Source: www.bharatpetroleum.com

The BPCL EVA has been increased in the first two years. In the year 2017 & 2019, the EVA declined as 5277.63 and 5818.80 respectively. Increase in the operating costs and other payments to governments might be the reason for declining in the EVA.

Table-3
Energy Consumption of BPCL (Group)

Year/ Energy	Refining	Retail	Lubricants	Aviation	LPG
2018-19	91.72 (Million (GJ)	562.4 (000 Gj)	35.9 (000 Gj)	75.5 (000 Gj)	550.4 (000 Gj)

Source: www.bharatpetroleum.com

From the above statistics we can easily predict how the refining capacity in the country exceeds the domestic demand. After refining BPCL consumption is more for retail and LPG only in the year 2018-19.

Table-4
Primary Energy Demand Growth

World	2.3%
US	3.7%
China	3.5%
India	4.0%
Europe	0.2%
Rest of the World	1.8%

Source: www.bharatpetroleum.com

The above table revealing that the global energy demand registered a resounding growth of around 2.3% in 2018, its fastest pace of growth in this decade, driven by increasing energy needs propelled by a healthy world economy while the demand for oil grew by 1.3%. India is on top in the growth of demand for Primary energy compared to the other nations.

Table-5
Specific Energy Consumption (Kochi & Mumbai–Refinery)

Years	Consumption - Kochi	Consumption - Mumbai
2016-17	86.17	71.4
2017-18	79.2	66.7
2018-19	71.5	64.5

Source: www.bharatpetroleum.com

From the above statistics, it is noticed that both the refineries reduced the consumption of specific energies by keeping in the view of environment safety. They may be using the alternate energy sources like wind, natural gas etc.

Table-6
Production (Million Metric Tones')

Years/ Area	2015	2016	2017	2018	2019
Heavy Ends	2.75	2.49	2.45	2.95	3.82
Middle Distillates	13.21	13.84	14.49	16.05	17.06
Light Distillates	6.19	6.64	7.25	7.95	8.47

Source: www.bharatpetroleum.com

The production in all the segments during the period of the study has been increased except in the year 2016 the production of Heavy ends decreased compared to earlier year. However, the BPCL maintained healthy growth rate of production according to the demand.

OIL AND NATURAL GAS COMISSION OF INDIA (ONGC)

Table-7
Economic Performance of ONGC FY-2019

ONGC	29%
*OVL	49%
*MRPL	15%
*OMPL	50%
*OPAL	75%
*OTPC	14%

Source:www.ongcindia.com

ONGC recorded growth in economic performance of all its groups. Moreover, ONGC group's economic performance has observed constant growth due its agile response to the continuous volatile business environment that is designed by global variances. Constant growth in ONGC group's turnover might be the reason for increased economic condition.

Table-8

Economic Value Added (EVA)

Group	ONGC	OVL	MRPL	OMPL	OPAL	OTPC
EVA	19504.01	92,228.05	549.85	741.86	-29,391.52	645.73

Source:www.ongcindia.com

The EVA of the all the companies of ONGC increased during the year 2018-19 except OPAL. The EVA of OPAL recorded as negative i.e. 29,391.52. Increased operating expenses and payments to the government and other agencies resulted in negative EVA for OPAL.

Table-9

ONGC Group Performance in Water Management

Year	Ground Water	Municipal Water	Surface Water	Other Sources
2017	3.34	5.08	9.24	0
2018	9.24	4.39	0.95	4.74
2019	3.01	0.43	12.92	5.33

Source:www.ongcindia.com

From the statistics of water management of ONGC during the period 2017-2019, it is noticed that ONGC reducing the consumption of ground and municipal water with the intention of managing the quality of water returned to the environment. The company alternatively increases the utilization of surface and other sources of water for its activities during the year 2019.

Table-10

Volume of Waste Water (Billion Litres) ONGC Group

Year	ONGC	MRPC	OPAL	OMPL	OTPC
2017	-	6.193	0.369	0.4237	---
2018	0.789	6.199	3.75	0.367	---
2019	0.88	5.2	3.92	0.43	0.58

Source:www.ongcindia.com

From the above table, it is noticed that the flow of wastage water from all the ONGC units except MRPC increased in the year 2019.Drilling operation generates waste water in the form of wash water due to washing of equipment, string etc.

Table-11

Recycling wastewater to reduce Water footprint

ONGC	60%
OMPL	47.01%
OPAL	68%
OTPC	20%
MRPC	78%

Source:www.ongcindia.com

*OVL - ONGC Videsh ltd. MRPL - Mangalore refinery & Petrol chemicals ltd .OMPL - ONGC Mangalore petrochemicals Ltd. OPAL – ONGC petro additions Ltd. OTPC - ONGC Tripura power company

ONGC working on companywide sustainable water management strategy that aims reduction in specific fresh water consumption and reporting on the water footprint using internationally recognized standards and practices. The group of firms has been effectively recycling the wastewater at their level in order to reduce the consumption of water footprint.

Table-12

Year	Hazardous Waste (in MT.)	Non-Hazardous Waste (in MT.)
2017	33,369.6	26,279.26
2018	57,469.3	49,627.59
2019	30,818.7	1,27,706.02

Source:www.ongcindia.com

The significant sources of hazardous and hazardous wastes are drill cuttings, drilling fluid and oily sludge from cleaning of storage tanks. Here in the above table the wastage from the sources of Hazardous declined in the year 2019 to the maximum extent. Whereas wastage from the non-Hazardous have been continuously increased during the study period. Increase in the turnarounds or shutdowns of process units may be the reason of increase of non-hazardous wastage.

Table -13

Details of Energy Consumption from renewable sources

Year	Solar	Wind
2017	5.84	298.4
2018	14.69	273.5
2019	76.03	358.3

Source:www.ongcindia.com

The ONGC group is maximizing its consumption of renewable sources in the last three years of the study. Specially, the company largely depends upon wind sources for its operations.

Table -14
OIL & GAS Production of ONGC

Year	Oil	Gas
2017	22.25	22.09
2018	22.31	23.48
2019	21.11	24.75

Source:www.ongcindia.com

The above table showing the production of oil and gas during the years 2017,2018 and 2019. Almost oil production is constant i.e around 22 mmts. There is a continuous growth in the production of gas during the study period. This resulted in maintaining the ONGC first position globally in the category 'Oil and Gas exploration and production".

CONCLUSION

By the study environmental accounting and sustainability analysis of BPCL and ONGC companies it is concluded that the both the companies are maintaining the clean records pertaining to environment in the form of Annual and sustainability reports. Both the corporations are striving for the clean and safe environment with their practices such as recycling of wastewater, water management, minimization of specific energy consumption, maintaining healthy EVA, and production according to the demand etc.

Environmental Accounting is an important measure for understanding the role-played by natural environment in the development of the economy. In India, the level of environmental related disclosures in the corporate annual reports is poor. The only reason is environmental disclosures are voluntary in practice. So very few companies like oil, petroleum and gas, etc., are including the environmental accounting information in the form of annual reports or sustainability reports. Lack of knowledge/awareness also might be the reason behind the firms away from reporting environmental costs and benefits.

Finally, it is concluded that the lack of strict E.A practices both at domestic and International level motivating the corporate to be away from the EA practices and also to close their eyes towards the deterioration in the environment. MA

REFERENCES

1. *www.ongcindia.com*
2. *www.bharatpetroleum.com*
3. *https://en.wikipedia.org*
4. *https://www.accountingedu.org*
5. *https://thecommercepedia.blogspot.com*
6. *https://www.academia.edu*
    - *Annual reports of BPCL & ONGC*

mohin_khwaja1@yahoo.co.in

Ref No: G/82(127)/05/2020 May 28, 2020

NOTIFICATION

In pursuance of Regulation 146 of the Cost and Works Accountants Regulations, 1959, the Council of the Institute at its 324th Meeting held on 17th and 18th May, 2020 by virtue of power conferred therein has constituted the following Chapter of the Institute of Cost Accountants of India covering all towns and villages in the jurisdiction of Beawar Tehsil in the State of Rajasthan.

The Institute of Cost Accountants of India – Beawar Chapter
447, Laxmi Kunj,
Lokeshwar Hanuman Temple Street
Locality - Near Hanuman Temple
Lokashsah Nagar,
Beawar – 305 901.
Rajasthan

CMA Kaushik Banerjee
Secretary

ENVIRONMENTAL ACCOUNTING – A CASE FOR A COMPREHENSIVE ACCOUNTING STANDARD

Dr. Inchara P M Gowda
ICSSR Post - Doctoral Fellow
Institute of Management Studies, Kuvempu University
Shankaraghatta, Karnataka

Abstract

The corporate world is utilizing many natural/environmental resources on the one hand and causing much damages to the environment,in terms of environmental pollution, natural resource depletion, etc., on the other. And the beneficiary corporate world is contributing very trivial sum towards environmental protection. However, systematic accounting for environmental costs and benefits is missing. In this backdrop, this paper puts forward a strong case for a comprehensive Accounting Standard for Environmental Accounting.

Introduction

Over the years, Accounting has expanded its scope and activities. Consequently, one can find a few branches of Accounting such as Financial Accounting, Cost Accounting, Management Accounting, etc., wherein each branch is designed to serve one or more stakeholder group/s in their informational requirements. However, in spite of substantial growth and expansion in the scope of Accounting, it suffers from a few shortcomings/inadequacies. One such inadequacy is the absence and/or non-availability of comprehensive methodology for quantifying, in terms of money, certain transactions/events, and to recognise and present them in the financial statements. And one such area is the accounting for environmental costs and benefits.

As is known, the response of traditional method of Accounting to account for the changes in environmental/natural resources such as depletion of natural resources on account of their use by the corporate world in their revenue generating activitiesis not adequate or satisfactory. As is known, conventional Accounting system depreciates/amortizes only man-made assets (of course, both tangible and intangible assets) but not natural resource degradation/depletion.Further, though the environmental and natural resources play a stupendous role in the revenue generating activities of corporate entities, conventional Accounting system fails to quantify and recognise the monetary equivalents of environmental pollution, industrial wastes released to the environment, etc., in the financial statements.

In the above backdrop, attempts have been made by the accounting bodies, regulators, individual researchers, etc., to develop a newsystem of accounting and these efforts resulted in the emergence of Environmental Accounting. It may be noted at this stage of analysis that even this Environmental Accounting is not a full-fledged system to measure and recognise all environmental costs and benefits.

A few Environmental Issues and Response of the Country

It is an irrefutable fact that the 'nature' provides, directly and indirectly, many invaluable services to the people, corporate entities, etc. And the well-being of the people is influenced by 'mother nature'. Unfortunately, these beneficiaries are causing harm to the nature in more than one way by exacerbating/consuming more natural/environmental resources than what the nature/environment can produce.

As one of the major contributors to the industrial economies,industrial revolution marked the crucial turning point causing urbanisation (i.e., mobility of people from mofussil area to urban centres), pollution, climate change, global warming, greenhouse gas emission, etc. Water is contaminated and therefore, the people are deprived of pure drinking water, and air is polluted and as a result, the people are not getting good air to breath.

It is reported that, Delhi, the capital city of the country,is one of the top most polluted cities not only in India but also in the world. As per the Global Report, 2017, more than 1.5 million people die in India on account of air pollution causing stroke, heart attack, lung cancer, etc.

Advances in technology and its adoption by the corporate world for mass production are also causing imbalance in eco-system, loss of biodiversity, global warming, etc., through toxic metal and non-metal discharge, gaseous emission, etc.

On the lines of the above, many more facts and figures are available to demonstrate that the greed and indifferent attitude of people including corporate citizens towards environment is degrading the environment. Of late, the stakeholders of environment/nature including the governments have realized the need for protecting the environment by conserving natural resources more judiciously and by undertaking environmental protection activities. In this regard, the Government of India (GoI), State Governments, Central and State Pollution Control Boards, etc., have made certain attempts and some of these initiatives are summarised below.

There are a few regulations/legislations making it mandatory to disclose certain environmental information by the corporate undertakings.These regulations include the CompaniesAct,2013;the Environmental (Protection) Act, 1956; Corporate Responsibility for Environmental Protection (CREP), 2003, BusinessResponsibility Report, 2012; SEBI Report on Corporate Governance, 2003; etc. These regulations make it mandatory to disclose certain environmental information in their annual reports. Further, the GoI has made it mandatory to disclose the energy conservation activities undertaken by the companies in the reports of their Boards of Directors.

The Central Statistical Organization (CSO) focused on the development of standards for environmental statistics. During 1991, the Ministry of Environment and Forests (MoEF) of GoI issued a direction to the effect that every company should disclose, in its Board of Directors' Report, the details of steps taken or proposed to be taken towards adopting clean technology, pollution prevention technology, waste minimization, waste recycling and use, pollution control measures, investment in environmental protection and the impact of these measures on waste reduction, water and other resources.

A Committee constituted during 2004 worked on 'Green Accounting for Indian States and Union Territories Project' (GAISP) with the objective of developing accounts for timber, carbon, fuel wood, non-timber forest products, agricultural cropland, sub-soil assets, biodiversity, ecological services and accounting for fresh water quality in India (Haripriya et. al, December 2005).During2006,the National Environmental Policy recommended to develop standardized environmental accounting practices and norms in the preparation of statutory financial statements by large industrial enterprises to encourage greater environmental responsibility in investment decision making, management practices, and public scrutiny (Sujit, 2011).The Ministry of Corporate Affairs(MCA),GoI has issued guidelines for presenting corporate social responsibility (CSR) report. These guidelines address six aspects/areas viz., (i) care for all stakeholders, (ii) ethical functioning, (iii) respect for workers' rights and welfare, (iv) respect for human rights, (v) respect for environment and (vi) activities for social and inclusive development. The MCA has issued further guidelines to improve reporting practices on environmental, social and governance issues among small and medium enterprises, and large corporate organizations (Ministry of Corporate Affairs, 2009).In the year 2011, Partha Dasgupta committee worked on a project to develop green national accounts framework.

During 2011, the Securities and Exchange Board of India (SEBI) mandated all listed companies to report about the initiatives taken by them on environmental,social and governance (ESG) responsibilities in accordance with the principles enunciated in the 'National Voluntary Guidelines on Social,Environmental and Economic Responsibilities of Business' issued by the MCA.Further, two accounting professional bodies of the country viz., the Institute of Chartered Accountants of India and the Institute of Cost Accountants of India are making some attempts. For example, the Institute of Cost Accountants of India has issued, *Cost Accounting Standard – 14: Pollution Control Cost*. This Standard aims at bringing uniformity and consistency in the principles and methods of ascertaining pollution control costs with reasonable accuracy (The Institute of Cost Accountants of India, 2017). Similarly, based on the work done by the Accounting Standards Board of the Institute of Chartered Accountants of India, the Ministry of Corporate Affairs, GoI has notified, *Ind AS – 106: Exploration for and Evaluation* *of Mineral Resources*and this Standard aims atspecifying the financial reporting for the exploration for and evaluation of mineral resources (Ministry of Corporate Affairs).

On the lines of the above, there are many more guidelines, regulations, directions, etc., issued by the authorities. However, all these regulations, guidelines, etc., deal with different dimensions of environmental pollution, environmental degradation, conservation of natural resources, etc., but not on the accounting for environmental costs and benefits to be recognised in the financial statements.

Environmental Accounting and Reporting Practices in India

It may be noted here that the corporate entities utilize the environmental/natural resources and cause damage to the nature/environment. After July 1991 major economic reforms, though the country has posted substantial improvement in its economic growth, the governments (both the central and state governments) realized the adverse implications of substantial increase in the economic activities on the environment.Further, the corporate enterprises realized the need for developing eco-products by using user-friendly technology and by investing in energy saving equipment, etc. And the corporate enterprises, more particularly large scale organisations, have started undertaking these activities and providing the necessary details in their annual reports and/or sustainability reports. These reports, to some extent, enable the stakeholders to assess and evaluate the environmental performance of companies as they provide a few details about environmental policies, targets, environmental expenses, installation of energy saving equipment, adoption of clean technology, environmental risks and liabilities, etc. Still, the extent of environmental information provided by the companies in India is not adequate. Most importantly, the companies which disclose environment-related information report only the positive aspects such as the efforts made by them towards environmental protection. Though the effort of companies to quantify the extent of damage they are causing to the environment is not visible ,most of the reporting entities (i.e., the entities which are disclosing environmental information) are providing only the details about the activities undertaken by them towards environmental protection/welfare e.g., saplings/seedlings.

Further, most of the companies are providing details about their environmental protection activities as a part of their CSR. Besides, most of the companies are providing, as a part of their environmental performance report, only the descriptive information such as the environmental management system, obtaining ISO 14001 certification, environmental clearance received from the authorities, environmental statement, environmental awards received, etc. Even with regard to complying with the Global Reporting Initiative (GRI) stipulations such as land reclamation, green house gas emission, air pollution control, water pollution, noise pollution, efforts to conserve biodiversity, etc., there is no uniformity in the disclosure by the reporting entities. Most importantly, the environmental information disclosed by the reporting entities is not adequate.

Environmental Accounting – A few Observations and Suggestions

There are many reasons as to why Environmental Accounting has not made much headway not only in India but also at the global level. A few important reasons are enumerated below.

One of the reasons is the difficulty in measuring, in terms of money, the environmental damages caused by the corporate activities and also the efforts of corporate undertakings to protect the environment. For instance, what is the monetary equivalent of water pollution caused by the industrial wastes discharged by a company into the nearby river water?Similarly, what is the monetary equivalent of air pollution caused by industrial smoke? On the lines of these, there are many more issues which are yet to be resolved.

Another reason which is the fallout of the above reason is the absence of a comprehensive accounting standard(eitherInternational Financial Reporting Standard, IFRS or Indian Accounting Standard, Ind AS or Cost Accounting Standard, CAS)on this subject as to how to measure the environmental costs and benefits, and how to recognize them in the financial statements.

The third reason is the absence of standard format in which all reporting entities should present and report their environmental information. As a result, one can find the companies reporting CSR activities as their environmental protection activities. Further, disclosure of environmental information is, for all practical purposes, not mandatory. Due to these reasons, there is no uniformity in environmental accounting and reporting in India (as in other parts of the world).

The analysis made above bring the point to the fore that there is a strong case for developing and issuing a comprehensive accounting standard on environmental accounting i.e., to account for environmental costs and benefits. Therefore, it is necessary for the standard setters, both at the national level such as Accounting Standards Board of the Institute of Chartered Accountants of India, the Institute of Cost Accountants of India, etc., and at the global level such as International Accounting Standards Board, etc.,to develop and issue a comprehensive Standard on Environmental Accounting. As the development of Accounting Standard is a difficult task as it encompasses many disciplines such as environmental science, law, accounting, etc., it is advisable for the accounting professional bodies to take the help of environmental regulatory bodies, academicians, green tribunals, environmentalists, environmental scientists, legal experts, etc., for the purpose of developing comprehensive standard on Environmental Accounting. The Accounting Standard so developed should specify the methods of accounting for environmental costs and benefits such as costs of environmental damages caused by the company's operations, and also the contribution of the company for environmental protection. Besides, the Standard should specify the criteria/parameters to classify the amount spent by the company towards environmental protection into chargeable (to the Profit and Loss Statement) and capitalizable (i.e., assetizing the amount spent by the company and amortizing the capitalized amount to the Profit and Loss statement over a period of time). In addition to these, the Accounting Standard should specify the format (similar to the formats specified in Parts – I and II of Schedule - III of the Companies Act, 2013 for Balance Sheet and, Profit and Loss Statement respectively) in which the companies should present and report the environmental costs and benefits either as a part of their annual reports (on par with the statutory financial statements) or in the standalone sustainability reports.Further, the Accounting Standard should be made mandatory. All these exercises should be directed towards ensuring both the uniformity and consistency in the environmental accounting and reporting. This enables the stakeholders to obtain reliable and comparable environmental information for both the trend analysis and inter-firm comparison.

Another suggestion is about earmarking certain percentage of revenue by the companies for environmental protection activities. Separate head should be created as most of the companies are claiming some of their CSR activities as a part of their environmental protection activities. Further, 'revenue' is suggested as the base (instead of 'profit' as for CSR activities) as the efforts of the companies towards protection of environment should be continuous and as there is an element of uncertainty about the companies earning profits in all years. The government notification should also specify the activities which fall into the categories of environmental protection activities.

Besides the above, it is necessary to create awareness about the need for conservation of natural resources and also for protecting the environment. It is also necessary to make the citizens to realise that they have both the right and responsibility – right to consume/use natural resources and responsibility to leave the natural resources for the future generation to consume. All should work towards sustainable development. And the corporate citizens have greater role and responsibility to conserve natural resources and to protect the environment. MA

References

1. *Haripriya Gundimeda., Sanjeev Sanyal., Rajiv Sinha and Pavan Sukhdev. (December 2006). The Value of Biodiversity in India's Forests (Monograph 4, Green Accounting for Indian States and Union Territories Project) – A project undertaken for Green Indian States Trust, retrieved on 29 April 2020 from https://www.cbd.int/financial/values/india-valuebioforest.pdf.*
2. *Ministry of Corporate Affairs. (December 2009). Corporate Social Responsibility: Voluntary Guidelines, 2009. Government of India, New Delhi, pp. 13-16.*
3. *Ministry of Corporate Affairs. Ind AS – 106: Exploration for and Evaluation of Mineral Resources (Standard developed by the Accounting Standards Board of the Institute of Chartered Accountants of India) retrieved on 10 April 2020 from https://mca.gov.in/Ministry/pdf/Ind_AS106.pdf.*
4. *Ramesh N (2020). A Study of Environmental Accounting Practices in selected IndianCompanies. Unpublished thesis submitted to Kuvempu University.*
5. *Sujit Kumar Roy (2011). IN Quaddus M A and Siddique M A B. (eds). Handbook of Corporate Sustainability – Frameworks, Strategies and Tools. Edward Elgar Publishing, UK, retrieved from https://www.e-elgar.com/about/contacts/ on 1 April 2020, p. 325.*
6. *The Institute of Cost Accountants of India. (2017). CAS – 14: Pollution Control Cost. Cost Accounting Standards Board. Kolkata.*

Acknowledgement

The Author acknowledges the support provided by the Indian Council of Social Science Research, New Delhi by awarding Post-Doctoral Fellowship.

incharapmgowda@gmail.com

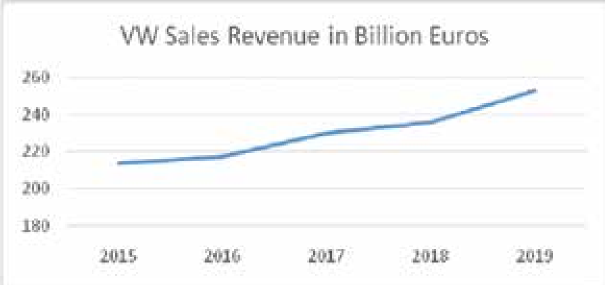
WHY WE NEED INDUSTRIES TO HELP SUSTAIN NATURE

Deepak Kumar Mehto
Senior Buyer - IT
Jaguar Landrover India
Pune

Abstract

The article covers the industrial impact on environment. It focuses on how the businesses need to aspire for achieving profitability with management, operational and administrative practices that have positive environment impact. Article provides examples of past corporate practices that lead to huge damage to nature and mankind. It also highlights how there is shift with various organization implementing initiatives for a positive impact. Article also highlights the micro initiatives that can be implemented irrespective of size of business. Overall the endeavor is to put across a rationale for environment oriented strategy to industries whether big or small.

Business is a commercial activity where people work to provide goods and services which then can be sold to buyers or customers at price which brings profit. Profit is the surplus that helps business to grow in size and portfolio. Profit gives the resources to expand by buying new infrastructure, hiring more people, investing more in technology and preparing for future solutions which in turn can bring more profit. But this quest for profit has many times led reputed corporations to put environment at risk. Biggest example is the Volkswagen Diesel gate scandal of 2015 where a German automobile giant installed a cheat device to fudge the emissions data for diesel cars worldwide. Volkswagen Group had deployed a decoying software in over 11 million vehicle worldwide across its five brands. By fudging the software Volkswagen achieved the status of biggest auto manufacturerbut it came at price of not just ignoring but with malignant approach toward the environment and human life. Environmental Research Letters, an a quarterly peer-reviewed open-access scientific journal, estimated that roughly 59 deaths could have been caused due to the excess pollution produced between 2008 and 2015 by vehicles in United States which were with software that showed under limit manipulated emission data. In spite of paying over 30 Billion Euros in penalties, Volkswagen revenue kept surging year on year. This served as bad example where corners were cut to realize the sales dream putting environment at risk.



YoY Growth for VW group Global Revenue even after Dieselgate expose

Source: Statista.com

Volkswagen diesel gate is not a standalone scandal. There have been many companies that have directly or indirectly polluted or damaged environment. When we look at the leading polluters Petrochemical and energy companies lead the way. Coal India is eighth largest polluters in world. It accounts for 1.71% global emissions by emitting 23,124m tones of CO2 in timeline of 52 years from 1965 to 2017. It is known fact that burning of fossil fuels produce greenhouse gases, cause ocean acidification, and harmfully affects the aquatic life. Global beverage leaders - Coca Cola and Pepsi lead in producing plastic waste. Coca Cola disclosed that it uses 3 million tons of plastic for its beverage business. Plastic waste that needs thousands of years to decomposes goes in to oceans causing dangerous repercussions to aquatic life and sending highly carcinogenic plastic particles in food chain.Close behind in plastic production are the Food product companies like Nestle, Danone, Mondelez which use plastic in packaging using over 2Mn tons of plastic yearly combined.There have been events which can be termed as accidents like the Deepwater Horizon oil spill that occurred in 2010 in Gulf of Mexico. Till the time British Petroleum could curb the disaster 4.9 million barrels of oil spilled in ocean. Instances like Bhopal gas tragedy highlight how inability to implement compliant industrial practices like keeping methyl isocynate (MIC) beyond the prescribed levels, bad maintenance of gas tanks and malfunctioning of safety systems led to gas leak killed more than 2200 people and injured thousands. With electronic age where technology is rapidly evolving resulting in products getting obsolete and replaced very quickly and we see the aggregation of e-waste. Gujyu, China has become the biggest e-waste site receiving e-waste from domestic and international markets. The heavy metals and chemicals present in e-waste have transgressed in to water and soil and there have been many reports of lead poisoning and higher miscarriages than normal. Air, water, soil pollution, wildlife damage, acid rain, global warming, melting of ice caps, toxic chemicals creeping our food chains, abnormal weather phenomenon and uncontrollable forest fires are bad fruits of industrial revolution. Industries contribute more than 67% of world pollutants.

Top 10 Global polluters (in terms of CO2 emissions from 1965-2017)	
1	Saudi Aramco
2	Chevron
3	Gazprom
4	ExxonMobil
5	National Iranian Oil Co
6	BP
7	Royal Dutch Shell
8	Coal India
9	Pemex
10	Petróleos de Venezuela

Source: Guardian article 2019

The before mentioned examples highlight how corporation have negatively impacted the environment by following industrial practices that neglect environment and has profits at its core value. Thus there is strong need to implement environment friendly changes to practices that need to adapt to ever evolving and continuously getting stringent guidelines. Environment protection and sustenance need to be the equally important as profit to every corporation. Businesses not only in their core functionality like product creation but also in their non-core functionalities like HR, admin etc, should implement strategies to positively impact the environment situation. Companies should aspire towards creating agile environment policies that adapt not only after accidents in their organization but also from learnings from organization that they work with or are in same industrial bracket. Mere compliance to OSHA or ISO 14000 or similar standards should not be sufficient, there is a need to make operations environment friendly.

There are many examples where businesses have implemented new ideas to reduce their emission levels and carbon footprint. World's leading sports apparel manufacturer Nike brought transparency to their supply chain. They used technology to enable their designers to make environment friendly decisions on raw material. They worked on redesigning packaging to reduce waste and improve recycling. Similarly Patagonia an activewear retailer for adventure gear in US, UK and Canada have built repair centers to increase the product lives leading to reduced waste and contributing to lowering carbon footprint. Indian IT professional services provider has also shown way how they can help other corporation in saving energy. Their enterprise solution called "Wipro EcoEnergy" has helped partner companies to reduce energy consumption while saving a lot of money. They have helped save 1.5 Billion KwH of energy which is like taking away 2 hundred thousand cars from road for a year. Technology giant Apple signed a billion dollar deal with First Solar in US. Apple would use First Solar's technological expertise in solar energy plants to generate power for all its offices, stores, data centers and Headquarters in California, US. Apple has initiated a program called Apple Renew that encourages used Apple phones, tablets etc. to be recycled. IT hardware manufacturer Hewlett-Packard is aiming to decrease their emissions and reduce toxic materials used in producing products for example printing cartridges. IT is also endeavoring to have recycling program that makes sure that majority of the production waste do not disposed in landfills.

Company	Industry	Initiatives
Ikea	Furniture	Better sources raw material - Cotton Solar panels at stores
Unilever	FMCG	Improved supply chain to reduce waste CEO awarded Champion of the Earth Award in 2015 by UN
Panasonic	Electronic	focuses on making environmentally friendly products
Allergan	Pharmaceutical	focus on water conservation grounded in reporting and benchmarking
IBM	IT	smart buildings that reduce resource demand green procurement
Adobe	IT	Reduction in energy and water consumption at offices

Initiatives by global brands, *source:www.virgin.com*

Above examples have shown that there is a need to be a companywide push contributing to eco-friendly measures. Some initiatives might require a great level of decision making while there are other measures that could be easily implemented which cover broadly reducing energy consumption and waste production. Companies can help above said by implementing work from home and giving incentives to people for carpooling and commuting to office using e-vehicle or cycle. Policies at workplace should be created to reduce wastage like reducing paper cups and removing plastic bottles by encouraging employees to bring their own cups and bottles, employees to take prints only when critically required, using bulk containers for edible products rather than single throwaways, hand dryers instead of paper towels in wash rooms. Every business irrespective of size can look forward to "Green Procurement" that conveys buying from seller who has ecofriendly practices and also motivates other suppliers to adapt so that they can be contention for business. Offices can be renovated or designed to be greener to reduce Energy consumption. Also while constructing or renovating the waste should be recycled before sending for disposal. Businesses should aim at reducing water consumption and wastage. This could be achieved by preventive maintenance and quick reactive maintenance of water taps, leaks, getting low flow toilet & tapsand continuous awareness to employees to keep consumption to only required level. Companies can look forward to reduce energy by redesigning office spaces to use natural light and also get additional renewable energy source like installing solar panels. Energy demands can also be reduced by using cloud computing options which could avoid setting data centers that would need constant cooling. This could reduce very high energy consumption. Disposal of electronic items should be carried out properly. This could either be done by donating working equipment to schools & charities, working with Original equipment manufacturer for buyback or selling to authorize e-waste disposal companies only. At last the simplest way to put and execute green initiatives is to partner with companies/organization for business who have similar mindset and are focused on sustainable and eco-friendly business model.

Year 2020 has been a grim year with pandemic of Coronavirus creating havoc throughout the globe bringing economies to grinding stop and causing large number of deaths. But the only positive was news of nature is recovering as human kind is indoors. Many industries like IT, consultancy, education etc. were forced to put their people to work from their homes to overcome the prohibition of going to office to work. With traffic going down to bare minimum, industrial output going to zero meant close to zero harmful emissions which led to air quality improvements to even most polluted cities which were considered beyond repair. Take for an example the air quality index for Delhi which hovered over 200 dropped to breathable AQI below 50 in majority of city. Reduction in factory discharge meant cleaner Yamuna. Similar news was reported from various parts of the world like the blue color of Venice waters or the sightings of rare and exotic species of animals like snow leopard etc. Countries will slowly allow industries to run again so that economies can rebuild but corporate should think how they can implement more strategies so that humankind does not have to face another Pandemic so that environment can recuperate. Corporation have to work towards reducing resource use keeping their emission level and carbon footprint low for sustainable future. MA

References

1. *https://www.virgin.com/virgin-unite/10-global-companies-are-environmentally-friendly*
2. *https://www.thebalancesmb.com/greening-your-business-2948100*
3. *https://99designs.co.uk/blog/business/eco-friendly-brands/*
4. *https://www.smartcitiesdive.com/ex/sustainablecitiescollective/9-companies-great-environmental-initiatives/1193165/*
5. *https://www.energuide.be/en/questions-answers/are-electric-vehicles-really-environmentally-friendly/197/*
6. *https://www.forbes.com/sites/jamesellsmoor/2019/05/20/are-electric-vehicles-really-better-for-the-environment/#af1f80476d24*
7. *https://www.aqi.in/dashboard/india/delhi/new-delhi*
8. *https://en.wikipedia.org/wiki/Volkswagen_emissions_scandal*
9. *https://www.statista.com/statistics/264349/sales-revenue-of-volkswagen-ag-since-2006/*
10. *https://eu.usatoday.com/story/money/2019/06/17/20-corporations-behind-the-most-ocean-pollution/39552009/*
11. *https://www.theguardian.com/environment/2019/oct/09/what-we-know-top-20-global-polluters*

Deepak.mehto88@gmail.com

LEVERAGING LEAN MANUFACTURING TO ENABLE ENVIRONMENTAL MANAGEMENT ACCOUNTING *(LEAN TO GREEN)* - ROLE OF CMA

CMA Udandrao Lakshmana Rao
Practicing Cost Accountant &
Management Consultant
Sujatanagar, Visakhapatnam

Abstract

Lean Manufacturing focuses on eliminating waste that does not add value to the customer for which it is paid for. Environmental Management Accounting is a specialized branch of Management Accounting which focuses on identification, collection and analysis of physical information and monetary information on use of energy, water, material (including wastes). Both in Lean Manufacturing and EMA the focus is on waste. As a CMA, it is important to place emphasis on eliminating waste with a duel objective of insuring ecological balance and reduce cost of production of a product to make it more competitive.

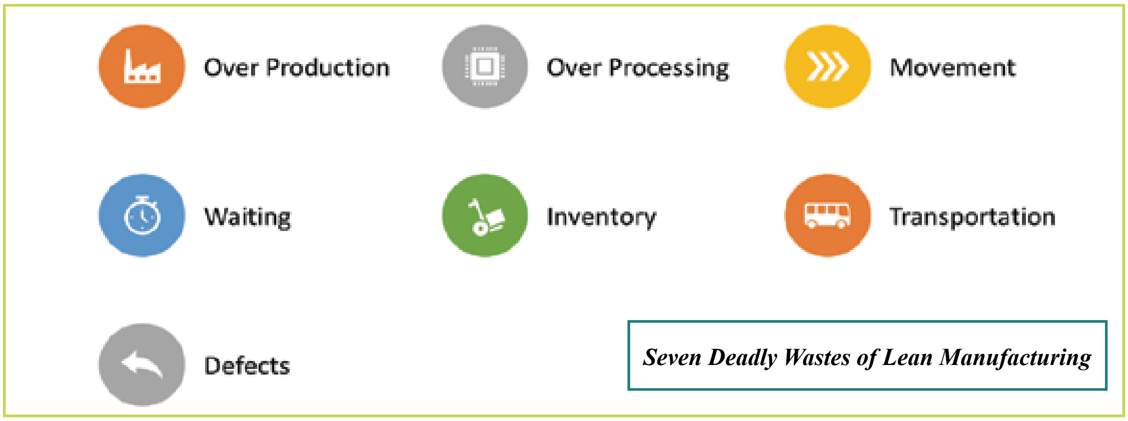
Prologue

Industrial Revolution led to rapid changes in manufacturing processes and manufacturing evolved as an important factor of growth of economy. The evolution in manufacturing processes significantly influenced the industrial growth which moved from traditional assembly line to digital factory today.

Industrialization is one of the controllable factors that cause undesirable change in the physical, chemical, and biological characters of ecological system. To address these undesirable changes a need is felt to account for the environmental costs whether they are physical or otherwise .In this article, we may observe the nexus between Lean Manufacturing (***Lean***) and its influence on Environmental Management Accounting (EMA) towards minimizing ecological imbalances (***Green***).

What is Lean Manufacturing?

Lean Manufacturing philosophy was first mooted by Toyota Corporation in Japan. It was in 1970's this philosophy was propagated across the world. The goal of Lean Manufacturing (*Lean*) is to improve manufacturing processes by systematically identifying and reducing waste thereby eliminating non-value adding activities throughout value chain.It is an operating approach designed to reduce waste in order to maximize customer value. Waste here means that does not add any value to the customer for which the customer pays. In the *Lean* context waste is viewed as, use or loss of resources that does not lead to add value that customer wants when he wants it. Lean Manufacturing is a continuous and steady attack on all forms of waste. Under *Lean*philosophy there are seven such wastes which are called as Seven Deadly Wastes of Lean, they are (1) Over Production (2) Over Processing (3) Unnecessary Movements, (4) Waiting (5) Excessive Inventory (6) Transportation and (7) Defects.



Seven Deadly Wastes of Lean Manufacturing

To eliminate such wastes, it is important to understand the *cause and effect* relationship of these seven deadly wastes.

Waste Type	**Causes**	**Effect**
Over Production	Wrong sales forecasting, wrong production scheduling, wrong information, wrong batch sizes, wrong yield calculations	Consumption of more raw materials, utilities. Product spoilage and product obsolescence.
Over Processing	Lack of proper Standard Operating Procedures (SOP), lack of process standards, poor quality control and supervision, misunderstanding of customer needs	More wear and tear of machines, consumables, excessive use of energy, material, spares etc
Movement	Poor workplace organization, poor plant layout, poor industrial engineering methods	Use of more energy, excessive space for movement of goods, excessive lighting, heating, fuels, cooling, etc
Waiting	Poor co-ordination, longer changeover period, low process quality, poor preventive-maintenance of machinery	Potential spoilage of material, wasted energy, heating, fuels etc
Inventory	Interruption during production, large batch sizes, long change over times, planning and scheduling issues	Unwanted use of packing material excessive carrying cost, handling damages

Transportation	Poor layouts, larger batch sizes, multiple storage locations, complex material handling system	Excessive fuel consumption, excessive wear and tear of material handling equipment and vehicles
Defects	Poor material quality, lack of required skills, poor process flow, operator or machine issues	Rework, spoilage, additional use of material, labour, fuels, cost of disposal.

The objective of Lean is to produce the right product, in the right quantity, with the right quality (zero-defect), at the exact time the customer needs it and at a lowest cost possible. Further, *Lean* lowers the capital equipment requirement, reduces use of material, lowers operating costs, equipment down time, rework and defects

What is Environmental Management Accounting (EMA)?

Management Accounting primarily focuses on satisfying the information needs of internal management. Whereas Environmental Management Accounting (EMA) is a specialized branch of management accounting that focuses on cost of material, air, water, energy, disposal of waste and treatment of effluents.

As per the definition given by the United Nations Expert Working Group on EMA representing 30+ members, "*Environmental Management Accounting (EMA) is the identification, collection, analysis and use of two types of information for internal decision making. The first is physical information on the use, flow and rates of energy, water and material (including wastes). The second is monetary information on environment-related costs, earnings and savings.*"

From the above definition it is important to note that the identification, collection and analysis of physical and monetary information should happen based on cause and effect relationship (cost driver). Such physical information shall include (i) material inputs (ii) product outputs (iii) non-product outputs (waste and emissions) (iv) material / mass balances (v) physical environmental performance indicators. Monitory information shall include (i) waste or emission costs (ii) prevention and other environmental management costs (iii) research and development costs (iv) material costs for non-product outputs (v) material costs for product outputs (vi) monetary environmental performance indicators (vii) environment- related earnings

Material + Conversion Cost = Output + Waste + Emissions

Conversion costs shall include other operating materials, water, energy etc.EMA consists of environmental related accounting systems and procedures, life cycle costing, environmental cost accounting, environmental performance measures, assessment of environmental benefits, strategic planning for environmental management.

Need of Environmental Management Accounting (EMA)

Industrial pollution is one of the most evident causes for environmental problems today such as burning fossil fuel like oil, natural gas, petroleum, burning coal, chemical solvents, improper disposal of radioactive material, use of outdated technology, improper waste disposal. In any manufacturing process there may be a chance of environmental related costs being hidden in the accounting records in form of various cost elements viz., material, labour, overheads whether direct or indirect. Environmental waste mainly arises due to excessive use of material, excessive use of energy, water, defective products, scrap, non-product output, hazardous waste etc.Management Accounting may not be able to address all the above issues hence as a specialized branch of management accounting, it is imperative to have EMA.

Nexus between Lean Manufacturing (Lean) and (EMA)

Lean Manufacturing and Environment are closely connected. One of the main reasons for environmental imbalances is waste disposal. Lean manufacturing focuses on elimination of waste which is important to ensure ecological balance. *Lean* can be leveraged to bring more environmental improvements viz., Energy cost of wasted material, purchase cost wasted material, cost of additional storage of wasted material, processing cost of wasted material, administration cost of wasted material, cost of machinery abrasion caused by wasted material, labour cost of processing wasted material. All these may directly or indirectly associate with environmental costs.

Environmental costs can be categorized as preventive costs, appraisal costs, internal failure costs and external failure costs. Internal failure costs are controllable and mainly arise out of inefficiencies in the product processes. Lean Manufacturing can address such internal failure costs and environmental costs related thereto.

Waste Type	Impact on Resources	Impact on Environment
Over Production	• More material consumed in making over production • Excessive production may become obsolete • More energy consumed for making excessive production	Lesser over production, lighting, heating, cooling = reduced use of materialand preserving natural resources

Over Processing	• More material, spares and consumable in over processing • Unnecessary processing increases waste, energy consumption • Excessive wear and tear of machinery	Lesser over processing, spares, consumables, lesser wear and tear = lesser energy use and lower emissions
Movement	• Excessive energy consumption for movement of equipment • Excessive consumption spares, manpower, consumables • Additional packaging	Lesser movement =conversation of energy and lower emissions
Waiting	• Increase idle time, • Lower productivity • Excessive use of heating, cooling, lighting	Lesser idle time = reduced spoilage of material products
Inventory	• Excessive use of packing material • Damage due longer period of storage • Excessive requirement of storage space	Reduced inventory levels = lesser use of space, lesser damage of products
Transportation	• More fuel consumption for excessive transport • Excessive wear and tear of vehicles, roads, • May lead to spillage, damage of material, products	Efficient transportation = reduced damaged products, lesser use of packing material, lesser damage
Defects	• Consumption raw material for defective products • Additional resources for reprocessing • More space for storing defective products, lighting, cooling, heating etc	Lesser scrap, fewer defects, less spoilage = reduced environmental waste

Role of CMA in enabling EMA

CMA's can identify areas of waste reduction in the manufacturing process and classify them as controllable and non-controllable. Controllable waste can further be identified into seven deadly wastes to excess control over them. CMA's can perform life-cycle cost analysis to understand the costs involved in the entire life cycle of a product and impact of the same on environment. CMA's can provide management information with an analytical insight into various inputs and their impact on environment of such inputs. CMA's can connect the Lean Key Performance Indicators (KPIs) with Environmental KPIs

<u>Cost & Management Accounting Tools:</u> Activity based Costing, Balanced Scorecard, Bench Marking, Standard Costing, Variance Analysis, Waste Multiplier and Yield Management

<u>Mathematical & Statistical Tools:</u> Linear Programming, Assignment Models, Transportation, Queuing Theory, PERT/CPM and Six Sigma

<u>Software & Analytical Tools:</u> Enterprise Resource Planning (ERP), Data Analytics, Business Intelligence and Artificial Intelligence

With the help of the above CMA's can identify and estimate the costs of environment-related activities, monitor the use of resources such as water, electricity and fuels making sure environmental considerations from part of capital investments, assessing the future impact of environmental risks.

Case Study 1: Lean Manufacturing at an Integrated Steel Plant in India

Leading Public Sector Undertaking (PSU) has merged certain processes to make leaner while constructing an integrated steel plant

In an integrated steel plant, manufacturing of final product(s) broadly involves (1)Raw Material Handling and preparation (2) Coke preparation in Coke Oven (3) Sinter preparation in Sinter Plant (4) Iron making in Blast Furnace (5) Steel making in Steel Melting Shop (6) Making semi-finished products viz., blooms, billets, slabs etc using Continuous Casting Machines (7) Re-heating of these semi-finished products (8) Rolling in Hot Rolling Mills (9) Finished long products such as rods, bars, sections and flat products such as coils, plates etc. However, in the given case of said PSU, the processes of (6) making semi-finished products (7) re-heating and (8) rolling are combined into one making it *Lean Process*.

This envisaged benefits of 30% saving in energy costs mainly due to elimination of reheating, lowered the cost materials, cost of inventory carrying, elimination of unnecessary movements, elimination of over-production and over-processing, eliminated transportation of WIP to stock yards, no chance of defects and inventory at processes (6), (7)and (8) above as they were eliminated. Also there is no waiting time between these processes as they were merged. Further, significant reduction in energy consumption resulted in reduction CO_2emission making it more environment friendly.

Case Study 2: Reduction in idle running of Coal Handling Plant in a cement factory

A leading cement factory in India reduced idle running of conveyor belts.

Coal handling through stackers and reclaimers is one of the important activities of cement factory and power consumption is one of the major cost elements. This cement plant in the country is having coal reclaiming system with series of belt conveyors. When the belt used to trip due to any reason the coal handling plant belts in the downstream would run continuously idle for approximately 30 minutes in a day. Subsequently, the plant has modified the logic for line-1 and line-2 reclaimer group to avoid idle running time of coal handling belts. As per the modified logic command, the last belt of the group should be started within 5 minutes after ON command is given to the group. If, not the entire group will be tripped through interlocking protection thereby the idle running time of belts has been avoided.

This resulted in avoiding unnecessary movement of belts (one of the seven wasted is movement), average power consumption reduced by 75 kWh per day, in addition reduction in CO_2emission of36 tons a year!

Epilogue

Ecological imbalances and economic are two different aspects. Ensuring economic growth without denting environmental sustainability is a challenging task. Environmental Management Accounting (EMA) being a subset of Management Accounting in which CMA's are specialized, CMA's can leverage lean manufacturing techniques concurrently with physically oriented and financially oriented EMA techniques on real-time basis with the help of technology to ensure ecological neutrality. MA

References

1. *Author's practical experience in the fields of Financial Accounting, Cost & Management Accounting, Business Analytics, ERP and Six Sigma*
2. *Lean Six Sigma-Combining Six Sigma Quality with Lean Speed by Michel L.George*
3. *http://leanmanufacturingtools.org/77/the-seven-wastes-7-mudas/*
4. *International Guidance Document on Environmental Management Accounting issued by International Federation of Accountants (IFAC)*
5. *Environmental Management Accounting: Policies and Linkages, United Nations, New York, 2001*
6. *Management Accounting Guidelines – MAG-IV-Tools and Techniques of Environmental Accounting for Business issued by the Institute of Cost Accountants of India (ICAI)*
7. *https://www.cgma.org/resources/tools/cost-transformation-model/environmental-management-accounting.html*
8. *https://www.accaglobal.com/gb/en/student/exam-support-resources/fundamentals-exams-study-resources/f5/technical-articles/Env-MA.html*
9. *National Productivity Council of India good practices manual on cement sector*

ulrao@yahoo.com

OBITUARY

The Institute and its members deeply mourn the demise of CMA (Dr.) P Chattopadhyay, Former Director (Research) of The Institute of Cost & Works Accountants of India (erstwhile), Kolkata who left for heavenly abode on 21st May 2020.

He had also worked as a Professor at the University of Burdwan and associated with many universities with various capacities. He was a regular contributor to this Journal for long.

May his family have the courage and strength to overcome the loss.

ENVIRONMENTAL ACCOUNTING AND AUDITING - ROLE OF CMAs

M V L Jagath Sanjana
CA Final Student
Hyderabad

Maruvada Bapu Venkatesam
Qualified CMA
Hyderabad

Abstract

An entity utilizes the natural resources available to it to execute it' s business operations. As the entity uses the natural resources from the environment, it will have a duty to record the costs incurred and report regarding the natural resources it has utilized and ensure that the natural resources have been utilized effectively and efficiently.

Since late nineties, there has been increasing fear about the availability of natural resources for future generations and therefore, entities are under increasing pressure to reduce the unnecessary usage of environmental resources using cleaner production technologies and also to report the external and internal stakeholders which have paved the way to environmental accounting and environmental audit.

The environmental accounts and auditing have been first introduced by European countries. Norway was the first to follow later on Philippines, Namibia, Netherlands, Chile, USA, Japan have started following environmental accounting.

The officials in Norway were concerned about the natural resources, on which the economy is dependent, would run out. Therefore, to track the use of natural resources like forests, fisheries, this concept of environmental accounting and audit has emerged.

Environmental Costs:

Environmental costs are costs connected with the actual and potential deterioration of natural assets due to economic activities of the entity.

In practice, Environmental costs can be categorized as follows:

» Internal costs – They have direct impact on income statement of the company.

» External costs – external costs are imposed on society at large, but not by the company that generates the costs in the first instance.

Cost – benefit analysis:

The costs in relation to environment can be measured financially but benefits cannot be measured in monetary terms. It yields to non-financial and long-term benefits like cleaner environment will promote healthier and longer life of people. It will also benefit those who depend solely upon environment like faming, fishing, tourism industries.

Benefits under Corporate social responsibility (CSR):

The expenses especially incurred by companies and organizations for protecting the environment and improving the environment will be classified under CSR expenditure. This expenditure is also subject to CSR audit.

Environmental accounting:

In general sense, it is the identification, measurement, and allocation of environmental costs and integrate them into business decisions.

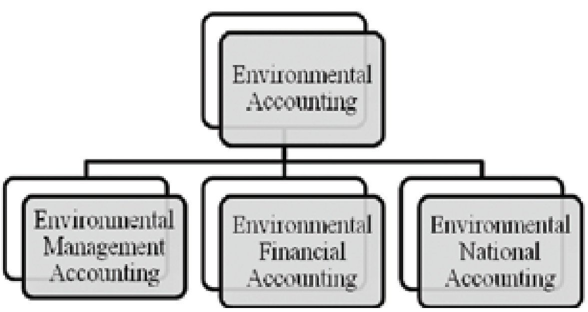
Need for Environmental accounting at corporate level:

At corporate level, it is helpful in complying with the statutory requirements and also educate about the environmental awareness. With the use of environmental accounting at corporate level, it is possible to properly cleanup the pollution that already exists and also useful to operate in such a way that further environmental damages do not occur. It aids in disposing the hazardous material properly and also have a control over costs by controlling the waste through waste management.

Objectives of Environmental accounting:

It helps in estimation of total cost for protection and enhancement of the environment. It' s objective is the assessment of environmental costs and benefits and balance between benefits and costs.

Forms of Environmental accounting: Environmental Protection Agency (EPA) of USA has explained environmental accounting at following three forms:



» **Environmental Management accounting:**

It means use of environmental cost and performance in decision making. It also helps business managers in making capital investment decisions, product design decisions, performance evaluation, determination of cost and so on. It includes segment environmental accounting, eco-balance environmental accounting, corporate environmental accounting.

» **Environmental Financial Accounting:**

It means preparation and presentation of environmental financial reports to the external stakeholders using generally accepted accounting principles (GAAP) and also includes public reporting of environmental costs which are financially material and also reporting of environmental liabilities.

» **Environmental national accounting:**

It refers to natural resource accounting, which involve statistics about nation's consumption, extent, quality, value of renewable and non-renewable natural resources.

Benefits of Environmental accounting:

- Control or eliminate unnecessary environmental costs.
- To track the environmental costs previously incurred.
- To get an understanding of environmental costs and performance of processes and products.
- It supports the operation of overall environmental management system.
- It results in edge over competitors.
- It is helpful in determining measures that promote sustainable environmental management.

Limitations of Environmental accounting:

- There is no standard method for environmental accounting
- Comparison between two countries or firms is not practically possible as there is no harmonized method of accounting.
- Costs can be measured in monetary terms but benefits in relation to environment cannot be measured easily because benefits may be financial and non-financial.
- It does not consider the cost to society. It only considers cost internal to the entity.

Environmental Audit:

The International Chambers of Commerce (ICC) in its publication Environmental Auditing (1989) defines environmental auditing as "a management tool comprising a systematic, documented, periodic and objective evaluation of how well environmental organization, management and equipment are performing, with the aim of helping safeguard the environment by facilitating management control of environmental practices; and assessing compliance with company policies which would include meeting regulatory requirements."

A conference named "EARTH SUMMIT" was conducted by UNCED in 1992, where heads of different states signed agreed documents including Agenda 21. It contains a check list of do's and don'ts to protect the environment and also described the role of corporate entities in overall management of environment.

Features of Environmental audit:

Environmental audit is a part of internal control system which will be helpful in assessing, evaluating, managing environmental performance of the company. Like any other audit, environmental audit also needed to be systematically planned and it is verified on past events, actions, activities with available evidence. It aims in meeting organizational goals set in environmental policies. It is the essence to find out the performance of environmental organization, environmental management and environmental equipment. It ensures compliance with industry guidelines and standards requirements.

Objectives of Environmental audit:

The intention of environmental audit is to increase overall level of environmental awareness, and to develop structure for optimizing environmental resources. It will quicken the development of environmental management control system. It aids in complying with the environmental standards and improve the performance at operational level.

Benefits of Environmental audit:

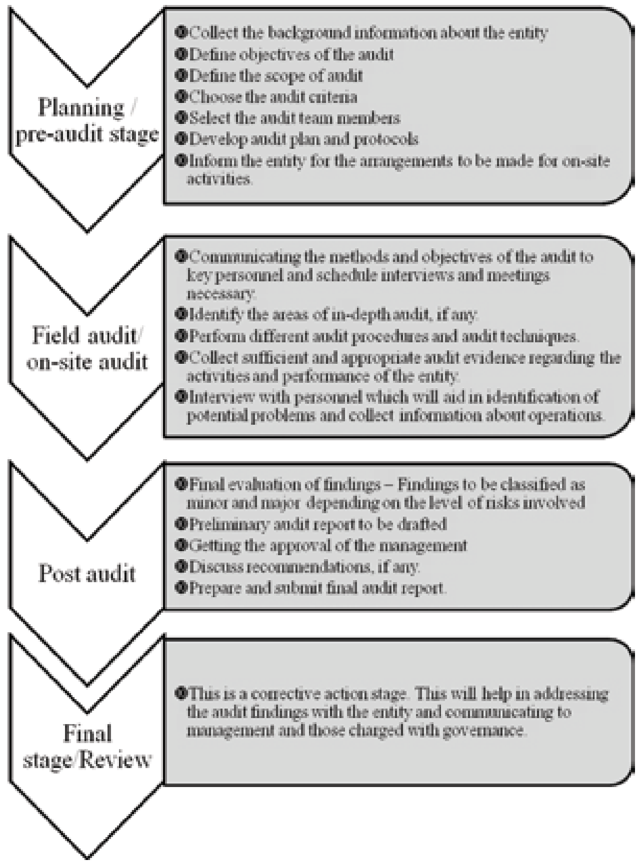
- » It aids in assessing performance of Environmental Management System
- » It ensures cost effective compliance with laws, standards and policies relating to environment.
- » It is helpful in identifying the areas of inefficiencies in process and operations, thereby controlling the cost and increase in operational and environmental performance.
- » It helps in complying with certification requirements like ISO 14001, product specific certifications from organizations like Chlorine free product association, Leadership in Energy and environmental design (LEED).

Is Environmental audit an internal audit or external audit?

Internal audit is conducted by organisation's own employees to access their own process, procedures, system, activities whereas external audit is conducted by an independent party on the entity to assess their capabilities in meeting specified requirements.

Therefore, environmental audit is both internal and external audit and to be conducted by both internal and external auditors. Both are conducting audit in same areas of an entity but with different purposes. Internal auditors are interested in reviewing the compliance with environmental laws and regulations. They are keen in keeping wastes and pollution under control. External auditors determine whether the entity is complying with the environmental standards, governmental regulations. They also determine that financial statements reflect all environmental costs and liabilities of the entity.

Environmental audit process:



Environmental audit report:

Rule 14 of Environmental protection Act, 1986 requires certain industries to submit environmental audit report every year in FORM-V to State Pollution Control Board.

This report has to be submitted by following class of companies mandatorily.

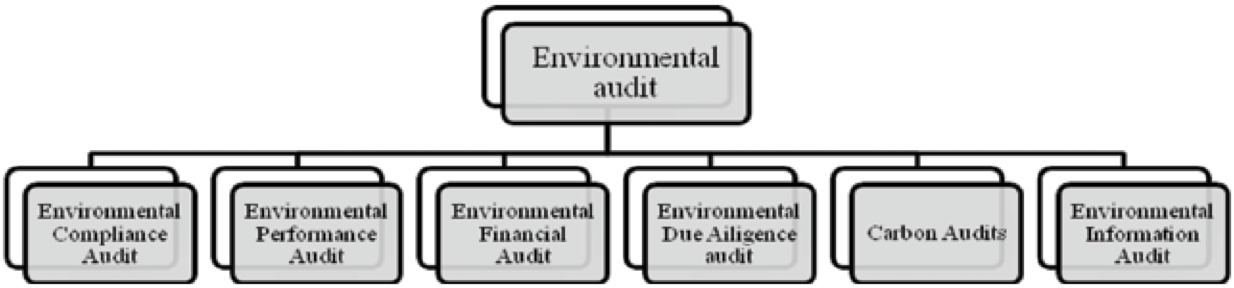
For every industry/operation which requires

- » Consent under Water (Prevention and control of Pollution) Act, 1981.
- » Consent under Air (Prevention and control of Pollution) Act, 1981.
- » Authorization under Hazardous Wastes (Management and Handling) Rules, 1989.

Environmental audit – Techniques and Tools:

Tools used in Environmental audit are checklists, questionnaires, questioning, observation, photographs, research.

Environmental audit – Types:



Environmental Compliance Audit:

It means verification of environmental activities to check the compliance with environmental laws, legislation, industry guidelines, environmental standards and also provides assurance that organizational activities are in accordance with the applicable laws and regulations.Energy audit, certification audit, surveillance audit, suppliers audit and eco-labelling, environmental impact assessment are the types of environmental compliance audit.

Environmental Performance Audit:

It helps in measuring the environmental performance and it' s impacts and also assessing whether entity meets it' s environmental objectives and operates economically and efficiently.The types of environmental performance audit are environmental survey, issues audit, process audit, product/ life-cycle audit, energy audit, activity audit, health and safety audits, site audits, corporate environmental audit, third party audit, Environmental Management System (EMS) audit.

Environmental Financial Audit:

In this type of audit, monetary and financial transactions relating to environmental activities of the entity are verified by auditor.

Environmental due-diligence audit:

It is the audit that is conducted, before merger/strategic alliance/ take over or sale of business, to evaluate the extent to which business may have known or unknown liabilities.

Carbon audits

Many countries are considering controlling greenhouse gas effects and CO_2 targets by regulating business organizations with the help of carbon emission rating system. In this system, they allocate carbon credits if the greenhouse gases emission is within the limits.

Environmental information audit:

It means reporting environmental policies, practices, activities and performances and also disclosing qualitative and quantitative information to the external stakeholders.

Role of Cost and Management Accountants:

In Environmental Accounting:

The cost and management accountants play an important role in Environmental accounting. They help in assessing modified management and financial system and also help in resolving conflict between environmental management and financial management system by computing individual environmental costs. They offer expertise in environmental litigation and settlement options and help in improving methods for reallocating internal environmental costs to specific products. They consider financial costs and risks associated with the product designer process design that may cause pollution or increase pollution.

In Environmental audit:

In environmental audit, they help in identifying, monitoring, measuring and controlling the environmental costs.They aid in development of environmental information systems so that outputs are reliable and are in accordance with input-output analysis. They help in formulation and implementation of environmental strategies also have skill set in application of principles and procedures of audit. They can efficiently conduct environmental audits, certification audits in particular and can also enter into environmental consultancy area and help entities to obtain consents about various environmental laws.

To conclude, the ability of planet's eco-systems and resources to sustain future generations can no longer be taken as granted.Governments and organizations have a key role in protecting the natural heritage and environment so as professionals like cost and management accountants. MA

Sources:

1. *www.wikipedia.com*
2. *www.icai.org*

maruvadasanjana@gmail.com
rajamaruvadabapu@gmail.com

A STUDY ON THE ROLE OF ENVIRONMENTAL ACCOUNTING AND ENVIRONMENTAL AUDITING IN ACHIEVING SUSTAINABLE DEVELOPMENT

Abstract

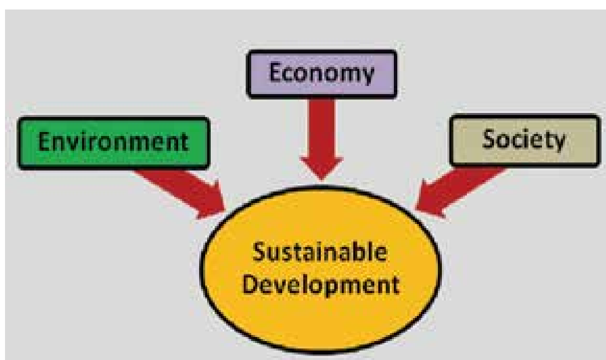
As per the Indian Constitution, Article51A of Directive Principles of State Policies states that it is the duty of every citizen of India to protect and improve natural environment, which includes forests, lakes, rivers, and wildlife. Environmental Degradation occurs due to many environmental problems such as land degradation, global warming, contamination of air, water, etc. Environmental Accounting and Auditing plays a crucial role in the prevention of Environmental Degradation. Environmental Accounting is a system that makes assessment of costs and benefits arises due to environment preservation activities undertaken by an enterprise. Environmental Auditing helps to evaluate an enterprise environmental performance and check compliance with applicable laws and regulations. In this study we analyze the role of Environmental Accounting and Auditing in achieving Sustainable Development. The study also highlights the role of CMA with regard to Environmental Accounting and Auditing.

CA Sk Shakeel
Assistant Professor
Ph.D Scholar
University of Calcutta, Kolkata

Introduction

Environmental Degradation can be in the form of desertification, deforestation, extinction and radioactivity, etc. The major causes that contribute to Environmental Degradation are overpopulation, industrial pollution, waste production, plastic pollution, industrialization, Littering, Mining, Resource depletion, etc. To prevent Environmental Degradation, various costs are incurred and various measures are also taken by enterprises with a motive to achieve Sustainable Development. Sustainable Development means that meets the needs of the present without compromising the ability of future generations to meet their own needs. Figure 1 represents the three dimensions of Sustainable Development.

Figure 1: Sustainable Development and its three balanced dimensions



(Source: www.environmentalauditing.org)

Research Objective

1. To study the costs associated with Environmental Accounting.
2. To study the role of Environmental Accounting in the light of Sustainable Development.
3. To study the role of Environmental Auditing in achieving Sustainable Development.

Research Methodology

The present study is conclusive and descriptive. The study was conducted on secondary sources of data collected from books, articles, journals, e-sources, etc.

Analysis and Findings

Sustainable Development involves the simultaneous improvement of the Economy, Environment and Society and to achieve Sustainable Development the Environmental protection becomes essential and for the same various rules, laws and regulations are formulated from time to time which requires compliance by enterprises to ensure protection towards environment. Enterprises incur huge costs on prevention towards Environmental Degradation arising out of its business processes. These costs are termed as Environmental costs. Environmental costs can be classified as follows-

1. Internal Costs

a. Conventional costs- material, supplies, structure and capital costs needed to be examined for environmental decisions.

b. Potential hidden costs- Regulatory costs such as fees, licenses, reporting, training, etc. Upfront cost such as site preparation, engineering, installation, closure and disposal, etc.

c. Contingent costs- the costs for cleaning up for e.g., penalties, fines, etc. It is also referred as contingent liability.

d. Image and relationship costs- these costs are intangible in nature for e.g., cost of producing environmental reports.

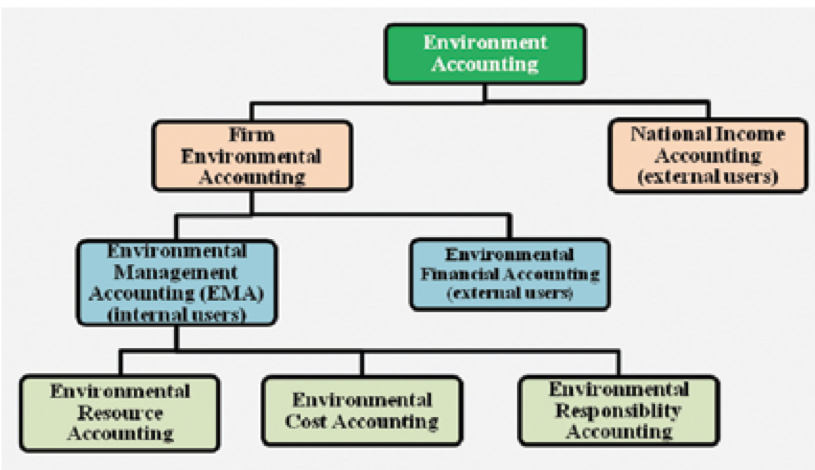
2. External Costs

a. Environmental Degradation Costs- these costs are incurred by enterprises in controlling degradation.

b. Human impact costs- e.g., the impact of air pollution on asthma sufferers, etc.

To manage and reduce Environmental costs the role of Environmental Accounting (EA) becomes relevant. Environmental Accounting (EA) is used to identify the Environmental costs and benefits arising out of such costs and to measure the efficiency of Environmental activities. EA helps to eliminate some Environmental costs which provide no value addition (e.g., waste raw material) and also helps in proper decision making by proving accurate and relevant information. EA provides data that is relevant for assessing the contribution of natural resources to economy as well as analyzing the costs related to environmental activities. The structure of EA has been shown in Figure 2.

Figure: 2 Showing the Structure of Environmental Accounting



(Source: Management Accounting Aspect of Environmental Costs, 2018)

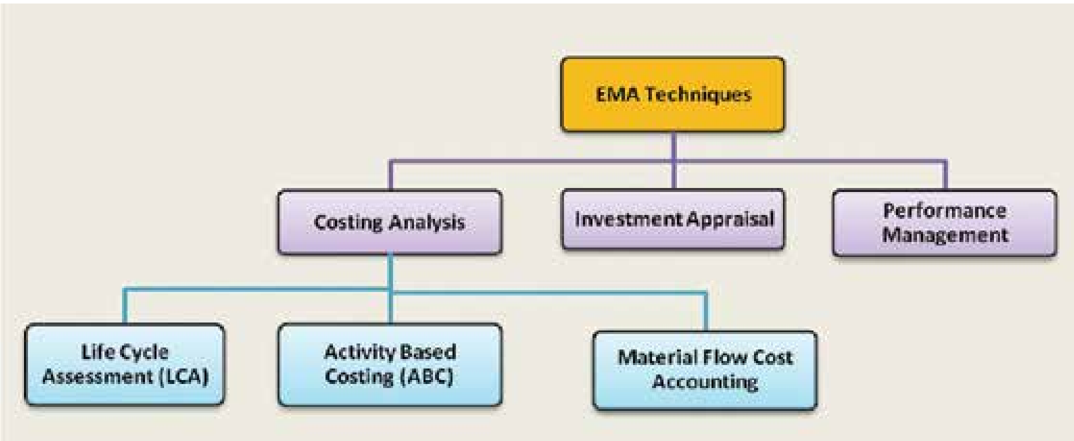
Environmental Accounting is composed of three components such as –

1. **Environmental Conservation Costs** – The expenses and investments which are related to the prevention, reduction and control of Environmental costs and also includes avoidance of Environmental impact, removal of such impact, restoration following the occurrence of disaster and other activities. These are measured in monetary value.
2. **Environmental Conservation Benefit** – Those benefits which are obtained from Environmental conservation costs. These are measured in Physical units.
3. **Economic benefits associated with Environmental**

Conservation Activities – These are economic benefits that arise with Environmental conservation activities. These are measured in monetary value.

EA takes these costs and benefits into account and presents it through Environmental reports. For accounting of Environmental costs, the concept of Environmental Accounting is used. Environmental Management Accounting (EMA) is used in the process of Environmental Accounting and it is one of the most important forms of Environmental Accounting. EMA is concerned with gathering data relevant to the environment (lowest level) which are converted through techniques and processes (middle level) into information which is useful for managers (top level). EMA analyses both financial and non-financial data in order to support internal Environmental Management processes. EMA attempts to make all relevant, significant costs visible so that they can be considered for decision making. UNDSD (2003) identified Management Accounting techniques for the identification and allocation of Environmental costs, these techniques are Activity based costing, Flow cost accounting, Input/output Analysis, Life-Cycle costing. The techniques of EMA are shown in Figure 3.

Figure: 3 EMA Techniques



(Source: Management Accounting Aspect of Environmental Costs, 2018)

The major areas of application for EMA are product pricing, budgeting, investment appraisal, relevant costing, savings from environmental projects, etc. Environmental Cost Accounting (ECA) is a part of EMA which focuses at providing information necessary for effective management of Environmental costs. Environment Resource Accounting and Environment Responsibility Accounting also assist in the process of EMA. So, EMA not only helps companies to better manage costs, but also helps in strengthening the reputation of the company in the society.

Three forms of Environmental Accounting is practiced in India-

✓ National Income Accounting – At the National level for external users.

✓ Environmental Financial Accounting – At the firm level for external users.

✓ Environmental Management Accounting (EMA) – At the firm level for internal users.

Before carrying out any project, every enterprise is required to carry out Environmental Impact Assessment (EIA). EIA is a study to evaluate and identify predictable environmental consequences and the best combination of costs and benefits of the proposed project. To examine the environmental performance of enterprises the need for Environmental Audit arises.

Environmental Auditing

According to World Bank, 'Environment Audit is a methodical examination of environmental information about an enterprise, a facility or a site, to verify whether, or to what extent, they conform to specified audit criteria. The criteria maybe based on local, national, or global environmental standards. Thus, it is a systematic process of obtaining and evaluating information about environmental aspects'. An evolution of Environmental Audit is shown in table 1.

Table 1: Evolution of Environmental Audit

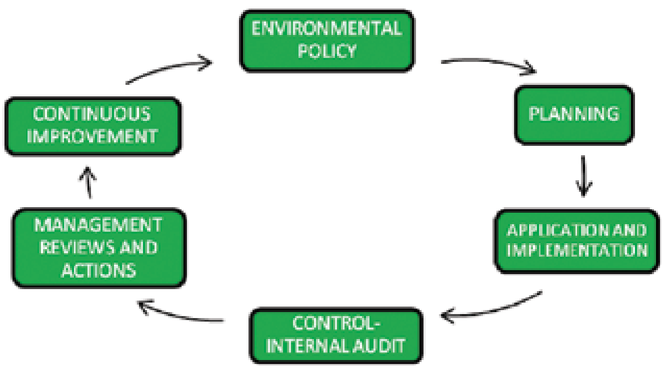
Year	Details
1969	The US National Environmental Policy Act (NEPA) was promulgated.
1970	The Environmental Protection Agency was established to implement policies for the regulation of emissions, discharges, environmental impact assessments, etc.
1970	Environmental Auditing originated in the United States.
1972	Formation of UN Agency titled UN Environmental Program (UNEP).

1987	The Commission published a report called "Our Common Future" with the proposed concept of 'Sustainable Development'. The aim of sustainability is to have "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs".
1992	UN Conference on Environment and Development (UNCED) in Rio de Janerio, Brazil, known as "EARTH SUMMIT" where heads of different states signed four agreed documents including the Agenda 21 which contains checklists of Do's and Don'ts to protect the environment through the next century.
1992	Environmental Protection Act, 1986 was introduced which requires certain industries to submit Environmental Audit Report every year. The Environmental Audit Report has to be submitted to State Pollution Control Board (SCPB) every year. This report is mandatory in the following cases: ✓ For every industry/operation/process which requires consent under Water (prevention and control of pollution) Act,1981 ✓ For every industry/operation/process which requires consent under Air (Prevention and Control of Pollution) Act,1981, and ✓ For every Industry/Operation/Process which requires authorization under Hazardous Wastes (Management and Handling) Rules, 1989.
1992	First International Standard BS7750 was issued by British Standards Institution. The main focus was to ensure that Enterprise must have a systematic environment policy in place.
1993	The Canadian Institute of Chartered Accountants issued the document- 'Environmental Costs and Liabilities: Accounting and Financial Reporting Issues' which expresses how Environmental concerns should be accounted for and reported in the financial reports.
1993	European Eco-Management and Audit Scheme (EMAS) was adopted by the European Council to improve environmental performance on a continuous basis.
1994	The Canadian Standards Association (CSA) published Guidelines for Environmental Auditing: Statement of Principles and General Practices. The purpose of these Environmental Audit Guidelines was to encourage Enterprise's to consider Environment when making business decisions.
2009	EMAS regulation was revised and modified to deal with environmental challenges.

(Source: Guide on Environmental Audit, Jan'2012, kb.icai.org)

In 1996 the first ISO standard was adopted and for the area of Environmental Audit, ISO 14001, 14010, 14011, 14012, 14013/15, 14024, 14031/32, 14040/43 standards are relevant. ISO 14001 is applicable to all types and sizes of enterprises with the object to support Environmental protection along with a balance towards social and economical needs. Basic approaches to Environmental Protection are shown in Figure 4.

Figure 4: Basic approaches to Environmental Protection



(Source: Environmental Audit for Environmental Improvement and Protection, 2017)

In India Environmental Audit is conducted by Supreme Audit Institution (SAI) within the broad framework of Compliance and Performance Audit and the process was formalised with the introduction of specialised guidelines {MSO (Audit) 2002}. The Ministry of Environment & Forests is the Nodal Agency in the administrative structure of the Central Govt. of India for the planning, promotion, coordination, and overseeing the implementation of Environmental and forestry programmes.

Benefits of Environmental Auditing

1. It helps in improving the efficiency of Environmental Management System (EMS).
2. It ensures cost effective compliance with environmental laws and regulations, industry guidelines and standards,

and company's own environmental policies.

3. It acts as effective risk management tool for assessing compliance with environmental legislation.
4. It highlights the areas of inefficiencies in the operations and processes.
5. It increases awareness of its workers, potential health hazards, risks and other needs.

Obstacle in Environmental Auditing

✓ Multiple agencies are involved in the process of Environmental Audit, and as such there arises a problem in identifying the bodies responsible for taking up the critical environmental activities.

✓ The capability and knowledge of the auditor is challenged. Therefore, this creates a problem for the auditor to make conclusions and provide suggestions.

Overcome of this obstacle

✓ Involvement of concerned stakeholders in all stages of Environmental Audit process.

✓ Appointing Auditor with better knowledge/skills and with more experiences.

Findings

a. EA analyses costs and identifies areas to reduce cost thereby helps in cost allocation, cost control and cost reduction.
b. By analysing the costs and benefits, EA helps in the improvement of Financial and Environmental performance and discloses relevant data that creates awareness among the stakeholders, company itself and outsiders which helps in achieving Sustainable Development.
c. Environmental Audit examines the compliance of laws, regulations and policies by the enterprise and ensures that adequate care has been taken towards environment protection while carrying out its processes thereby maintaining a balance between economy, society and environment which leads to achieving Sustainable Development.

Role of CMA

A CMA can-

✓ Act as an Environmental Accounting Manager.

✓ Evaluate the Financial Management System.

✓ Work with professionals and assess potential cost of activities related to Environmental Accounting.

✓ Ascertain the Environmental costs and benefits and effectiveness of Environmental Accounting.

✓ Assess the financial costs and risks associated with an Investment for managing the Environmental impacts.

✓ Assist in the process of Environmental Auditing.

✓ Conduct social audit by looking at cost-benefits involved.

Conclusion

Environmental Accounting and Auditing plays a crucial role in achieving Sustainable Development. EA helps the management in enhancing its efficiency by providing proper accountability of Environmental costs and assessing the investment risks. Environmental Auditing ensures compliance with regulatory requirements and corporate guidelines and also encompasses a wide range of Auditing practices like Certification Audits, Energy Audits, Environmental Surveys, Policy Impact Assessment, EMS Audit etc. The Global challenge is to ensure that enterprises develop systems and take necessary steps to control the erosion of natural resources and to improve their Environmental performances. The enterprises are required to develop a fully Integrated Environmental Management System (EMS) for efficient management of resources and should conduct Environment Impact Assessment (EIA) before undertaking any project. Regular Environmental Audit is required to be conducted to verify the enterprises Environmental performance and to check measures taken by the concern for Environmental Conservation and Protection. To met up the obstacles and challenges arising on the Environment and to control adverse impact on Environment, strong measures on pollution control, water management and waste management, importance to biodiversity, and strict compliance with laws, rules and regulations should be implemented. MA

References

1. *"Guide on Environmental Audit", Internal Audit Standards Board, The Institute of Chartered Accountants of India, January'2012.*
2. *Afzal Ahmad (2012), "Environmental Accounting & Reporting Practices: Significance and Issues: A Case from Bangladeshi Companies", Global Journal of Management and Business Research.*
3. *Hamid Saremi and Behrad Moein Nezhad (2014), "Role of Environmental Accounting in Enterprise".*
4. *Srinivasa Murthy M D (2014), "Conceptual Framework of Environmental Accounting and Reporting: An Overview", EPRA International Journal of Economic and Business Review.*
5. *G.Tarun and Muruga Ramu (2018), "A Study on Green Accounting: A Way to Sustainable Development", International Journal of Pure and Applied Mathematics.*
6. *Piyush Thukral (2017), "Environmental Accounting Framework in India: Concept, Virtues and Inhibitors", EPRA International Journal of Economic and Business Review.*
7. *Ramesh l and J.Madegowda (2013), "A study on Environmental Accounting Practices in selected Indian Companies", Kuvempu University.*
8. *V.Vijaya Lakshmi and K.Shamala Devi (2018), "Environmental Accounting Reporting Practices in India- Issues and Challenges", International Journal for Research in Applied Science & Engineering Technology.*
9. *Guidance on Conducting Environment Audit, 8th ASOSAI Research Project 2009.*
10. *Dejan Jovanovic and Marina Jankovic (2018), "Management Accounting Aspect of Environmental Costs".*
11. *Snezana Ljubusavljevic, Luka Ljubusavljevic and Dejan Jovanovic (2017), "Environmental Audit for Environmental Improvement and Protection", Economic Themes.*
12. *https://www.accaglobal.com*
13. *https://www.kb.icai.org*
14. *https://www.soas.ac.uk*
15. *https://www.sciencedirect.com*

caskl2013@gmail.com

SUSTAINABLE ENVIRONMENTAL DEVELOPMENT AMIDST THE DARKNESS OF COVID-19 *- ASHA KI KIRAN!*

CMA Kalyani Karna
Practicing Cost Accountant
Ghaziabad

Abstract

COVID-19 pandemic has been upending the economy of world but the flip side of the epidemic turmoil with positive repercussions on environment. The halt of movement due to COVID-19 has shown a glimpse of cleaner world. The environmental improvements during the lockdown to fight with COVID-19 will be short-lived as the rampant economic activity resumes and things will go back to status quo. We should make extensive efforts in planting trees, conserving soil, protecting biological diversity, and finding new ways of living that could help to a greater extent in maintaining a balanced environmental harmony. This pandemic has been definitely uniting the globe. Humanity is coming together as the people are singing in unison. It is not only the responsibility of government but we all are responsible to maintain the fresh water and air. Let us unite and carry on with singing in unison to preserve our nature!

Every cloud has a silver lining. The darkest hour is just before the dawn. After every night either long or dark, there shall yet come a golden morning. There are silver linings also amidst the dark clouds of COVID-19. Corona pandemic has caused catastrophic loss to world economy impacting different sectors of the countries. The plunge from prosperity to peril will be as a swift due to worldwide lockdown protocols. However, the halt of movement due to COVID-19 has shown a glimpse of cleaner world. The environmental impact of deadly corona virus due to lockdown protocols have been described as largest scale experiment ever into the air quality. This year (22 April, 2020) we celebrated world 50th anniversary of Earth Day at home and it seems that mother earth healed herself on its Golden Jubilee. The pandemic has been definitely uniting the globe. Humanity is coming together as the people are singing in unison. The streets of world remained empty during lockdowns but hearts of people are always full of warmth and joy as the people came out on their balconies, sing and play instruments and embraced each other through the power of music. The corona virus pandemic has been upending the economy of world but the flip side of the epidemic turmoil with positive repercussions on environment.

This article highlights the environmental changes during the outbreak of COVID-19 due to lockdown protocols and attempts to see the ray of optimism amidst the dark clouds of COVID-19. It pinpoints the importance of maintaining the environmental changes due to worldwide lockdown for sustainable development.

Reduction in deadliest air pollutant $PM_{2.5}$ during lockdown period:

"The world's response to the pandemic is an unintended experiment that is giving us a chance to test our understanding of various air pollution emission sources," said Barry Lefer, NASA's program scientist for tropospheric composition.

India is among the most polluted countries around the globe. According to a December 2019 report by the Global Alliance of Health and Pollution, India accounts for the highest pollution-related deaths in the world with more than 2 million people every year. An average resident in India is exposed to air pollution which exceeds 500% of the standard set by WHO for $PM_{2.5}$. Air pollution is the silent killer. Every year approximately 7 million pre-mature deaths are due to exposure from household and outdoor air pollution. Air pollution is a global children's health issue. Globally, 93% of all children and 630 million children under 5 years are exposed to air pollution level. Deaths linked to air pollution shows 34% deaths from ischaemic heart disease, 19% from chronic obstructive pulmonary diseases and 7% from lung cancer.

Number of deaths every year due to air pollution:

Region	Number of deaths
South East Asia region	Over 2 million
Western Pacific region	Over 2 million
Africa	Nearly 1 million
East Mediterranean region	About 500,000
European region	About 500,000
America region	More than 300,000

Source: WHO

The reduction in deadliest air pollutant $PM_{2.5}$ during lockdown period across nine major global cities has been observed as follows:

City	Measurement for three week lockdown period	Average $PM_{2.5}$ during lockdown period, 2020 (µg/m³)	Reduction in $PM_{2.5}$ as compared to same period of year 2019
Delhi, India	March 23-April 13	32.8	-60%
London, UK	March 23-April 13	16.2	-9%
Los Angeles, US	March 23-April 13	5.5	-31%
Madrid, Spain	March 23-April 13	6.4	-11%
Mumbai, India	March 23-April 13	28.8	-34%
New York City, US	March 23-April 13	4.4	-25%
Sao Paulo, Brazil	March 23-April 13	10.1	-32%
Seoul, South Korea	February 26-March 18	24.1	-54%
Wuhan, China	February 3-February 24	35.1	-44%

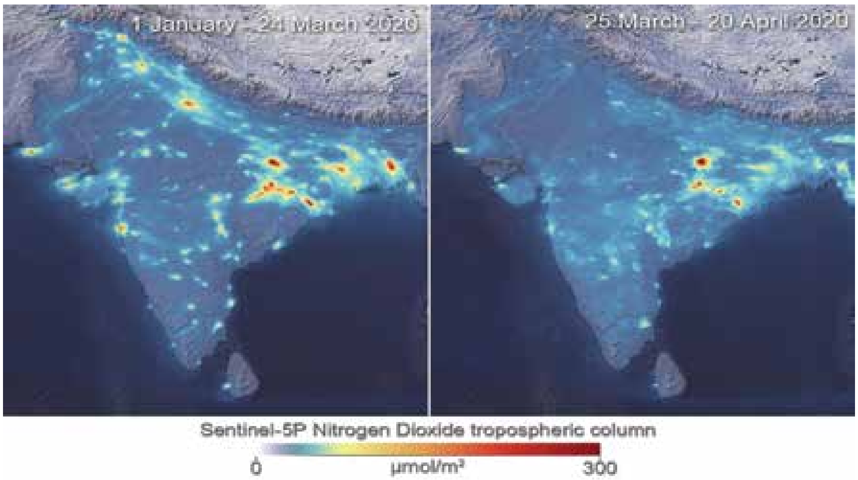
Source: IQ Air

The capital of India showed the highest reduction in deadliest air pollutant $PM_{2.5}$ by 60% as compared to the same period as lockdown for the year 2019. The unhealthy air pollutant plummeted from 68% to 17% during lockdown period.

Image: Reuters (Images of India Gate, Delhi as on October 17, 2019 and April 8, 2020)

Government had been taking myriad steps to control air pollution but it seems that nature healed herself. Air pollution is major environmental risk to health. With the improvement in air quality level, countries can reduce the risk of stroke, heart diseases, lung cancer, chronic and acute respiratory diseases. The study titled 'State of Global Air 2019' reported that the life on average of a South Asian child growing up in current high levels of air pollution will be shortened by two years and six months while the global life expectancy loss is 20 months. Major sources of air pollution are industry and energy supply, transport, dust, agricultural practices, household energy, and waste management. WHO suggests for the application of energy efficient power generation, improvement in domestic, industry and municipal waste management, energy efficient buildings, and safe and affordable public transport. If the measures of air pollution control can be implemented then we can enjoy the nature again and can take fresh air. Countries alone cannot combat air pollution. It is a global challenge and we can combat together. Study indicates that COVID-19 severity and fatalities were dramatically higher among those with heart disease, diabetes and chronic respiratory diseases. Long term exposure to air pollution causes many of these diseases and makes respiratory illnesses more dangerous. Globally, air pollution is estimated to be responsible for nearly 40% of lower respiratory tract infections and chronic obstructive pulmonary disease burden and about 20% of coronary heart disease. Study showed that U.S. counties that already had high levels of air pollution before the COVID-19 crisis have higher death rates highlighting the importance of continuing to push for reductions in air pollution nationwide during and after the pandemic.

The study of Harvard University on U.S. showed that an increase of 1 μg/m³ in $PM_{2.5}$ is associated with an 8% increase in the COVID-19 death rate (95% confidence interval [CI]: 2%, 15%). The study of Harvard University concluded that any of the pre-existing conditions increasing the risk of death in those with COVID-19 are the same diseases that are affected by long-term exposure to air pollution. The long-term average exposure to fine particulate matter ($PM_{2.5}$) is associated with an increased risk of COVID-19 death in the United States. The small increase in long-term exposure to $PM_{2.5}$ leads to a large increase in the COVID-19 death rate.



Source: NASA

The above images show the average nitrogen dioxide concentrations from January 1 to March 24, 2020, and March 25 to April 20, 2020. There was decline of nitrogen dioxide concentration by 40-50% in Delhi and Mumbai. NASA satellite sensors observed aerosol levels at a 20-year low for this time of year in northern India.

Impact of COVID-19 lockdown on water pollution:

Clean water is a key factor for economic growth. Deteriorating water quality is stalling economic growth, worsening health conditions, reducing food production, and exacerbating poverty in many countries," said World Bank Group President David Malpass.

Rivers are heart and soul of growth and cultural development of India. Water resource of India constitutes 4% of total global water resource. Namami Gange project was launched in May 2015 with the budget of INR 20,000 crore. The actual expenditure for the year 2016-2017 by NMCG was INR 1,062.81 crore out of INR 3,500 crore expected fund release. On April 4, at Varanasi's Nagwa Nala, the Dissolved Oxygen (DO) values showcased an extraordinary improvement of 79 per cent in DO values. According to the report of Uttarakhand Pollution Control Board, the Bio-Logical Oxygen Demand (BOD) in the Ganges has decreased by 20 per cent at Har Ki Pauri. The amount of dirt carried by humans in the Ganges water has decreased by 34 per cent.

Water quality of Ganga River under Namami Gange project and lockdown period for Rishikesh to Haridwar:

	BOD (Criteria: 3 mg/litre or less)		**DO (Criteria: 5 mg/litre or less)**	
	Mean (Upstream)	Mean (Downstream)	Mean (Upstream)	Mean (Downstream)
2012-13	1.3	5.3	8.4	7.2
2016-17	1.0	1.10	10.30	9.30
28 March 2020	2.1	1.21	8.0	7.9

Source: CPCB

A recent analysis by the Delhi Pollution Control Board found that the quality of the Yamuna River flowing along New Delhi has also improved during the lockdown. The report cited a decrease in runoffs from 28 industrial clusters and less trash.

Image: Reuters (Images of Yamuna River in Delhi as on March 21, 2018 and April 8, 2020)

The health costs related to water pollution has been estimated at INR470-610 billion ($6.7-$8.7 billion) per year. Food is lost every year due to the presence of salt in water. This loss is equivalent to feed 170 million people or to feed the country equivalent to size of Bangladesh. Oxidized nitrogen or nitrates present in water are lethal for babies. The nitrates present in water causes childhood stunning by 11-19% and it decreases the adult earnings by 1-2%. The increase in biological oxygen demand (BOD) lowers the GDP growth by one third. It is estimated that 70% of surface water is unfit for consumption. The polluted water in India causes 9% reduction in agricultural revenue and 16% reduction in agricultural yields.

The economic growth is restricted by one third due to the absence of clean water. A key contributor to poor water quality is nitrogen present in fertilizer used for agriculture. This nitrogen eventually enters rivers, lakes and oceans and it transforms into nitrates. The exposure to nitrates affects the growth and brain development of children.

Call for adequate Sanitation:

A WHO study in 2012 calculated that for every US$ 1.00 invested in sanitation, there was a return of US$ 5.50 in terms of decline in health costs, premature deaths and increase in productivity. Economics of Sanitation Initiatives of World Bank studies the economic impact of poor sanitation and costs associated with it. It also studies the benefits of maintaining sanitation. The sanitation in the study includes the management of human excreta, solid wastes and drainage. Inadequate sanitation is estimated to cause 432,000 diarrhoeal deaths annually. Sanitation is an important factor in various tropical diseases, including intestinal worms, schistosomiasis, and trachoma. Poor sanitation also contributes to malnutrition. Hygiene promotion is the most cost effective health intervention. Hand hygiene is a critical element in disease prevention, including preventing the spread of COVID-19. WHO data shows that 4 out of 10 households do not have soaps and water on premises. 5 out of ten schools do not have soap and water available to students. 4 out of 10 health care facilities do not have soap and water or hand sanitizer at points of care. COVID-19 presents an urge to call the gaps in sanitation.

Time to focus on forestation:

A verse From Rig-Veda says, "***Thousands and hundreds of years if you want to enjoy the fruits and happiness of life then take up systematic planting of trees.***

Deforestation and forest degradation contribute about 12% of the world's greenhouse gas emissions. One mature tree sequesters 48 Lbs of CO_2 every year. The 2019 IPCC special report on Climate Change and Land focussed on the importance of planting forests and protecting it for reducing the limit of global warming to 1.5^{o}C. Forest conservation and investment in plantation is highly needed as 46% of world forests are already destroyed. For every 1.2 seconds man destroys an area of forest the size of a football field. 46-58 thousand square miles of forest are lost every year.

Approximately, 80,000 acres of forest is disappearing from the earth everyday due to fire, clear cutting for agriculture, ranching and development, unsustainable logging for timber and other activities. Clearing of forests for agriculture, extractive industries, urbanization and other land uses leads to the loss of habitat. According to the IPBES, the rate of species extinctions is accelerating, with severe impacts on people worldwide. 80% of the terrestrial plants and animals live in the forests and are losing their habitats due to deforestation. Approximately, 28,000 species are expected to be extinct by next 25 years due to deforestation. Biodiversity is essential to ecosystem health and the provision of these services.

Fostering Green living:

"When we have love and affection for each other, these feelings make us strong enough to tackle any hardship in life- as said by honourable Prime Minister Mr. Narendra Modi while addressing the nation on the occasion of Buddha Purnima, 7th May 2020.

Sustainable development of environment includes green living. Green living is discovering and incorporating creative, compassionate, economical, and sustainable actions in everyday life in order to help sustainable development of environment and give brighter world to our future generations. Going green is creating something better and improving our health and that of the planet. It is a philosophy which focuses the humanity relationship with our external environment. Green living can involve the weekend projects to plant a few trees or build a rain garden, green roof or compost. Green living can include family immersion away from the mundane television and towards activities that strengthen family bonds and improve relationships with society. Green living is about bringing a new level of consciousness and awareness to our activities and consumption to give preference for products that are the least exploitative, least toxic and least harmful and steer clear of products linked to environmental, social and health injustices.

Role of environmental accounting to preserve nature:

Environmental Accounting is the branch of accounting which is related with the identification, collection, classification, analysis and interpretation of environmental information so that the negative effect of any human activity could be reduced or eliminated. With the help of environmental Accounting and reporting, responsibilities can be fixed and proper compensation can be recovered from concerned institution or people. Environment Accounting is a tool which helps to retrieve the useful information and enable us to take required steps to improve and save our environment. Environmental accounting can help to make the individuals and industries to be accountable for the environmental damages and cost associated with damages. The reduction in pollution can even be helpful to fight the unfortunate pandemics. Environmental accounting will play crucial role in maintaining the climatic change. It is not only the responsibility of government but we all are responsible to maintain the fresh water and air. After lot of efforts by government this level of climatic purity was not achieved and we were facing the effects of global warming. But this climatic change due to lockdown of COVID-19 will act as a ray of optimism for world that we can still enjoy the freshness of nature. We have the right to breathe fresh air and drink fresh water. Lockdown protocol can be taken as model with appropriate preparation to reset the environment.

Conclusion:

Indian consciousness is full of trees and forests. The Varah Purana focuses on importance of planting trees and it says, ***"One who plants one peepal, one neem, one bar, ten flowering plants or creepers, two pomegranates, two oranges and five mangos, does not go to hell."*** Various trees, fruits and plants have special significance in Hindu ritual.

The environmental improvements during the lockdown to fight with COVID-19 will be short-lived as the rampant economic activity resumes and things will go back to status quo. The United Nation Climate Change Conference held in Paris from 30 November to 12 December, 2015 required common agreement binding to all participating countries towards the reduction of Green House Gas (GHG) emission. COVID-19 has brought the world at same line and united the world to fight against this and to enjoy clean earth. It proved that boundaries cannot divide us we are one and thinking globally.

The Vedas focus on the importance of environmental protection and purity and men were forbidden from exploiting nature. Men were taught to live in harmony with nature. Ancient Indians were very much aware about the ecology and sustainability. Dr. Abdul Kalam said, **"Ancient India was a knowledge society that contributed a great deal to civilization."** We need to recover the status and become a knowledge power. We have forgotten the golden principles of sustainability which can be very helpful in present scenario to have a balanced and peaceful life. We should make extensive efforts in planting trees, conserving soil, protecting biological diversity, and finding new ways of maintaining a balanced environmental harmony.

The Bhagavad Gita emphasised for preserving nature with the lines in verse 9.26 ***"Patram pushpam phalam toyam, yomey bhaktya prayachchati tadaham bhakt yupahrutam asnaami prayataatmanaha"*** (I accept a leaf, flower, fruit or water or whatever is offered with devotion.) MA

References:

1. *World Bank data*
2. *Economic times*
3. *WHO database*
4. *FAO database*
5. *Zee News India*
6. *Hindustan Times*

cwakalyani@gmail.com

AT THE HELM

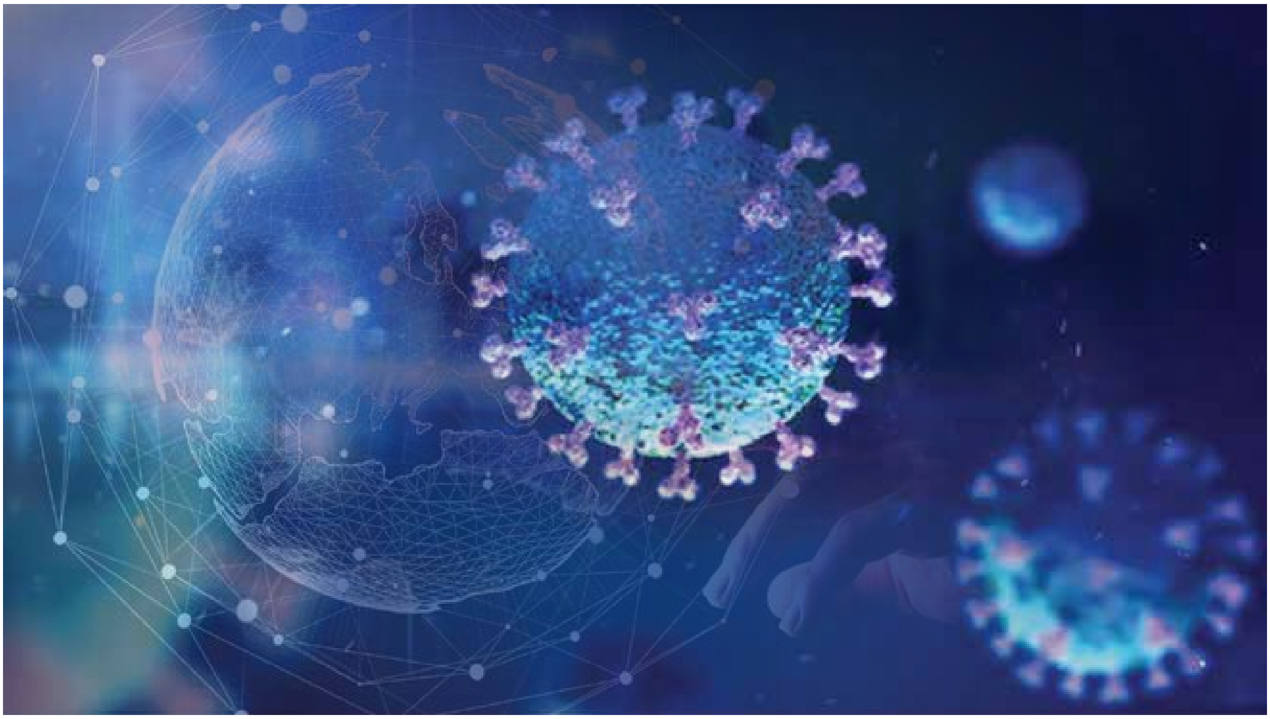
Our heartiest congratulations to CMA (Dr.) Ashish P. Thatte, Council Member and Chairman, International Affairs Committee who has been appointed to the Member Development Committee (MDC) of the Confederation of Asian and Pacific Accountants (CAPA) for the period 2020 to 2023.

We wish CMA (Dr.) Ashish P. Thatte the very best for all his future endeavours.

DIGITAL OBJECT IDENTIFIER (DOI)

Issue: May - 2020 [Vol. 55 No. V]

Name of The Article	Name of Author/s	Volume	Issue	Issue No.	Page No.	DOI Numbers
COVID-19 DEMONSTRATES WHY MANAGEMENT ACCOUNTANTS MUST CHANGE IN OUR EVOLVING WORLD	Paul Sharman	Vol.55	May-20	5	18-22	10.33516/maj.v55i5.18-22p
POST COVID-19 ADVANTAGE INDIA	CMA B.B. Goyal	Vol.55	May-20	5	23-26	10.33516/maj.v55i5.23-26p
ECONOMIC IMPACT OF CORONA	Prashant Singh	Vol.55	May-20	5	27-33	10.33516/maj.v55i5.27-33p
CURRENCY RISK MANAGEMENT AND COVID 19	CMA (Dr.) M.V.S. Kameshwar Rao	Vol.55	May-20	5	34-38	10.33516/maj.v55i5.34-38p
REGULATORY RESPONSE TO TACKLE THE ANTICIPATED REPERCUSSIONS OF COVID-19	Subhashruthi.N.J, CMA (Dr.)Latha Chari	Vol.55	May-20	5	39-42	10.33516/maj.v55i5.39-42p
IMPACT OF CORONAVIRUS IN PREPARATION OF CORPORATE ACCOUNTS AND THE ROLE OF CMAs	CMA (Dr.) Subhash Chandra Das	Vol.55	May-20	5	43-45	10.33516/maj.v55i5.43-45p
COVID-19 ITS IMPACT AND OPPORTUNITY FOR INDIAN ECONOMY	CMA Ashoke Kumar Bothra	Vol.55	May-20	5	46-47	10.33516/maj.v55i5.46-47p
COVID19 DIVERGENT EFFECT ON INDIAN ECONOMY AND ROLE OF GoI	CMA Nirmal Kumar Chakrabarti	Vol.55	May-20	5	48-53	10.33516/maj.v55i5.48-53p
ONLINE EDUCATION IN THE LIGHT OF DRAFT NATIONAL EDUCATION POLICY	CMA Biswarup Basu, CMA (Dr.) Debaprosanna Nandy	Vol.55	May-20	5	54-59	10.33516/maj.v55i5.54-59p
USE OF ARTIFICIAL INTELLIGENCE IN EDUCATION	CMA (Dr.) Ashok Panigrahi, Dr. Vijay Joshi	Vol.55	May-20	5	64-67	10.33516/maj.v55i5.64-67p
FROM PENCILS TO iPADS: EVOLUTION IN INSTRUCTIONAL TECHNOLOGY	CMA Harpreet Singh	Vol.55	May-20	5	68-70	10.33516/maj.v55i5.68-70p
IMPLEMENTATION OF NEP - 2019 A STUDY ON EFFECTIVE APPLICATION OF PPP MODEL	CMA Sandip Basak, Sayani Sikdar	Vol.55	May-20	5	71-73	10.33516/maj.v55i5.71-73p
NEW EDUCATION POLICY 2019 - REFORMS TO UNIVERSALIZE THE EDUCATION	J. Karunasree, Dr. L. Sampath	Vol.55	May-20	5	74-75	10.33516/maj.v55i5.74-75p
SWAYAM: A REVOLUTION IN INDIAN HIGHER EDUCATION	Dr. Anirban Ghosh	Vol.55	May-20	5	76-80	10.33516/maj.v55i5.76-80p
ONLINE COLLABORATIVE LEARNING: A MOTIVATIONAL STRATEGY FOR STUDENTS	Shilpa Narang	Vol.55	May-20	5	81-83	10.33516/maj.v55i5.81-83p
VOCATIONALISATION OF HIGHER EDUCATION IN COMMERCE: THE NEED OF 21ST CENTURY	Atul Suvagiya, Kalpesh Purohit	Vol.55	May-20	5	84-87	10.33516/maj.v55i5.84-87p
PROFESSIONAL OPPORTUNITIES FOR THE COST & MANAGEMENT ACCOUNTANTS IN NATIONAL EDUCATIONAL POLICY (DRAFT), 2019	CMA Rakesh Shankar Ravisankar	Vol.55	May-20	5	88-92	10.33516/maj.v55i5.88-92p
IS BLENDED LEARNING STRATEGIES CAPABLE TO MEET THE SCHOOL EDUCATION GOAL OF NPE 2019? – A STUDY IN WEST BENGAL	Nimai Sundar Manna, Piyali Sarkar	Vol.55	May-20	5	93-99	10.33516/maj.v55i5.93-99p
DIGITAL TRANSFORMATION – APPLICATIONS OF IMMERSIVE TECHNOLOGY	CMA (Dr.) Paritosh Basu	Vol.55	May-20	5	104-105	10.33516/maj.v55i5.104-105p
LEARNING FROM TRADITIONAL INDIAN FAMILY OWNED BUSINESS	Dr. Hitesh Shukla	Vol.55	May-20	5	106-108	10.33516/maj.v55i5.106-108p



DIGITAL TRANSFORMATION IN THE NEW WORLD ORDER POST COVID-19 PANDEMIC

CMA (Dr.) Paritosh Basu
Senior Professor
NMIMS School of Business Management
Mumbai

The Ghastly Disastrous Stranger

Digital evangelists around the world extensively wrote about the fourth industrial revolution during the last decade, some of which have been captured in previous nine such columns. This revolution started with cerebral applications of digital solutions for problems of a common man coupled with new business and revenue models for commercial enterprises. Many innovative applications of eight deep digital technologies influenced human behaviour and started crafting a new way of living life. The journey of many technology players blissfully moved ahead from a startup to a 'soonicorn' to a unicorn.

When the fourth industrial revolution was about to take-off for its second orbital change with a quantum leap, came the disastrous and gutsy stranger called Covid-19 virus. The virus inflicted unprecedented pandemic with an overwhelming speed. It proved to be such tempestuously contagious that people across the world could not participate in economic activities for weeks and months. Epidemiologists suggested social distancing as the only solution till the vaccine is discovered and medicines are convincingly established for treatment.

Covid-19 virus has caused the cruellest humanitarian crisis in the history of mankind, the domino effect of which has already caused much harsher and perilous economic fallouts. Every single nation's economy has been pushed back and down. The devastation is such unprecedentedly ominous that most affected are the developed countries, and not even a single country has been spared.

However, this fear psychosis may not end even after winning over this virus. Scary narratives are deluging cyberspace about more such virus attacks. Environmentalists are of the view that such an outcome is mainly because nature has abysmally been abused and the distance between encroached space for human civilisation and habitats of wild birds and animals has mercilessly been diminished.

Consequences of all these are also being manifested by frequent natural disasters.

Research of ascension analysts reveals that mankind would have to continue living life in this type of fiercely natural, societal, and economic environment for decades to come. There is no option, therefore, but to find effective and efficient solutions with risks-enabled processes for reducing close physical participation of human beings. However, engagements and collaborations of human beings cannot completely be ruled out for societal purposes and economic activities. More and more digital transformation with applications of digitally operated devices, therefore, is the call of the day.

The New World Order

The old maxim that 'Future has no precedent' was perhaps not more aptly applicable earlier than what people are now experiencing. This is because Covid-19 virus have caught every single human being and government agency unaware. The forward path would continue to be affected by consequential fear psychosis of uncertainty and insecurity. This will most certainly impinge on both supply side and demand side of any economy. The first knee jerk reaction for survival would be process simplification, cost cutting, and manpower reduction. The need for digital transformation of operations would further be reinforced.

Nations will realise consequences of dependency on import for essentials and reassess how far they would prepare for self-sufficiency to meet any such crisis in future. Every country will also reassess their partners for toll manufacturing and foreign trade because this pandemic has unfolded self-centric strategies of certain nations. All these will affect global trade and redefine industrial landscape of many countries. Case in point is India becoming self-sufficient by quickly setting up medical PPE manufacturing facilities and re-establishing her as the friendliest and most reliable medicine factory of the world.

Digital platforms have suddenly occupied the centre stage of every interaction and collaboration. Usage of digital platforms for virtual meetings have increased five folds and for that many regulatory provisions had to be changed for granting permissions. Every organisation is further being forced to accentuate and speed up the process of digital transformation. In the new world order digital networks will become the sole or primary medium of customer engagement and FinTech will proliferate to touch every citizen's life every day.

Automated processes will be the primary driver of productivity. Processes for service delivery and supply chain management must have to be flexible with reduced human touchpoints, transparent, and stable. 'Stragility' (ability to create agile strategy), the new word coined by the author, will be the main mantra for success in the new world order post Covid-19 Pandemic where customer behaviour will change almost daily. eCommerce players are hurriedly establishing methods for contactless delivery.

In events of disastrous global financial crisis such as of 2008, sovereign governments could effectively help speedy economic recovery by injecting money into their respective economies. But the present pandemic is catastrophically unique. Even after billions of dollars being allocated, people could hardly participate in economic activities during first about 45 days because of the horrific and life-threatening intensity of Covid-19 virus. Thereafter graded reopening of economic activities became an imperative to avoid fatalities as much as possible.

Simon Mair[1] is of the view that *"The responses to the Covid-19 pandemic are simply the amplification of the dynamic that drives other social and ecological crises: the prioritisation of one type of value over others. This dynamic has played a large part in driving global responses to Covid-19. So as responses to the virus evolve, how might our economic futures develop? ...."* Who can answer the questions with conviction and chart the forward path.?

Market players of developed economies such as North America and Europe were driven during the last about four decades by the following specific set of experiential belief based on broad consensus:

- *"The market is what delivers a good quality of life, so it must be protected.*
- *The market will always return to normal after short periods of crisis."*

Unfortunately, these are the countries which have been worst affected by this pandemic. Therefore, it may not be wrong to think that going ahead the new patterns of human behaviour will drive emergence of unique applications of digital technologies and decides. This in tun will bring in newer types of business and revenue models. The old maxim of 'Necessity is the mother of invention' will be added with 'Adversity is the surrogate mother of invention.' Example of this could be proliferation of 'Virtual Engagement', 'RPA and Robot Human Collaboration', 'Tele Health', 'Remote Learning', 'Take Home Examination', etc. So far technology has largely influenced human behaviour which will now develop in a diagonally reversed order of people's behaviour influencing digital technology.

Digital Lipstick to Digital Destination to Digital Journey

Till recently a large group of professionals across almost all sectors used to believe that digital transformation is meant for showing-off to stakeholders that the firm is with the wind and creating brand images. Actual and effective economic activities will have to be performed by human beings. Billions of dollars have thus been wasted without any differential value generation. This phenomenon in a lighter vein is known as 'Digital Lipstick' without meaning to be offensive to anyone and any gender group.

The second group of CXOs thought that digital transformation is only a destination for gaining competitive advantage. An entity should embark for once, implement all conceivable projects to reach the destination, where after the tasks are for maintenance and incremental changes. Covid-19 pandemic has forcefully brought a directional change in this thought process. Now digital transformation is an essential necessity for survival and revival. Going forward it will be the way of life.

The current pandemic is really testing in a hard way how efficient remote working can be! Even organisations in most digitally transformed in sectors such as FinTech, IT&ITES are threatened to the bone about privacy, safety and security of their information, data base and operating systems. This is because their employees are accessing corporate systems using private devices and public network. Organisations which used to force its employees with a policy of 'Bring Your Own Device' (BYOD), has now experienced that this practice is seriously prone to cybersecurity breaches in a working from home (WFH) environment.

Certain organisations had WFH practices even before the present pandemic. But that was more as a measure of cost savings and matching working time of overseas clients. Hardly any organisation was there who had almost cent percent remote working practices. In large capital / labour intensive industry sectors none had any iota of thought about digital transformation of those employees who do not work from any desk because of being deployed in the field, e. g. mining, oil rigs, customer facing physical technology-based services, etc. Time is here and now to even connect them through digital platforms, redefine their work processes, establish remote collaboration and control with robotic process automation.

While responding to this extreme crisis by forcing employees for WFH and adopt all possible digital measures they can, almost all organisations have switched over to a survival mode. It has painfully been understood that some of the of the opensource software and digital platforms are severely prone to security risks. Most of the CXOs are realising in a hard way that digital transformation is neither 'Digital Lipstick' to beautify the entity, nor a destination. This crisis has changed people's mindsets and taught several lessons.

New Thoughts and Approaches

Covid-19 pandemic has forced people to think and behave with a new approach. Willam Grove[2] wrote in April 2020 that, *"Teams are learning to collaborate in new ways, companies are realizing they are able to function properly without having people in the office and leadership is seeing that they don't need to spend so much on office space. As a result, organizations will be forced to consider how to digitally transform in order to facilitate the needs of a mass, remote workforce."*

The present situation of 'Impossible to Travel' are forcing every marketing professional to believe that there is no option but digital access, virtual meeting, and adoption of immersive technologies such Augmented Reality and Virtual Reality for product and service marketing. Even the best of the companies engaged in BFSI, healthcare and other services, academic institutions etc. have been caught underprepared or unprepared.

Business professionals are convinced that upcoming unique elements and dimensions of volatility, uncertainty, complexity, and ambiguity; that will torment global and country specific business ecosystems; would be more unique and unprecedented. Future will continue to be shrouded with uncertainties and challenge humanity much harder. This will in turn change human behaviour, and imperatives for survival and prosperity of business organisations.

In digitally divided *Bharat* and India, where broad band connectivity and uninterrupted services are still points of serious anxiety, engagement and collaboration through digital platforms is quite a challenge. Hence, government will have to consider telecommunication facilities more as a lifeline to meet essential necessities, like drinkable water, than a source of revenue by renting out radio spectrum. Telecom service providers will in turn have to be more serious in improving speed and quality of services while carrying data through their network than measure success by number of customers and average revenue per user (ARPU).

Again, technologies for safe and secured digital access for effective and risk free WFH practices will be the most wanted facility than access with mobility. In the post pandemic era technology for differentiation in quality of services rendered from distance will be the predominant consideration than risk and cost, Users will be ready to pay for what is digitally secured, environment friendly and safe for health and hygiene. Traditional digital platforms and storage facilities like cloud computing are increasingly being proved to be vulnerable as shockingly established by several hundred thousand attacks by cyber criminals between March to May 2020. Hence users will demand much more secured and invincible platforms.

"Hopefully this pandemic has shown people that you can be trapped at home, by no fault of your own, and you can still contribute," says Mik Scarlet, an expert in the field of access and inclusion for disabled people. *"In the same way that we're trying to plan our end of lockdown, can we also plan for the end of society being inaccessible?"*

Propagators of ascension analyses such as the author are, therefore, more convinced, particularly because of the experience from the first decade of Industry 4.0, that digital transformation will kick in a massive way and will continue to help mankind to successfully face every single challenge. Digital transformation should most certainly not be the 'Digital Lipstick' to beautify and entity nor a destination to be reached for once only. It will be an ongoing journey that will perhaps never end till human civilisation moves on. In such a business ecosystem technology-enabled operating systems and processes will usher in new business and revenue models, which is a silver line for every entrepreneurial mind.

Digital Transformation - Survive Revive and Sustain

The concept of 'Playing it safe now by lockdown' which is understandably to be right decision to prevent spread till enough facilities are in place to reduce fatalities, cannot be a permanent solution. Economic activities cannot be allowed to remain in a state of grinding halt for months. Simon Blackburn et.al are of the view that, *"If a silver lining can be found, it might be in the falling barriers to improvisation and experimentation that have emerged among customers,* *markets, regulators, and organizations……. In this world, some things will snap back to previous form, while others will be forever changed."*[3].

The clarion call is for creative destruction. Those changes for ever will be brought by 'destruptive' applications of digital technologies and devices. Covid-19 pandemic has not only shown the way but also compellingly and convincingly paved the way for digital transformation at a faster speed with agile and 'innoventive' applications for solving problems of humanity. Some such applications have been discussed in the following lines, the glimpses of some of which has been seen even before the pandemic:

- Blockchain is more and more be recognised as the most safe and secured platform for citizen's identity management, KYC for commercial activities, and business operations with point to point tracing, stoppage of infiltration of fake medicines, baby food, costly consumer durables, etc., besides immutability, transparency, data safety and security.
- Artificial intelligence and machine learning have proved to be the handiest tools to predict behaviour of the virous in different environmental conditions, intelligently recognising and tracing affected people and thus controlling its spread by identification. These digital tools have also helped exploring and experimenting with medicines, and methods of treatments which can save more lives in varying geo-physical conditions.
- Artificially intelligent robots are gradually taking over from nursing staff the noble task of serving patients in developed countries. Human-Robot collaboration will further improve quality and precision for medical surgery, and remote collaboration for improved diagnosis and medicinal treatment of patients.
- Artificially intelligent Internet of Thing (AIIoT), Internet of Body (IoB) and robots, digitally controlled drones, etc., supported by AI and ML, will redefine the processes for pre-empting and better handling of natural calamities, and health care services in crisis situations than by conventional methods. This has been supported by a joint study report WEF and PwC.
- Drones have started being used for sanitisation of vast areas, fighting fire with water guns, pest-killing operations in agricultural fields, surveillance operation at times of emergencies due to civil commotions and terror attacks.
- By now it has comprehensively been established that robotic process automation, intelligence applications of drones, humanoids and robots can reduce human interventions in manufacturing and logistics operations. Many applications of these have been seen in motor vehicle industry, warehousing and other manufacturing operations.
- Digital engagement with customers will be further enhanced through virtual meeting platforms, digitalisation of online sales channels and eCommerce platforms with applications of immersive technologies such as AR, VR and MR. Supply-chain management will be rendered more transparent, speedy and risk-enabled with applications of Blockchain with added layers of artificial intelligence.
- Digital platforms for speedy screen sharing, immersive experience of virtual reality, video-streaming, interactive discussions with break-out groups, opinion polling, etc will bring paradigm shift in remote learning experience of students and teaching and training professionals.
- Last but not the least data privacy, cyber security and safety will be the predominant consideration while designing any solution. Existing and new applications will be fortified with shields of safety measures, powered by Blockchain, AI and IoTs, particularly in terms of access control, proactive hacking control abilities and information privacy.

Note: The author has purposely refrained from quoting many other applications of digital tools for typical management related activities like framing and implementation of business strategies, etc.

All these applications will proliferate with overwhelming speed in post Covid-19 pandemic era. Simon Balckburn[3] et. al. further observed, "*As the COVID-19 crisis forces your customers, employees, and supply chains into digital channels and new ways of working, now is the time to ask yourself: What are the bold digital actions we've hesitated to pursue in the past, even as we've known they would eventually be required? Strange as it may seem, right now, in a moment of crisis, is precisely the time to boldly advance your digital agenda*."

Clint Boulton,[4] a senior CIO writes that *".... with 80 percent of revenue growth hinging on digital offerings and operations by 2022, IT leaders should continue transforming their operating models. ……. Companies that continue to invest in their digital strategy, while balancing short-term efforts with long-term measures, will emerge from this pandemic more competitive. Sound models that incorporate the best people, processes and technologies remain critical in good times and bad."*

Paradigm Shift in Solution Designing

Digital transformation typically has three major goals, viz., unlocking productivity for employees with data driven cognitive intelligence and device enabled processes; improving the experience of a customer while interacting with a service provided through a digital platform; and cyber security. The ultimate objective is to improve business performance with higher profit and profitability. Success in all these ensures sustainable growth and prosperity.

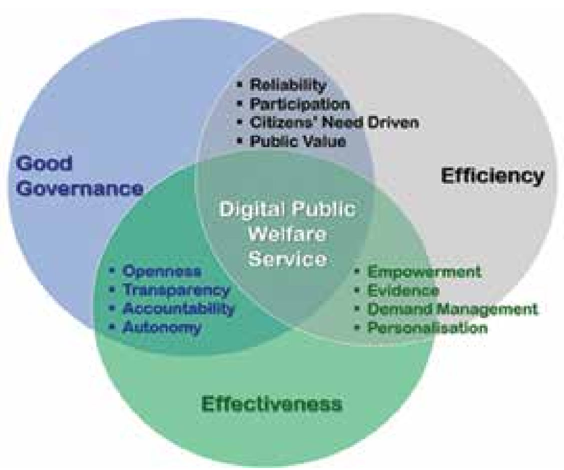
The author is of the view that the horizon of digital scientists must be widened to serve the larger causes of humanity across all segments of society in all corners of the world. The concept of 'Customer Relationship and Experience Management' will have to be broadened. The word Customer has to be replaced by 'Stakeholders'. This will bring into fold all human beings directly and indirectly connected with a business entity.

The following humane dimensions are again being recommended to be borne in mind while designing and implementing solutions for digital transformation.

- No technology has ethics, morality, compassion, and emotional intelligence. But technologists have. Success of digital transformation will depend on those humane qualities of solution builders leaving least scope for anyone to use the solution with any ulterior motive.
- Solution designing should be grounded on the humane foundation of universal altruism and sustainable shared values.
- Humanity is one and the world is its home. Hence there is a need of a global regulatory body for directional guidance, monitoring and overseeing applications of different digital technologies while each country should prescribe its country specific regulatory compliance requirements.
- Regulators must have more insight to control through oversight.

The perceived trend of many sovereign governments adopting digital solutions for rendering effective and efficient services to citizens will gain further momentum in post pandemic era. Readers are aware of many such measures initiated by Indian Government in last few months for public welfare. The case in point are Arogya Setu App and open invitation for developing a platform for virtual meetings so that Indians can avoid using similar platforms developed by other countries.

Digital platforms for governmental services must be designed with such considerations that bring people at the forefront. Primary considerations for such digital solutions should be citizens' need, simplicity, equality, independence in use, transparency, compliance with legal and regulatory provisions, cost effectiveness, multi-vernacular front end etc. It will be useful to reflect on the guidelines given by OECD[5] to achieve these objectives. Those guidelines can briefly be narrated using the following graphics:



Request readers to decipher the graphic, which is otherwise self-explanatory, by combining two founding pillars at a time to appreciate the resultant impact noted in bullet points.

The present author recommends the following 'Ten Commandments for Digital Transformation with an all-pervasive approach for serving humanity:

- Humanity first,
- Redistribute power,
- Reduce complexities,
- Reimagine consumption,
- Go for creative destruction,
- Manage climate emergency,
- Be accountable without discrimination,
- Fix imbalance of humanity and technology,
- Enhance technology with universal altruism, and
- Let imagination, ethics, and safety lead digital transformation.

Conclusion

The objective of this paper is not spreading a feeling with any semblance of panic. Worries and anxieties never serve any purpose and solve any problem. Need of the hour is to find way outs for survival during the pandemic, revival of both society and economy, and thereafter re-establish confidence amongst all stakeholders of business. Moving ahead with all pervasive growth and prosperity are the other synonymous words for living life meaningfully and mindfully. Efforts of the author will be well served if all associated with digital transformation can serve humanity taking some thoughts from this paper. MA

Note: The author acknowledges contributions of Ms. Rajashree Basu for writing this paper.

Webliography

Only webliographical references have been quoted below for economy of words and space.

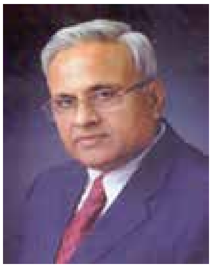
1. *https://www.bbc.com/future/article/20200331-covid-19-how-will-the-coronavirus-change-the-world?ocid=ww.social.link.twitter*
2. *https://www.skyboxsecurity.com/blog/how-will-covid-19-impact-digital-transformation/*
3. *https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/digital-strategy-in-a-time-of-crisis*
4. *https://www.cio.com/article/3533993/doubling-down-on-digital-transformation-during-the-coronavirus-pandemic.html*
5. *http://www.oecd.org/gov/digital-government/Digital-Government-Strategies-Welfare-Service.pdf*

Paritosh.Basu@sbm.nmims.edu

SIMPLICOST - A COST PARTHA SYSTEM FOR MSMEs

Abstract

In this article, the author lobbies for a simplified approach to costing, addressing the requirements of small enterprises, and takes a cue from the India centric approach of the famous "Parta" system. The one time cost sheet for each product, subject to updates on a need basis, tries to address the need for daily performance monitoring of costs and course correction from an engineering based approach.



CMA Mahadevan Gopalakrishnan
Practicing Cost Accountant, Chennai &
Former President (2011-12)
The Institute of Cost Accountants of India

Introduction:

Parta System is quite famous in India, as it was introduced by the Doyen of industry Late G.D.Birla for his group. In a nutshell, "Parta means what will be the return to pocket in net. Parta is a system of establishing return on Investment based on Cost Management." Parta is the financial performance monitoring system for any organization which indicates Profit/ Loss on daily basis. Taking the essence of this concept, the terminology is applied to a practical approach in costing and profitability assessment on a day-to-day basis, andis explored in this article. The term "SIMPLICOST" is borrowed from the publication by Chartered Institute of Management Accountants, UK, which was released way back is 1980s. Combine the same with the Indian Parta System, and we derive SIMPLICOST – A cost parta system. The original Parta System has undergone many derivations some which are production based and Market based. Although it was applied to large industries in the past, when the entire records were manual, the system is no more relevant now, as more granular automated information base is available across large units, leading to more effective control systems. But in case of small entities, cost systems are yet to mature in an automated form like Tally or Zoho for financial accounting. Till such products emerge, the SIMPLICOST showcased in this article can possibly serve the purpose of cost control and management.

Some of the real challenges faced by MSMEs:

By very nature, majority of MSMEs are single person entities, managing the entire managerial and operational aspects of decision-making resting with the owner. In case of new ones, it is promoted by persons well experienced in the line of products mostly by way of being employed in manufacturing or service organisations for a long time, coming out to set up the unit on their own. Sometimes they get some support from their existing organisations, but may not last long or may be able to fulfil only part of the Capacity build up. The first major challenge by the MSME, may be to get additional orders from diverse clients for products that can be produced from the process capabilities established by the entity. Even if the MSME is able to convince the new customer on the technology capability, unless the cost attractiveness is thrown in they may not get the order.

Even in case of established players, by the time, the customer base gets settled, a new challenge arises in terms of barging of a new competitor with more advanced technology resources, which gives him a cost advantage, depleting the customer base of the existing player. Even if everything else goes fine, the production has to be always on specific order basis, where only unique products are outsourced by large customers to MSMEs. With the introduction of JIT, KANBAN etc., the inventory stockpile is shifted from the customer to the vendor, putting pressure on working capital cycle. The large customers provide an annual order, with tentative delivery schedules, which may enable planning the production line up over a longer period. But any change in customer product scheduling at their factory, may upset carefully planned schedules of captive

MSMEs. The stockouts at the customer end, puts penalty on the vendor, in spite of very careful planning by the vendor MSME.

Raw Material being the largest cost component poses another challenge. Since the orders are heterogenous, the input materials are also likewise. If the quantity consumed per production batch is low, the same has to be sourced from retail market at higher costs. In case of reasonable size annual orders, the MSMEs try to source raw material in bulk, so as to gain the cost advantage. Apart from the interest costs, many times, cash locked in stocks lead to business lost due to opportunity to cater to some other customer.

In all these instances, the survival of the MSMEs and the Course correction in case of deviation, has to be almost on a real time basis. A reasonable but simple cost system will enable them to keep track of the activities and the result of the activities and map them against their estimates.

SIMPLICOST - Cost Parta system - The Framework:

As the name implies, the SIMPLICOST is a simple cost system, aimed at providing cost information on the go to the owner/manager of MSME. As provided in the introduction, the Parta system of daily reporting and monitoring is also integrated to provide the basic framework. Although it may not adhere to the legal or official (Accounting) Cost Reporting rules and procedures, it is aimed at providing an approximately real time cost information. Therefore, the Framework of this system is more designed to follow the Business Process Flow rather than the standard language of cost accounting. The basic data gathering starts from the identification of product and the resultant process, even before it is actually produced. As will be stressed many times in this article, the foundation for this framework is based on Engineering Specifications (Product and Process).

SIMPLICOST - Cost Parta system - The Framework: Bill of Materials

Once the product is identified, the Engineering Drawing is made available along with a Bill of Material, based on which the input materials, components, specifications, tools, moulds and other relevant product related data is collated.

SIMPLICOST - Cost Parta system - The Framework: Input Material& Related Costs:

In case of a MSME, the major part of the cost is materials which may approximately vary between 50% to 60% of the selling price, except in case of labour and machine intensive processes. Even in such cases, the materials portion can go down to 40% of the selling price. With the introduction of Kaizen, TPM and other similar productivity quality improvement practices, most of the MSMEs have a good control over material cost, rejects and scrap. As already indicated elsewhere in the article, the best manufacturing practices are transferred from the OEMs in their own interest to keep the supply chain robust. MSMEs usually have a total control over material costs, as they can closely monitor it.

Bought out Components are also input costs and can be classified as input material and related costs. Similarly, any Job Work charges can also be put under the same head or even as a separate one. The idea is to put all material related costs under one cost silo.

SIMPLICOST - Cost Parta system - The Framework: Bill of Activities based on Process Design

Based on the Bill of Material, the Process Design is prepared, which will give the production flow and the activities taken up in converting the input materials to the final output product. Based on the Process Design, the Bill of Activities (may have a different name also), is prepared which provides the details of Machine allotted, time taken for each activity, Labour involved, etc., which are relevant from cost point of view.

SIMPLICOST - Cost Parta system - The Framework: Cost Table of activities for each key production facility:

The standard Machine Hour Rate for each machine is also arrived at based on Power consumed estimate, Fuel consumed estimate (where applicable), labour based on work allocation, either for individual machines or a group of homogenous machines. From this a Cost Table can be prepared which will give quantity, rate and amount parameters for each activity performed on that machine, which is mentioned in the Bill of Activities. The Cycle Time can be the key for the Cost Table. Depreciation is considered separately subsequently.

SIMPLICOST - Cost Parta system - The Framework: Other Product related costs:

There can be many unconventional but relevant cost information, which may have to be fitted into the SIMPLICOST framework. Materiality and significance will be the basic principle on deciding whether this has to be costed separately.

Although it may change from entity to entity some samples are given below:

- **Interest on Material holding period:** - An additional factor, which needs to be factored into is the Interest on Material holding period. As already indicated elsewhere in this article, the one of the key components of the working capital may be the raw material holding period. Since, this may vary from customer to customer, based on the material specification and availability, this is also considered as material related.
- **Variable Material Inward Logistics Costs**: Usually, all the inward logistics costs are pooled together and loaded on to all materials as a percentage. But in case of MSME, the owner would like to identify this separately for different customers based on the prevailing circumstances.
- **Variable Tool, Mould Costs (If material & Significant)**: In some cases, where the tool, mould etc are product specific, with a clear lifetime in terms of no. of pieces per tool, this can be considered.

- **Variable Product Outward Logistics Costs:** Since majority of MSMEs produce products mainly for specific customers, there can be significant difference between customer to customer. The quote to the customer in many cases, includes freight element, which has to be identified and monitored separately.
- **Variable Selling Commission:** The Selling Commission may also vary from customer to customer or from product to product and usually as % of Selling Price or per Peoduct (rarely).
- **Finance Cost- S.Drs based on Credit:** The credit terms definitely vary from customer to customer, and in case of invoice factoring, the factoring charges also have to be identified separately, for correct Quote for the product.

SIMPLICOST - Cost Parta system - The Framework: Varying levels of Contribution:

The normal cost accounting terminology talks about the Contribution approach under the Marginal Costing concept. Under the SIMPLICOST, varying levels of contribution approach is suggested, which will to some extent is aimed to provide meaningful cost information.

- **Level 1 Contribution:**

  The Level 1 Marginal Cost consists of Input Material and Related Costs (Eg.Material, Interest RM Holding, Bought out Components, Jobwork charges, etc.,); Credit for Scrap or Waste recoveries; Packing Material Costs; Process costs based on Bill of Activities; Variable Material Inward Logistics Costs; Variable Product Outward Logistics Costs (If any); Variable Selling Commission; Finance Cost- S.Drs based on Credit; or any other costs related to product.

  The difference between Level 1 Marginal Cost and Selling Price will give the Level 1 Contribution. Level 1 Contribution per Key factor process (per standard cycle time) can provide a priority ranking for comparison between products.

- **Level 2 Contribution:**

  There are lot of activities, which provide support to the main production process. One classic example is Compressor, which provides compressed air to the process machines, where it is required. If a machine process mainly depends on compressed air, then the compressor becomes a consolidated part of the machinery. In many engineering units, there may be many ancillary processes requiring compressed air, which may be served by a common facility. These can be called Production Support facilities Cost.

  In this article, an attempt is being made by bringing a new concept (may be controversial also) of Standby Production Facility Cost-(Non Traceable to Products). As already indicated in the SIMPLICOST framework, the Process cost of Products to be produced is arrived at by identifying the activities thru the Bill of Activities, arriving at the rate from the Cost Table of Activities, arriving at process cost of the product by combining both (BOA & Cycle Time) thru the cost driver route. Thru the above mentioned calculation, what will be arrived at will be the total cycle time of all activities for all the products produced in a given period, by applying the Engineering Process Design template of activities. But there will be a difference between the Available Productive time of each machine and the calculated time as above. The difference can be in terms of cost as well as UOM (Power consumed, Fuel consumed, Labour, etc.,). This is different from the Capacity Utilsation concept which is an integral part of the Cost Accounting system, as it compares the actual machine time used with available. What is indicated in this article is the machine that should be used as per Engineering Specification. Actually, there will be a difference between process design based time that should be used and the actual time the machine has run. This difference is accommodated under the Standby Production Facility Cost. It is not proposed to discuss the "Capacity Utlisation" in this article as it is a very vast topic, with lot of ramifications, specially in the current business scenario.

  We have seen that we have not considered Depreciation of the machine hour rate in the earlier Level 1 Marginal Cost as it is a committed cost. But no product cost will be complete, unless this is also factored into at some level in the cost sheet. This is considered as the next item in the SIMPLICOST framework.

  The above three items which are not directly related to the product but provide vital support to the production process are considered under the Level 2, which can be called as Engineering Cost (Incl. ProductionSupport,Standby Production Facilities Cost, Depreciation of production facilities). As indicated earlier, Level 2 Contribution per Key factor process (per standard cycle time) can provide a priority ranking for comparison between products, at this level.

- **Final Level - Margin:**

  All other expenses, which are not directly related to the product are pooled under a separate cost bucket or cost pool, the allocation of which may be important from the formal cost accounting point of view, but not that much from the SIMPLICOST point of view. These can be by way of Production Overhead-(Excluding Production Support,Standby Production Facility, Depreciation - Other than Production Facility related, General Admin expenses, Marketing Overhead (Other than product related already accounted), Other Finance costs, which are identified under various Heads of Overheads in a formal cost accounting system. This in other words can be the cost pool to which the Level 2 Contribution can be mapped to arrive at final margin.

SIMPLICOST - Cost Parta system - The Framework:

Frequency:

All the above information is prepared as a one time exercise, for each product so that a Product Cost Table also can be prepared. Although the Standard Cost Accounting System, also follows a similar approach, for this article it can be called as "Engineering Costing" as all parameters are based on predefined technical specifications relating to the product and process. For practical purposes, the MSME owner/manager follows a similar approach for arriving at cost for Pricing or Quotation purposes. This is somewhat akin to the "Should Cost", which is becoming a byword in the current scenario. The idea behind this exercise is to correctly identify all product related inputs either in terms of materials, machine, labour, power, fuel, tools, moulds etc., which are clearly identified, and as per technical standards, before the product is produced.

Since the base of the SIMPLICOST system is Batch wise customerwise, there is no need to factor in WIP and FG, which are mainly for period accounting purposes. This enables identifying the actual cost of various direct inputs such as materials, instead of a Weighted Average Approach of any ERP system. This will also enable invoice wise costing, and cumulate it to arrive at customer wise profitability. For reconciling at the end of the year, the opening day batches and the closing day batches only have to be considered. The idea behind this system is not to reconcile with Profit and Loss account on a Rs to Rs basis, but to provide real time cost information (even with a margin of error of 5%) to the owner.

SIMPLICOST-Cost Parta system- Why the word "Parta" :

We have seen in the first para is that one of the key fulcrum of "Parta" is the daily monitoring of performance. Since we have identified all the key variable cost parameters across the functions, under the Level 1 Contribution, this can be taken up as a parameter for daily monitoring of performance. An Illustration of Sample Daily Cost Parta is shown below:

A Daily Cost Parta							
				Rs.in 000s	Rs.in 000s	Rs.in 000s	Rs.in 000s
DD	MM	YYYY		Sale Value of Prodn	Total Level 1 Variable Cost	Level 1 Contribn Margin	Cumulat Margin
1	4	2019	Mon	153.00	118.53	34.47	34.47
2	4	2019	Tue	153.00	118.53	34.47	68.94
3	4	2019	Wed	285.00	229.45	55.55	124.49
4	4	2019	Thu	153.00	118.62	34.38	158.87
5	4	2019	Fri	249.00	199.29	49.71	208.58
6	4	2019	Sat	153.00	118.53	34.47	243.05
7	4	2019	Sun	0.00	0.00	0.00	243.05
8	4	2019	Mon	148.50	114.99	33.51	276.56
9	4	2019	Tue	148.50	114.99	33.51	310.07
10	4	2019	Wed	285.00	229.45	55.55	365.63
11	4	2019	Thu	153.00	118.53	34.47	400.10
12	4	2019	Fri	277.50	222.78	54.72	454.82
13	4	2019	Sat	157.50	122.04	35.47	490.29

tFor the above, The base information will have product wise, daily production represented in the table below:

A Daily Cost Parta				Shifts	Prod-1	Prod-2	Prod-3	Prod-4
					Prodn-Nos			
DD	MM	YYYY			Bellows	Rubber Mount	Dust Cover	Rubber Stopper
1	4	2019	Mon	2	600	900	0	1950
2	4	2019	Tue	2	600	900	0	1950
3	4	2019	Wed	2	600	900	1100	1950
4	4	2019	Thu	2	550	1000	0	1950
5	4	2019	Fri	2	550	1000	800	1950
6	4	2019	Sat	2	600	900	0	1950
7	4	2019	Sun					
8	4	2019	Mon	2	600	900	0	1800
9	4	2019	Tue	2	600	900	0	1800
10	4	2019	Wed	2	600	900	1100	1950
11	4	2019	Thu	2	600	900	0	1950
12	4	2019	Fri	2	650	900	1000	1950
13	4	2019	Sat	2	600	1000	0	1950

The Level 1 Variable cost for the above production is represented in the following table:

				Std.Cost/Piece-Rs			
A Daily Cost Parta				68.25	35.05	100.83	23.61
				Level 1 Variable Cost Cost-Total-Rs			
DD	MM	YYYY		Bellows	Rubber Mount	Dust Cove	Rubber Stopper
1	4	2019	Mon	40948	31548	0	46034
2	4	2019	Tue	40948	31548	0	46034
3	4	2019	Wed	40948	31548	110917	46034
4	4	2019	Thu	37535	35053	0	46034
5	4	2019	Fri	37535	35053	80667	46034
6	4	2019	Sat	40948	31548	0	46034
7	4	2019	Sun	0	0	0	0
8	4	2019	Mon	40948	31548	0	42493
9	4	2019	Tue	40948	31548	0	42493
10	4	2019	Wed	40948	31548	110917	46034
11	4	2019	Thu	40948	31548	0	46034
12	4	2019	Fri	44360	31548	100834	46034
13	4	2019	Sat	40948	35053	0	46034

The Selling Price is mapped in the following table and gives the Sale value of Production:

				Selling Price/Piece-Rs			
A Daily Cost Parta				90.00	45.00	120.00	30.00
				Sale Value of Prodn-Total-Rs			
DD	MM	YYYY		Bellows	Rubber Mount	Dust Cove	Rubber Stopper
1	4	2019	Mon	54000	40500	0	58500
2	4	2019	Tue	54000	40500	0	58500
3	4	2019	Wed	54000	40500	132000	58500
4	4	2019	Thu	49500	45000	0	58500
5	4	2019	Fri	49500	45000	96000	58500
6	4	2019	Sat	54000	40500	0	58500
7	4	2019	Sun	0	0	0	0
8	4	2019	Mon	54000	40500	0	54000
9	4	2019	Tue	54000	40500	0	54000
10	4	2019	Wed	54000	40500	132000	58500
11	4	2019	Thu	54000	40500	0	58500
12	4	2019	Fri	58500	40500	120000	58500
13	4	2019	Sat	54000	45000	0	58500

All the above tables may look meaningless, unless a full fledged cost sheet, from which the key data is collated, is shown, which is given below: The various Levels of Costs and the components are identified in each level in the cost sheet.

		ORDER WISE COST SHEET- BELLOWS					PERIOD- XXXX	
			Qty	Rate	Amount. Rs	Cost/ Kg	Cost/ Unit	Cost/ Unit %
1		PERIOD OF REPORT						
2	A	QUANTITY PRODUCED (KGS)						
	B	QUANTITY PRODUCED (NOS)						
	C	STOCK ADJUSTMENT (FG) (OS-CS)						
	D	QUANTITY SOLD						
3		PRODUCT (ORDER) RELEVANT COSTS						
	A	INPUT MATERIAL & RELATED COSTS						
	(i)	Raw Material						
	(ii)	Interest on Raw Material Holding Period						
	(iii)	Components						
	(iv)	Jobwork charges if any						
		TOTAL INPUT MATERIAL & RELATED COSTS						
	(v)	LESS: CREDIT FOR RECOVERIES (Eg.Scrap)						
		TOTAL INPUT MATERIAL & RELATED COSTS (NET)						
	B	PACKING MATERIAL COST						
	C	TOTAL MATERIAL COST-Input Matl+Pack Matl						
	D	PROCESS COSTS (From process-wise Cost Sheet-Based on Bill of Activities)						
		Mixing						
		Bale Cutting						
		Curing						
		Final Mixing						
		Injection Molding						
		De-flashing/ Trimming						
		Inspection/testing						
		Packing						
		TOTAL PROCESS COSTS						
	E	Variable Material Inward Logistics Costs						
	F	Variable Product Outward Logistics Costs (If any)						
	G	Variable Selling Commission						
	H	Finance Cost- S.Drs based on Credit						
	I	Total Variable Cost (all)						
	J	Level 1 Contribution						
4		OTHER THAN PRODUCT (ORDER) RELEVANT COSTS						
	A	Production Support Faclities Cost						
	B	Standby Production Facility Cost-(Non Traceable to Products)						
	C	Depreciation- Production Facility related						
	D	Total Engineering Std Cost (Incl.PS,SPFC)						
	E	Level 2 Contribution						
5		OTHER THAN PRODUCT & PDN FACILITY RELATED COSTS						
	A	Production Overhead-Excl.PS,SPFC						
	B	Depreciation- Other than Production Facility related						
	C	Total Cost of Production upto Production Unit						
6		COST OF PRODUCTION OF GOODS SOLD						
	A	General Overhead (Admin)						
	B	MARKETING OVERHEAD- Other than Product related (Freight, selling commission)						
	C	Finance Cost- Other than S.Drs based on Credit						
	(i)	Other Finance Costs						
		Total Cost of Production of Goods Sold						
7		Sale Value of Production						
8		Margin						
9		Cash Margin						

Why SIMPLICOST - Cost Parta system is suitable for MSMEs:

Whenever we talk about a reasonable cost system, the professionally qualified cost accountant can ramp up a cost sheet which gives details of material, labour and overhead in granular detail tallying the same with the Profit and loss account. For this he may require data on daily engagement labour machine wise, the labour hours worked, the machine hours worked, production in each process and a host of other details. While the same is possible for a large entity, it will be a luxury for an MSME, who has a skeleton team handling right from loading raw material, attending the machines, to packing and despatch of finished goods to the customer. Even in office, a small team of two, may be handling everything from recording inventory, preparing vouchers, posting in tally, raising invoices as well as attending bank work in the absence of the owner/manager.

But the need for a reasonable cost information is more required for a small entrepreneur than a large entity. In case of later, there are various non monetary performance indicators, which are lead indicators, whenever or wherever some deviations occur. In many cases, the deviations auto start the corrective mechanisms, to bring the process back on line. Such a luxury is far fetched in MSMEs. Therefore, a simple cost system, which is robust for the purpose of Pricing and Quotation as well as for day to day monitoring will serve the purpose of decision making more than adequately.

The scrutiny of Standby Production Facility costs can lead to a significant revelation of the process improvement parameters. Since drill down of the Standby Production Facility costs are available in terms of Non-monetary information such as Power Units, Fuel Ltrs, Manhours worked, thru a Design of Experiments approach, the particular process for optimisation can be attempted as a one time exercise. The advent of CIPs, will ensure that the MSMEs, is able to integrate the process improvement in the process design system itself.

Can SIMPLICOST - Cost Parta system can be automated:

In the current era of IT driven environment and RPA being evolving for any system, this system should also be capable of being automated. The "Should Cost" system, which is gaining ground and already being fully implemented in Government procurement in USA, has many software solutions being marketed. Of particular significance is "Apriori" which quotes "Simulation - Driven Costing Enables Quick Comparison of Design Alternatives. Through an innovative, patented understanding of how product design, materials and manufacturing processes translate into product costs, aPriori is helping leading manufacturing and product companies improve overall financial performance." But surprising all these software are targeting supply chain system, rather than targeting decision making. It is understood, that these talk to CAD, CAM and other Machine Learning data and integrate them into the cost solutions, which provide a myriad of what-if-scenerios.

Making aIT driven cost system on these lines, for MSMEs can definitely improve the cost competitiveness for them. Since this system does not need a daily batchwise (except total products), machine wiseactual data, the monitoring periodicity can be decided based on the cumulative contribution trend. An automated cost table can provide a cost dash board to the owner/manager on the go when he is discussing with the probable customer. In addition, he can also plan the stiff cost reduction targets sought by the customers, as a Cost Pareto, can lead him to laggard processes for either cost optimisation or even outsourcing them to a cheaper source.

Due to paucity of space, the topic on control systems emanating from the SIMPLICOST is not discussed here, but can be covered in the subsequent article. But since granular summarised information in terms of resources used can be available, a comparison of engineering based consumption summary and actual can enable identification significant deviations and go after them with Continuous Improvement Strategies.

Information Requirement for a SIMPLICOST - A SUMMARY

The idea behind the SIMPLICOST model is to minimise the requirement of day to day information to a bare minimum and lay the foundation on what is already normally done for business purposes. In this illustrative example, a MSME which is catering to unique products to large OEMs is considered as a model.

The business process flow of the entity can be put in following steps: (a sample)

- Identifying the broad range of products which can be supplied to the OEM.
- Negotiate and agree on a list of products, which the OEM agrees to purchase from the MSME.
- Get the Product Design/Prototype/Engineering Drawing from the customer.
- In case of New Products this can be a long drawn process ending with sample approval. But for the current article,it is assumed that an existing running product in vogue is ordered.
- Prepare the Bill of Material (for each batch) and get the same approved by the OEM.

- Prepare a Process Flow Chart or (Bill of Activities) for each batch. It will contain
  - » Input materials QTY with UOM and Output QTY with UOM. Including packing
  - » Planned Scrap and Rejects from the process (for each process, if applicable)
  - » Material specification to be issued.
  - » List of activities right from the issue of Materials to the final packing
  - » Process Flow of Machines identified with setup time, process time for each machine
  - » In case of manual process the cycle time of each process with the no. of labour engaged.
- Prepare the planned Machine Hour Ratetaking into account Estimated Power, Fuel, labour as per Machine specifications and work allocation as applicable. In case of machines with multiple activities, the MHR for each activity can be arrived at.
- Prepare the planned Labour Hour Rate
- In case of Job work operations piece rate of each component for each jobwork

Apart from the above, the process support facilities (such as compressors etc.) are directly related to the process. The other overheads of fixed and semi fixed nature or period costs including depreciation, can be accumulated in a single or multiple silos as per broad policy of the owner manager.

The design of the cost sheet has to be tailored to suit the practical requirement of the owner manager and give meaningful information to him for decision making. For this, it is Ok, of the format of the cost sheet is retuned to suit his requirement.

Conclusion:

Although the SIMPLICOST system, shifts the onus of Cost Management system to the owner/manager, it is based on the technical foundation of how product ismade and the processes involved in it. Although this system does not provide "accurate costs" as a cost accountant may think, as he primarily looks at reconciling with accounting system, it provides a practical control measure to the owner/ manager in terms of resources used on a daily basis. To quote Vangemersch Richard, Alexander Hamilton Church (New York: garland Publishing.Inc.1988 P.71 " Another cause of trouble is that the design of a cost system may be approached from two opposite view points – that of the commercial accountant, who thinks in ledger accounts and that of the shop staff, who think in terms of hours, men and materials. The accountant thinks of details as troublesome necessity; the shop staff knows that the detail is the life blood of the cost system". In the model presented in this article, the margins are an indicator which acts as a lead or lag indicator on a daily basis (although in a summarised form, but with drill down details available) to take the reins and guide the business back into rail from the next day itself. The model although not be a final template as the design is for a particular sector. But the principle behind the entire approach can be made applicable to any sector, with suitable modifications.

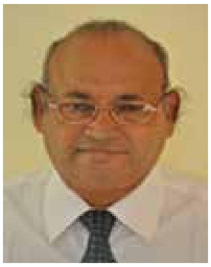
Ultimately, a CMA can play an effective role, if he becomes a business facilitator, looking at the cost system from the owner/ manager perspective and dovetail it to suit his decision making needs. This requires a technical centric approach rather than a ledger centric approach. Any cost system is like a "Rubik's Cube" which can produce as many facets as the user looks for. Many leading corporate houses have already started creating Business Analyst Teams, consists of technical experts, management accountants, management graduates, data analysts and supply chain specialists, who provide a 360 degree view of cost in terms of monetary and non-monetary details in drill down and drill up dashboards. The information base created by them, are available to all decision makers across the organisation, with the mandate for providing solutions under multipronged What-if scenarios. In the current tough times, when businesses think of downsizing the accounting teams, will be the first to face the axe, as the finance is more amenable to RPA route than performance reporting. But at the same time, a major demand will arise from operational teams, who will like to have a cost expert team to assist them in day-to-day (or even shiftwise) cost opritmisation. This way a CMA can provide a value adding role to the management, for which his course is designed.The SIMPLICOST model showcased in this article looks at costs from this perspective, to benefit the MSMEs. MA

References:

1. *SIMPLICOST: Publication by Chartered Institute of Management Accountants, UK (Date unknown)*
2. *https://www.topcafirms.com/white-paper/parta-system-to-lean-management-accounting-by-dr-nn-sengupta*
3. *Capacity Measurement and Improvement: A manager's guide to evaluating and optimizing Capacity Productivity – Consortium of Advanced Management International, 1997 – A CAM-I publication. PP.20 Chapter. 2*
4. *Vangemersch Richard, Alexander Hamilton Church (New York: garland Publishing.Inc.1988 P.71*
5. *https://www.apriori.com/product/function/ - Simulation-Driven Costing Enables Quick Comparison of Design Alternatives.*

mgopalak@gmail.com

COVID LEARNINGS FROM THE COST BEHAVIOUR OF INDIAN INDUSTRY



CMA (Dr.) Sreehari Chava
Practicing Cost Accountant
Nagpur

Abstract

The article ventures to perceive the trend of revenue & cost behaviour of Indian Industry on the basis of the consolidated financial results of non-government non-financial public limited companies for the years from 2009-10 to 2018-19. Thereafter, an attempt is made to project the indicative performance of the Indian Industry at various levels of feasible capacity.

The article infers that the Break Even Point of the Indian Industry lies at 70.00% of the existing feasible capacity, and at a value of production of Rs. 42.00 lakh crores. Impliedly, this construes to be the point of survival for the Indian Industry.

The article moves on to suggest element wise action points considered vital in maintaining the tempo of survival during COVID trance and due revival thereafter. The suggestions, if taken forward in letter and spirit, are bound to facilitate achievement of significant productivity improvements and ample cost reductions beyond the simple perceptions.

Indian Industry has always been in the forefront in its contribution towards wealth creation, economic development and providing gainful employment. The significance of its exclusive role can be gauged by the single fact that major contribution towards the Gross Domestic Product (GDP) of the secondary sector comes up from the value added output of Indian Industry.

We, therefore, draw the vital inference that the Break Even Point of the Indian Industry lies at 70.00% of the existing feasible capacity, and at a value of production of Rs. 42.00 lakh crores.

Post COVID-2019, the Indian Industry has been facing several challenges. The most important challenge, however, would be the unutilized capacities and idle resources.

Reserve Bank of India keeps on publishing the consolidated financial results of non-government non-financial public limited companies from time to time. We, venture to utilise the said consolidation for the years from 2009-10 to 2018-19 to perceive the trend of revenue & cost behaviour and to project, there from, the indicative performance of Indian Industry at various levels of feasible capacity.

The results published by RBI consists of the consolidation of the financials of 3,041 companies for the financial year 2009-10; 3,014 companies for 2010-11, 2011-12 and 2012-2013; 19,062 companies for 2013-14, 2014-15 and 2015-16; and 16,045 companies for the years 2016-17, 2017-18 and 2018-19.The aggregate sale for the selected 16,045 companies is reported to be of Rs.56.37 lakh crores for 2018-19. Thus, the size and quantum of the consolidation deems it to be the biggest possible sample that would throw up the macro behaviour of Indian Industry.

To start with a comparative financial statement has been prepared element-wise for the ten year period from 2009-10 to 2018-19. Thereafter, weighted averages have been computed for each of the elements by assigning a weight of 10 for the figures of 2018-19, 9 for 2017-18, …, and 1 for 2009-10. In the second step, the value of production for each of these years has been equated to 100 and values relating to each of the elements have been converted into a percentage expressed with reference to the value of production. Standard deviation and coefficient of variation have been worked out for these percentages for the ten year period from 2009-10 to 2018-19.

Thereafter, degree of variability of each of the elements has been assessed taking into account the intrinsic characteristics of the element, the observed trend and the coefficient of variation of the percentages. And finally, revenues and costs have been segregated into variable elements (expressed as a percentage to the value of production) and fixed elements (expressed in Rs. Crores per annum).

The feasible value of production for this chosen macro model is assumed to be Rs.60.00 lakh crores for 2020-21 and cost behaviour parameters are assessed accordingly. The revenue and cost behaviour, so assessed, for a projected value of production of sixty lakh crores of rupees per annum is summerised in table 1 that follows:

Table 1: Assessed Revenue & Cost Behaviour of Indian Industry

Serial	Element	Variable Element as % to Value of Production	Fixed Element (Rs.Crores per annum)
I	Other Income	3.00	60,000
II	Raw Material & Components	56.00	
III	Conversion Expenses (excluding factor costs)	8.55	6,50,000
IV	Factor Costs		
1	Rent	0.14	43,000
2	Employee Cost	0.88	4,50,000
3	Depreciation		2,24,000
4	Interest	1.53	2,00,000
5	Sub Total (1..4)	2.55	9,17,000
V	Conversion Cost (III + IV)	11.10	15,67,000
VI	Operating Cost (II + V)	67.10	15,67,000
VII	Net Total (VI – I)	64.10	15,07,000
VIII	Taxation	25% of Profit Before Tax	
IX	Dividend	33.33% of Profit After Tax	

It may be relevant to highlight, here, that 'Raw Materials & Components' are considered as totally variable by character and 'Depreciation' is considered as fixed by nature. The other income comprises dividends, interests and rent thereby giving rise to an assessment of Rs.60,000/- crores of fixed income every year.

The fixed element of Rs.6.50 lakh crores in conversion expenses includes general and other expenses to the extent of Rs.6.20 lakh crores. While segregating the costs into variable and fixed, the degree of variability is assessed to be 15% (i.e. 85% being fixed) in relation to rent and 10% (i.e. 90% being fixed) in relation to employee cost. Interest on short term borrowings, being in the nature of working capital funds, is assumed to be variable and interest on long term borrowings is considered as a fixed burden.

Accordingly, at the macro scenario for a capacity level of Rs.60.00 lakhs crores of value of production, the raw material cost of Indian Industry is observed to compute to 56.00% of the value of production; conversion cost (excluding factor costs) consists of 8.55% of the value of production as variable cost and Rs.6.50 lakh crores as fixed costs; factor costs amount to 2.55% of the value of production as variable cost and Rs.9.17 lakh crores as fixed costs; and the conversion cost totals to 11.10% of the value of production as variable cost and Rs.15.67 lakh crores as fixed cost.

The operating cost, thus, aggregates to 67.10% of the value of production as variable component and Rs.15.67 lakh crores as fixed component. After taking the element of other income into account the net total of the variable costs work out to 64.10% of the VOP and a net total of the fixed costs to Rs. 15.07 lakh crores per annum.

On the basis of the above assessed behaviour, the sensitivity of the performance of Indian Industry for various levels capacity may be worked out as detailed in table 2.

Table 2: Sensitivity of the Performance of Indian Industry

Serial	Element	Projections (Rs.Lakh Crores)			
I	Feasible Capacity (%)	100.00	90.00	80.00	70.00
II	Throughput Income (TI)				
1	Value of Production	60.00	54.00	48.00	42.00
2	Raw Material & Components	33.60	30.24	26.88	23.52
3	Throughput Margin (1-2)	26.40	23.76	21.12	18.48
4	Other Income	2.40	2.22	2.04	1.86
5	Throughput Income (3+4)	28.80	25.98	23.16	20.34
III	Conversion Cost	22.33	21.66	21.00	20.33
IV	Retained Profit				
1	Profit Before Tax	6.47	4.32	2.16	0.01
2	Taxation	1.62	1.08	0.54	-
3	Profit After Tax	4.85	3.24	1.62	0.01
4	Dividend	1.60	1.07	0.54	-
5	Retained Profit	3.25	2.17	1.08	0.01
V	As percentage to Value of Production				
1	*Throughput Income*	*48.00*	*48.11*	*48.25*	*48.43*
2	*Conversion Cost*	*37.22*	*40.12*	*43.75*	*48.41*
3	*Profit Before Tax*	*10.78*	*7.99*	*4.50*	*0.02*
4	*Retained Profit*	*5.42*	*4.02*	*2.26*	*0.01*

It is considered relevant to repeat that capacity levels considered in the model reflect the percentages with reference to the practical and feasible capacity that has been already achieved, which may be much lower than the installed capacity.

The computations are self explanatory. Specific attention is drawn to item V of the table which reflects the behaviour of throughput income, conversion cost, profit before tax and retained profit when expressed as percentage to value of production. Percentage of throughput income keeps on increasing at lower levels of capacity because of the impact of the fixed element of other income. Similar trend in conversion cost is observed due to the impact of fixed costs. However, profit before tax and retained profit have been falling down on account of the net impact on net total cost.

The computations reveal that the Indian Industry that has been slated to post a PBT of 10.78% of VOP at a feasible level of Rs.60.00 lakh crores (100% capacity) is likely to slip down to 7.99% of PBT at Rs. 54.00 lakh crores (90% capacity); to 4.50% of PBT at Rs. 48.00 lakh crores (80% capacity); and finally to an insignificant 0.01% at Rs. 42.00 lakh crores (70.00% capacity).

We, therefore, draw the vital inference that the Break Even Point of the Indian Industry lies at 70.00% of the existing feasible capacity, and at a value of production of Rs. 42.00 lakh crores. Impliedly, this construes to be the point of survival for the Indian Industry.

As such, all out efforts shall be directed towards ensuring that the level of production of the Indian Industry does not fall below the said seventy percent during the COVID crisis. At the same time, efforts are also warranted in the direction of converting some of the fixed elements into variable elements whereby the BEP can be pushed down to a lower level and the viability improved. Discussed below are element wise action points considered vital in maintaining the tempo of survival during COVID trance and due revival thereafter.

Incessant Search for Other Income: Other Income can add up to the revenue kitty forever. Enterprising entrepreneurs are always in search of more and more sources of propping up the other income. For example, when pushed to the wall Indian Railways came up with several ideas such as renting out the vacant spaces alongside rail tracks for public advertisements, airlines started selling snacks aboard, and so on. From a cost management perspective, any additional inflows into other income lead to a corresponding reduction in total costs. The search for reinventing the sources of other income shall, therefore, continue in an incessant manner.

Sustainable Raw Material Bucket: Raw material is the basic element of cost that accounts for the maximum quantum of the lot. Our model assesses raw material and components to be in the order of 56.00% of the value of production. Apart from various other scientific methods of cost control, target costing needs specific adoption and emphasis in the Indian context.

It is desirable to work back the raw material sustainability from the value of production and target a viable raw material bucket. Raw material bucket, here, refers to the excess of value of production over the aggregate of conversion cost and opportunity cost of equity. The relevant formula reads as:

Raw Material Bucket	=	{(Value of Production) – (Conversion Cost + Opportunity Cost of Equity)}

The desired and viable target is that the raw material bucket shall always be greater than or equal to raw material cost. The fundamental equation may, thus, be formulated as:

Raw Material Bucket	≥	Raw Material Cost

The performing enterprise would always ensure that the raw material bucket is higher than the raw material cost.

Zero Based Criterion for Conversion Expenses: Fixed cost of Rs.6.50 lakh crores that forms part of the conversion expenses is a substantial chunk by all means. In general, controls are exercised on fixed costs by means of budgetary appropriations. We suggest that the exercise may be taken forward to evaluate each and every element of fixed expenses on the precincts of 'Zero Based Criterion'.

Could it be local conveyance or external travel; printing and stationery or any means of communication; administrative meet or a professional dinner; an advertisement or an exhibition; consultancy or legal opinion; - everything adds up to the cost and hence needs concurrent evaluation as to the need and inevitability. It is worth evolving zero based evaluation as a work culture across the organisation. The emphasis is on the traditional saying: 'Rupee saved is Rupee earned'.

Pragmatic Human Resource Management: Employable human resources are perceived as the biggest strength of India. However, ninety percent of the employee cost has been observed to remain fixed, in the context of Indian industry, irrespective of the level of utilisation of capacity. Many a time, permanent employment has turned out to be an unviable burden on the industry. For instance, sugar industry operates for a maximum period of six months in a year whereas all the employees are to be paid in full for all the twelve months; and so is the case in many other agro processing industries. In our model the fixed element of employee cost is assessed at a gigantic Rs.4.50 lakh crores per annum.

One feasible way to minimize the burden could be opting for short term flexible employment in line with the capacity utilisation. Flexible Employments are turning out to be the order of the day. The policy makers have already mooted considerable reforms in this direction which warrant expeditious finalization and implementation. The governing principle shall be not to burden the employer for unproductive (idle) human resources.

It is also desirable to put due emphasis on the fact that employees and workers are the invaluable human resources in the journey of enterprising. Monetary and non-monetary incentives do work wonders in enhancing the productivity of employees. Our suggestion, in this context, is that some quantum, say 20%, of employee remuneration may be paid through the means of stock pools whereby bonding between the employees and employers are strengthened.

Further, skill-set scarcity and avoidable migrations of labour can be prevented by developing and augmenting the skills of local populace. It goes without saying that pragmatism shall embrace the entire sphere of human resource management.

Financial Re-engineering: Long term borrowings of the Indian Industry account for nearly two thirds of its total borrowings which culminate into a significant element of fixed interest burden every year. It may be recalled that our model has envisaged Rs.2.00 lakh crores as the fixed element of interest cost.

A considered proposition to minimize this burden could be converting the term lendings into preferential equity by the banks and financial institutions. Such a conversion would not only ensure minimum preferential return to the lenders, but also would bring down the interest burden of the industry considerably. For instance, if 8% preferential equity can replace 12% market borrowings, the interest burden would reduce by one thirds.

Specified cover period, for example inventory of less than two months old and receivables of less than three months, is the primary criterion for the banks to disburse working capital limits. COVID has brought the entire production activity to a standstill and the movements in the inventories and receivables have slowed down drastically. Extending the cover period to a logical level, say six months, would facilitate the industry to avail the credit limits uninterrupted and help easing the liquidity.

Another option, here, would be to convert a portion of the 'working capital limits' into 'working capital term loan'. The wisdom is that financial reengineering shall hold sway over conservative lending.

Digitalisation: Digitalisation is the need of the hour. Digitalisation enables recording of each and every transaction, facilitates prevention of revenue leakages & seepages, simplifies management controls, aids real time accounting, paves way for lean administration, improves the business processes, and so many. In short, digitalisation helps effective cost containments, cost reductions and productivity improvements.

The adoption of the concept of 'work from home' during the COVID days is a glaring example of the advantages of digitalization. The returns from digitalization are bound to be quite huge in comparison to the investments needed. (Policy makers shall appreciate the fact that the tax avoidance would slip into history the moment 100% digitalisation is achieved in the country.)

Confidence Boosters for Stakeholders: Any downswing in the performance brings in the element of suspicion and weakens the confidence reposed by several segments of stakeholders such as shareholders (other than promoters), employees, government, vendors, etc. It, therefore, becomes essential to retain the stakeholder confidence through turf and tide.

Some of the measures that may go a long way in strengthening the confidence of stakeholders include:

(i). Declaration of minimum dividend, commensurate with savings deposit rate, every year to non-promoter shareholders which would prompt flow of more equity funds into the industry.

(ii). Appointment of auditors by an external agency like Comptroller and Auditor General (as has been existing in banking sector for several decades) which would further eliminate the element of suspicion in the true and fair view of the corporate financial and other reports.

(iii). Being more transparent by reporting in annual and periodical reports about various government incentives such as subsidies, tax concessions, etc. availed by the organization. (A relevant observation in this connection is that direct tax incentives are profit based whereas indirect tax incentives are period and turnover based. It is desirable that all the incentives shall be linked, by the regulators, to profitable performance whereby level playing field can be ensured between performers and nonperformers.)

(iv). Inclusion of the credit rating of the firm in annual and periodical reports whereby stakeholders are enlightened about the credit worthiness of the entity.

Imagine a simple situation whereby other income, of the projected model, can be increased by Rs.20,000/- crores and the fixed costs can be reduced by 5% (15,67,000 x 5% = Rs.78,350 crores). The consequential benefits are:

(i). Net total cost would be down by Rs.98,350 crores (i.e. 20,000 + 78,350),

(ii). PBT at Rs.60.00 lakh crores of VOP will go up to 12.42% (from the projected level of 10.78%), and

(iii). The BEP would be pushed down to the capacity level of 65.50% (VOP level of Rs.39.30 lakh crores).

The suggestions, if taken forward in letter and spirit, are bound to facilitate achievement of significant productivity improvements and ample cost reductions beyond the simple perceptions. However, some of these thoughts, to be taken forward towards effective implementation, may warrant policy reforms. It is, therefore, essential that necessary policy changes be initiated in this direction by the government agencies wherever necessary.

Obviously, the learnings are worth implementation not only in tackling the COVID induced unutilized capacities and idle resources but even otherwise too! MA

References

1. *Finances of Non-Government Non-financial (NGNF) Public Limited Companies, 2018-19: Data Release on 04.05.2020 by Reserve Bank of India*

2. *Interactive research with the professional team of 'Ace Stratagem'*

sreeharichava@yahoo.co.in

EMERGING TRENDS IN INTERNAL AUDITING & GOOD GOVERNANCE

CMA Krishnendu Prasad Ray
Retd. General Manager (Finance),
Head of Internal Control & Audit
NEEPCO Ltd
Shillong

Dr. Gour Gopal Banik
Associate Professor
Department of Accountancy
Gauhati Commerce College
Guwahati

Abstract

Auditing generally refers to the examination of books of accounts with relevant vouchers and documents so as to enable the Auditor to opine whether the Balance Sheet gives a true and fair view of the financial position of the organization and whether the Profit and Loss Account gives a true and fair view of its profitability. This is applicable to both Internal as well as External audits. But with passage of time and the business world getting more and more complex in nature and more and more gigantic in size, the scope and the functions of Auditors have also multiplied and become more extensive and more critical than ever before. There is no denying the fact that in comparison to External Auditor, the Internal Auditor, by the nature of his/her duties and responsibilities, happens to devote more time to the organization and remains more attached to the same. The emerging trends of the internal audit signify that the success of the governance of any organization depends upon the functioning and role of the Internal Auditor to a great extent.

This paper is a humble endeavor of the authors to analyze as to how the Internal Auditor occupies a significant place in the governance of an organization.

Introduction:

The Internal Audit plays a very crucial role in the corporate sectors - be it manufacturing and non-manufacturing. It also renders valuable services to various Government departments as well. Internal Auditors offer constructive advices in the following areas:

a. Fixing the responsibilities of the managers and also advise the top management in identifying the various ways for achieving the objectives of the organization in a cost effective way and without compromising quality etc.
b. Cost reduction, cost control and making the organization cost effective in all respects and thereby, developing an overall sense of cost-consciousness in the organization.
c. Budgeting and forecasting, standardization of cost of products and services etc.
d. Identifying the areas that may invite fines & penalties and contractual disputes / conflicts; legal hazards etc in future and guiding the management in building up a system to plug off the loopholes.
e. Evaluating the emerging technologies, analyzing the opportunities and various global issues.
f. Assessing, analyzing and managing the risks, ethics, quality, economy, and efficiency and also assuring that the control measures are adequate in order to mitigate the risks.
g. Providing adequate information and opinions with clarity and accuracy that provide a broad perspective on the organization.
h. Efficiency improvement plan, decision making process, performance-management systems, financial reporting and control etc so as to assist the Management in the process of formulation and implementation of the plans and policies,
i. Achieving the organization's goals and objectives by strengthening internal controls and organizational governance.

In the Companies Act, 2013 as well as by the enactment of CARO 2020, the role of Internal Auditors has been enhanced to a greater extent. In the present economic scenario, the organization focused the need of expert knowledge in the field of cost control, cost reduction; time value of money and thus an Internal Auditor plays a very important role in managing the affairs of the organisation.

The internal auditor should be a person having expert knowledge in the various techniques of managing Cost and he/she should be a strategic leader in the corporate world in achieving the goals of maximization of profitability, effectiveness of the input resources and that of growth in different favourable dimensions. There is no denying the fact that the person with expertise in Cost management are in high demand in almost all areas of both public and private sectors – be it manufacturing or Non-manufacturing i.e. banking, research and development, education and training, service sectors as well as public utility concerns etc. In the present competitive economy, without cost consciousness, cost effectiveness and cost control, no organization can successfully survive in the long run; and in this respect, internal auditing backed by continuous innovations can act as a monitoring device. As such, in the present context, the CMA's are the most sought after choice for being appointed as the Internal Auditors although other professionals as defined in the Section 138(1) of the Companies Act, 2013 are not being ignored here.

Internal Auditor & Good Governance:

Good governance is always an indispensable ingredient for the successful operation of not only a corporate organization; but also of a non-corporate organization. Along with the increasing need of transparency in the corporate sector, the enactment of Companies Act, 2013 and its various amendments recognize the Internal Auditor as a prime factor in the corporate reporting and disclosure. The Internal Auditor plays a very crucial role in ensuring transparency in various management reporting as well as strengthening the confidence level between the Management and the Shareholders. The Internal Auditor helps in identifying the deviations from the standards set and detecting the loopholes in the transactions. The Internal Auditor verifies the various compliances, process, contracts, agreements etc so as to avoid the hefty penalties or fines etc. As such, there is no denying the fact that Internal Auditor and good governance are complimentary to each other. The Internal Auditor plays a positive role in developing a strong structure of good governance. The present complex Corporate Governance is crippled without the advisory role of the Internal Auditor.

Independence of Internal Auditor:

The concept of independence of auditor requires that the auditor should conduct the audit work freely and with integrity and objectivity. Independence of the Internal Auditor means that he/she is free from all sort of biasness and undue influence or conflict of interest from any of the parties. Here, independence refers to the independence of internal or external auditor from the parties who might have financial or other interest in the company whose accounts are being audited. It is independence by which the auditor can perform his/her duty freely and in an objective manner. There are several types of threats to the auditor's independence such as, (1) Self-interest threat (2) Familiarity threat (3) Self-review threat (4) The trust threat (5) Intimidation threat (6) Undue influence threats (7) Advocacy threat etc. All such different types of threats stand in the way of auditor's independence.

It is a big challenge not only to the CEOs of organizations but also to the Government as to how the freedom of the Internal Auditors would be maintained. This is very much connected with the survival of the organizations, the Growth of corporate sectors as well as the various Departments of the Government. Mere enactment of laws and rules will not help; rather the monitoring of the system will be much effective. Apart from being independent, the Internal Auditor must have all round knowledge in the organization starting from the manufacturing/ operational activities to the administrative roles.

It would be wise to choose the internal auditor preferably from finance professionals having the back ground of legal education so that he/she is able to study the legal / administrative matters as well without necessarily being dependent on any other employee of the organization or any other person whosoever. The Internal Auditor must be qualified and capable enough to handle the organizational environment and present the status of the organization to the Management with proper dimension so as to help the management in decision making process. At the same time, the Management must respond to the advices and directives of the Internal Auditor for the sake of the organizational welfare.

Internal Auditor and the Companies Act, 2013:

As per section 138 (1) of the Companies Act, 2013, "*Such class or classes of companies as may be prescribed shall be required to appoint an internal auditor, who shall either be a chartered accountant or a cost accountant, or such other professional as may be decided by the Board to conduct internal audit of the functions and activities of the company*."

The following class of companies shall be required to appoint an Internal Auditor or a firm of Internal Auditors:

(a) Every Listed company,

(b) Every unlisted Public company,

(c) Every private company.

So far as Listed Companies are concerned, the appointment of Internal Auditor is mandatory.

But in case of the other two types of companies, there are some conditions which can be enlisted as in the following table. The appointment of internal auditor is mandatory in these types of companies if either of the following conditions is fulfilled:

Criteria	Unlisted Public Companies	Private Companies
Paid up Share Capital	Paid up share Capital is rupees fifty crore or more during the preceding financial year; or	Not a determining Factor
Turnover	Turnover is two rupees hundred crore or more during the preceding financial year; or	Turnover is rupees two hundred crore or more during the preceding financial year; or
Outstanding Loans or borrowings from banks or public financial institutions	Outstanding loans or borrowings from banks or public financial institutions are one rupees hundred crore or more at any point of time during the preceding financial year; or	Outstanding loans or borrowings from banks or public financial institutions are rupees one hundred crore or more at any point of time during the preceding financial year
Outstanding Deposits	Outstanding deposits are rupees twenty five crore or more at any point of time during the preceding financial year.	Not a determining Factor

The Audit Committee of the company or the Board, in consultation with the Internal Auditor, shall determine the scope, functioning, periodicity and methodology for conducting the internal audit. Based on the structure of the organization, the entire internal audit work may be grouped into four or five segments, such as (i) Contracts & Procurements, (ii) Operational standards / practices, (iii) Establishment & Administration, (iv) Review of orders/ agreements/MOU's & Compliances and (v) Efficiency study. This is necessary for ensuring that a mechanism is designed to regularly review and assess the internal control system and identify the weaknesses, if any, existing therein and accordingly, develop and implement suitable measures for improvement. There is no denying the fact that internal audit plays a crucial role in the corporate governance framework and thereby, ensures protection to the interest of investors in particular and that of the public in general.

Necessity of Internal Audit in the present Corporate Structure:

Considering its inevitable relevance and indispensability, the internal audit function has been made compulsory as per the Companies Act, 2013. The internal audit helps in the proper compliances with relevant laws and regulations which, in turn, helps the management to minimize its anxieties and ensures piece of mind and assurance to the stakeholders. The internal auditor is, in fact, essential for efficient and effective operation of the business enterprise, in relation to compliances and carrying out the responsibilities faster. This also helps the external auditors in making their reports. A well structured internal audit plan / program & a regular internal audit system help in building up a successful client relationship.

So far as cyber security and other modern technologies are concerned, the issues of anti-bribery and anti-corruption have also become top consideration for internal audit. Internal audit provides independent assurance that an organization's internal control system is effective which is essential for good governance. Unlike external auditors, the internal auditors look beyond financial risks and financial statements to consider wider issues such as reputation and growth of the organization and thus help the organization to achieve success. Apart from the above, the Internal Auditor act as a full time advisor to the management even during the distressed situation and also advises the management on the ways as to how to come out of the red situation.

The external auditors are outside the organization. They hardly have any responsibility for improvement in the organization; their duties are limited by the statutes, they have the duty only to report the problems. But the responsibilities and duties of the internal auditors are vast and not limited by the statutes; they examine all records and document in depth, identify the problems and suggest the remedial measures. Accordingly, they report to the management and provide more scope for monitoring, compliance and organizational growth. They advise not only in connection with the profit maximization but also in the maximum utilization of the inputs available.

Internal auditors have the fundamental duty of the improvement plan in a cost effective manner. External auditor primarily concentrates on the financial reports and risks connected therewith; whereas, internal auditor has to cover all categories of risks, their management and reporting. Internal auditor can also act as an advisor and coach to various levels of employees, managers as well as even the board of directors for the overall improvement of the organization.

Along with the executive management, the non-executive management as well as the external auditors, the internal auditors occupy a significant position in the top level governance of any organization. Hence, no organization can overlook the importance of internal audit in the present-day complex environment.

Effectiveness of Internal Audit:

The effectiveness of internal audit depends on various factors, such as, (i) expected standards of the audit quality, (ii) Quality of the people engaged, (iii) Quality of the audit report, (iv) Quality of services rendered by the auditor and (v) the attitudes of the Management.

If the internal auditor acts merely as a compliance authority having no independent decision making power, then such internal audit shall have no effectiveness at all. The internal auditor must be free from all biasness and influences. His position should be a neutral one at all circumstances. Otherwise, the main purpose of audit itself will be killed. In order to enhance the effectiveness of internal audit, the following steps may be suggested:

i. The internal audit report should be submitted to the top management.

ii. Transparent audit methodology should be framed.

iii. Independence and objectivity in the internal audit should be ensured.

iv. Co-ordination and co-operation between internal audit department and all other departments should be developed.

v. The internal control and internal check systems of the organization should be made full-proof and effective.

vi. The organization should be made system-dependent instead of being person-dependent.

vii. Deficiencies, if any, in the system should be identified and corrective action should be taken instantly.

viii. Accountability at all levels should be increased.

ix. High level quality services should be ensured in all areas.

x. Data based technology should be introduced in order to achieve better performances,

Besides, the above points, it essential for the Internal Auditor to have thorough practical knowledge of Commercial Laws, Industrial Laws, Information Technology (IT) Laws, Project Management / Strategic Management and above all, Cost and Management Accounting apart from Financial Accounting. As per section 138 (1) of the Companies Act, 2013, an internal auditor, may be *either a chartered accountant or a cost accountant, or such other professional as may be decided by the Board*. It may be noted here that the rules have not defined the term, "*such other professional"*. If the internal auditor of the company is appointed from *"such other professional as may be decided by the Board*" and if such internal auditor does not have thorough practical knowledge of the above mentioned subjects, then there is every possibility of the very purpose of the internal audit being neglected. An internal auditor, well-versed in the knowledge of Cost and Management Accounting among other subjects, can help the organization in performance and cost management. She/he can better act as a watchdog of efficiency, effectiveness and compliance and as such, the entire operational activities of the organization can be thoroughly diagnosed. Such diagnosis can definitely help in developing a sense of cost-consciousness among all levels of Management and the employees which will ultimately result in value addition to the organization.

CARO 2020:

The Ministry of Corporate Affairs, Govt. of India, has announced a new format of statutory audits of Companies on 25 February, 2020 which is known as **Companies (Auditor's Report) Order**, **2020** (CARO 2020). The CARO 2020 replaces the earlier order under **Companies (Auditor's Report) Order, 2016**. The MCA has released notified CARO, 2020 which is applicable for audit of financial statements of eligible companies for the financial years commencing on or after the 1st April, 2019. The aim of **CARO 2020** is to enhance the overall quality of the company auditor's reporting. But there are some criticisms from certain corners that the new **CARO 2020** will make the audit report lengthier and more complex.

Apart from cash losses, resignation of statutory auditors, uncertainty of the company's capability to meet its liabilities, transfer of unspent CSR amount to the fund specified in Schedule VII, and qualifications or adverse remarks by auditors in the CARO reports of companies included in the consolidated financial statements, the **CARO 2020** specifies reporting on internal audit system also. The auditors must also report on compliance with the RBI directives and the provisions of the Companies Act, 2013.

Besides, there is also a requirement of comprehensive reporting for the default in the repayment of loans and other borrowings, or in the payment of interest. This necessitates the auditors to spend more time and resources so as to develop new skills and innovations for maintaining the required standards. Thus, the CARO 2020 increases the risk taken by auditors. The role and responsibilities of Internal Auditors have been increased in CARO 2020. At the same time, it is advisable that the power and independence of

Internal Auditor should also be increased which, in turn, will contribute to the advantages of the statutory auditors as well as the Management. The suggestions and advices of the Internal Auditor must be given due importance. This will definitely lead to efficient Governance. Transparency in all major management decisions is just a *sine qua non* for good governance.

The CARO 2020 expects that the Statutory Auditors should examine the entire operating activities in depth throughout the financial year under audit. This may be difficult unless the Internal Auditor is given enough autonomy to carry out the additional management responsibilities passed on to him/her. This demands that the Internal Auditor is given free access to the entire operational or management activities of the organization. If the Internal Auditor does not have effective access to the managerial records and books of accounts, the desired result can hardly be expected.

Conclusion:

The motto of the Institute of Chartered Accountants of India is *Ya Aeshu Suptaeshu Jagruti* (Sanskrit), which literally means "*a person who is awake in those that sleep*". It is taken from the Upanishads. It was given to the ICAI by Rishi Sri Aurobindo in 1949 as a part of its emblem. Again the motto of the Institute of Cost and Management Accountants of India is, "*Tamaso Ma Jyotir Gamayo*" which means, "*Lead us from Darkness to Light*." It is taken from the Rig Veda. Thus, both the leading Accounting Bodies of the country have spiritualism at the root. Such mottos imply that ethics play the most crucial role in every case. Statutes are essential. Systems are essential. But along with these statutes and systems, ethical approach at every level will help in putting the right person at the right position and taking the right decision at the right moment.

The clarity in appointment, role and responsibilities of the internal auditor is of utmost importance. This is essential for the proper governance at all levels of the organization. It is important for the Internal Auditor to maintain day-to-day worksheets with respect to every area of activities. There should be a system of feedback which will help in maintaining transparency at every point. This will help to elevate the confidence level of the investors, creditors, Government Authorities, customers as well as the employees upon functioning of the organization. Internal Auditor should be given a significant place in the governance of the organization. It is the Internal Auditor who serves as a monitoring agency, acts as the organizational policeman and watchdog; and thus, it goes without saying that the Internal Auditor is an integral component of good corporate governance. The Internal Audit helps to educate the management and the employees about the improvement plans and efficiency in operational activities which leads to achieving good governance. The quality, reliability, capability, independence and the reporting techniques of the Internal Auditor are of utmost importance in the good governance process.

But, to achieve better service , the Internal Auditors should be given enough autonomy to use his/her innovative powers for the proper monitoring of the transactions and he/she should not be a mere puppet in the hands of the Management. Besides, the survival of the organization depends on the high level of integrity of the Internal Auditor towards his duties and responsibilities. There should not be any conflict of interest of Internal Auditors with that of any other officials in the organization. MA

References:

1. *The companies Act, 2013*
2. *www.icai.org.in*
3. *www.icmai.in*
4. *Raef Lawson, Ph. D, CMA, CPA: What do management accountants do*
5. *www.thehindubusinessline.com › mohan-lavi › article31075928*
6. *Omolaye KE and Jacob RB, Department of Accounting, Federal University, Otuoke, Bayelstate, Nigeri: The Role of Internal Auditing in Enhancing Good Corporate Governance Practice in an Organization*
7. *Olga Bubulek: The Role of Internal Auditing in Enhancing Good Corporate Governance Practice in an Organization*

cmakpray@gmail.com
ggbanik@gmail.com

PATH TO FINANCIAL INCLUSION: THE ASSESSMENT OF SHG BENEFICIARIES IN DISTRICT CENTRAL CO-OPERATIVE BANK, KAKINADA, ANDHRA PRADESH

N.P.S.V.N.Murthy
Research Scholar
Dept. of Commerce & Mgt. Studies
Andhra University, Visakhapatnam

CMA Nerella Gurunadha Rao
Accounts Officer
National Fertilizers Limited
Hyderabad

Abstract

Financial Inclusion is defined as the ability of an individual, household, or group to access appropriate financial services or products. In simple terms, Financial Inclusion means delivery of banking services (such as savings accounts, loans, remittance and payment services) at an affordable cost and in a convenient manner to the poor and marginalized sections of society. Co-operatives are one of the oldest organizations working for Financial Inclusion. In developing countries, they still play a crucial role in that issue, especially by serving rural areas that other types of microfinance institutions are not willing or not able to serve. Indeed, reaching rural areas is one of the main challenges of microfinance and Co-operatives Banks could represent an efficient way to overcome this challenge. There are many ways in which both SHG members and Co-operative Banking institutions can benefit from doing business together, there are a number of reasons why such linkages should be pursued with caution, by both parties. This study addresses Financial Inclusion through Self Help Groups in District Central Co-operative Bank, Kakinada. The information required for the study has been collected from both the primary and secondary sources. A simple random sampling method has been followed. Percentage analysis was carried out to draw meaningful interpretation of the results. Analysis of Variance (ANOVA) technique was used to find the perceptions of the members.

Introduction

a) Financial Inclusion through Self Help Group:

Financial Inclusion can help the society and the economy. Financial Inclusion has the ability to generate positive externalities: it leads to increase in savings, investment and thereby, spurs the processes of economic growth. It also provides a platform for inculcating the habit of saving money, especially amongst the lower income category that has been living under the constant shadow of financial duress, mainly because of absence of savings, which makes them a vulnerable lot. Presence of banking services and products aims to provide a critical tool to inculcate the savings habit.

"Though several initiatives were taken by the Government, the central bank, NABARD and banks to bring the poor into the fold of formal financial service providers, no serious attempt was made to leverage the SHG-BLP to achieve the Financial Inclusion goals." The Status of Microfinance in India' report observed that a successful programme such as the SHG-BLP, which could link millions of rural poor to the formal banking system, could have been the main instrument for financial literacy and Financial Inclusion in the country.

In India the SHG concept was developed by Mysore Resettlement and Development Agency (MYRADA) in the late 1980s and since then over one million SHGs have been created across the country. NABARD launched a pilot project (1992) to cover Self-Help Groups (SHGs) promoted by Non-Governmental Organizations, banks and other agencies under the pilot project and supported it by way of refinance.

b) Co-operative Banks promoting Self Help Group:

Co-operative Bank was set up by passing a Co-operative act in 1904. They are organized and managed on the principal of co-operation and mutual help. The main objective of Co-operative Bank is to provide rural credit. The Co-operative Banks in India play an important role even today in rural Co-operative financing. The enactment of Co-operative Credit Societies Act, 1904, however, gave the real impetus to the movement. The Co-operative Credit Societies Act, 1904 was amended in 1912, with a view to broad basing it to enable organization of non-credit societies.

Although there are many ways in which both SHG members and Co-operative Banking institutions can benefit from doing business together, there are a number of reasons why such linkages should be pursued with caution, by both parties. It is important to identify both the pros and the cons of SHG linkage to Co-operative Banks, in order to ensure that any efforts to promote such linkage are designed to minimize or overcome the dangers, and to exploit the advantages to the full.

c) SHGs in the study area:

The growth of SHG linkage District Central Co-operative Bank (DCCB), Kakinada has not only been dramatic in the last ten to fifteen years, but has also been remarkably uneven. The better-off DCCB, mainly in the rural area, have dominated the linkage programme, where it is so much more needed in the struggle against poverty, have lagged behind. The same weaknesses that constrain development in general seem to have constrained SHG linkage too.

In further, the SHGs sponsored by the period (2004-05 to 2013-14) under study indicates a negative growth (2005-06, 2006-07 and 2009-10) in terms of accounts, though positive growth rate in terms of amount is observed during the same period. The reason for low member of SHG A/c's particularly after 2007-08 can be attributed to bank crisis in India as part of global economic meltdown. It can also be mentioned that the policy of banks in increasing sanctioned limits of loans to SHGs on gradual basis might be the reason in recording positive growth rate in case of amounts sanctioned to SHGs.

Review of Literature

Extending the reach of financial services to the poor through new technologies and simplified branch regulations hold promise. Bringing financial services to rural clients is the biggest challenge in the quest for broad-based Financial Inclusion. Co-operative due to their good rural network, local staff is in a better position to understand rural situation and the problems of poverty. They are serving very large number of small borrowers and depositors. However Co-operatives have developed serious weaknesses and need be addressed to urgently. Revitalized Co-operative Banks can be very effective in facilitating Financial Inclusion. By being local in nature and intricately interwoven with the local community, Co-operative Banks have a clear advantage over commercial banks for Financial Inclusion. They should give wide publicity to rural banking and its linkage programmes at local level and must enable the Rural Indians to participate in the decision making process at the bottom level. These measures can significantly make the Self Help Groups effective and efficient in order to boost the Rural Economy of India. Reason for joining SHG is not be merely to get just credit, it in an empowerment process after joining the Self Help Group the women are economically and socially empowered. This empowerment cannot be transformed or delivered it must be self-generated such that it enables those who are empowered to take control over their lives.

Objective of the Study

- To examine the role of Self Help Group in extending District Central Co-operative Bank, Kakinada services for Financial Inclusion.
- To assure the assessment from the beneficiaries regarding Financial Inclusion of the District Central Co-operative Bank, Kakinada.

Methodology of the Study

Population and sampling of study area: The study populations were women Self Help Groups (SHGs) in DCCB, Kakinada rural area. The study covered the 256 SHG members in the selected DCCB branches.

Source of data: The study is conducted by collected primary and data as well as secondary data. Primary data collected from SHG beneficiaries of DCCB, Kakinada. And secondary data collected from DCCB, Kakinada and various web sources.

Data collection Instruments: The study used in-depth interview and data captured using semi structured questionnaire. Interviews become necessary when researchers feel the need to meet face-to-face with individuals to interact and generate ideas in a discourse that borders on mutual interest.

Sampling technique: In selecting a sample for the study, ANOVA test is adopted by the study.

Data Processing and analysis the data collected included both quantitative and qualitative data. Quantitative data collected was analyzed and coded according to research objectives using descriptive statistics and SPSS computer package expressed in frequencies and percentage. The analyzed data was presented using tables. Qualitative analysis of opinions was organized into themes and patterns relevant to the research using simple random sample.

Interpretation of the Data

Details of Group formation:

The general information about the SHG formation, the size of the group and monthly subscription paid by the group members are presented in below:

Period of Existence of the Self Help Groups:

Table – 1: Presentation of sample SHGs by Period of Existence

Period of Existence	Frequency	Per cent
Below 5 years	21	8.20
5-10 years	111	43.40
Above 10 years	124	48.40
Total	**256**	**100.00**

Source: Field Survey

It is clear from the Table that about 48 per cent of select SHGs have been in existence for more than 10 years, while about 43 per cent of SHG are functioning for the period ranging from 5 to 10 years. This indicates that majority of the select groups are observed to be in existence for a reasonable period of five years and above.

Presentation of select SHG by Size:

Table - 2: Presentation of select SHGs by Size

Size of the Group	Number	Per cent
Up to 10 members	140	54.70
11 – 12 members	70	27.40
13 and above members	46	17.9
Total	**256**	**100.00**

Source: Field Survey

Size of an SHG in terms of members, will have its influence in pooling of financial resources and hence the relevant information is secured and presented in Table 2. It appears for the obvious reason, majority of the select group (about 55 per cent) have 10 members.

Presentation of select Self Help Groups by Monthly Subscription:

Table -3: Presentation of select SHGs by Monthly Subscription

Monthly Subscription (Rs.)	Frequency	Per cent
30	12	4.70
50	109	42.60
100	135	52.70
Total	**256**	**100.00**

Source: Field Survey

It is quite evident that more than half of the select groups are observed to collect Rs. 100 towards monthly subscription while a reasonable number of groups to the extent of about 42 per cent do have a practice of collecting monthly subscription of Rs.50.

MEMBER'S PERCEPTIONS TOWARDS FINANCIAL INCLUSION INITIATIVES OF SHGs PROGRAM:

In this Table inferred that the perceptions of the members of the groups about Financial Inclusion initiatives of SHGs program in the study area.

Table 4: Member's perceptions towards Financial Inclusion initiatives of SHGs program

Sl. No	Objective of SHG	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
1.	SHGs as informal financial intermediaries	87 (34.0)	86 (33.6)	23 (9.0)	28 (10.9)	32 (12.5)	**256 (100.0)**
2.	Savings-based credit linkages with banks	87 (34.0)	92 (35.9)	18 (7.0)	31 (12.1)	28 (10.9)	**256 (100.0)**
3.	The SHGs evolved a variety of instruments to promote thrift among their members	83 (32.4)	90 (35.2)	30 (11.7)	34 (13.3)	19 (7.4)	**256 (100.0)**
4.	Women's groups were successful in both savings mobilization and credit management, and in promoting income-generating activities	96 (37.5)	91 (35.5)	21 (8.2)	36 (14.1)	12 (4.7)	256 (100.0)
5.	To evolve a supplementary credit strategy for reaching the poor	85 (33.2)	104 (40.6)	22 (8.6)	26 (10.2)	19 (7.4)	**256 (100.0)**

6.	To build mutual trust and confidence between banks and the rural poor.	96 (37.2)	88 (34.4)	17 (6.6)	36 (14.1)	19 (7.4)	**256 (100.0)**
7.	Reduced the dependence on moneylenders through availability of credit at lower rates.	95 (37.1)	89 (34.8)	20 (7.8)	32 (12.5)	20 (7.8)	**256 (100.0)**
8.	Self Help Group Program its effects on rural empowerment.	85 (33.2)	96 (37.5)	32 (12.5)	22 (8.6)	21 (8.2)	**256 (100.0)**
9.	Presenting the SHG as a vehicle to enable the economic development of the poor.	95 (37.1)	90 (35.2)	21 (8.2)	35 (13.7)	15 (5.9)	**256 (100.0)**
10.	The quality and extent of financial services to members and issues in and perceptions around SHG Bank linkage.	101 (39.5)	84 (32.8)	19 (7.4)	29 (11.3)	23 (9.0)	**256 (100.0)**

Source: Field Survey

It is observed from the above table, identified for the major relevant issues of SHGs program. It can be clearly understood from the result that above two-third of the select members opined that SHGs relevant all issues are agreed that more than seventy per cent. This indicates that the SHG bank linkage with DCCB, Kakinada has been extending qualitative financial services to the members of group. One of the important functions of the Bank is to promote financial freedom of rural poor through financial support to weaker sections.

In further, the ANOVA test is attempted to find out period of existence, Size of group and monthly subscription which are influencing on the Group members' perceptions towards objectives of SHGs in the Bank. Hence hypotheses are developed to gather evidences in this regard.

Hypothesis for the ANOVA test		
H_o1	There is a significant difference between the respondents' perceptions towards the financial services of the Bank Self- Help Group and their Period of existence.	**Rejected**
H_o2	There is a significant difference between the respondents' perception toward the financial service of the Bank Self- Help Group and Size of the Group.	**Rejected**
H_o3	There is a significant difference between the respondents' perception toward the financial services of the Bank Self- Help Group and Monthly Subscription Rs.	**Accepted**

Table – 6.5: Perceptions of SHG members on financial services of the Bank by period of the existence

ANNOVA						
Period of the Existence	**N**	**Mean**	**Std. Deviation**	**Std. Error**	**f-value**	**p-value**
Below 5 years	21	36.61	10.956	2.390	1.476	0.230
5-10 years	111	36.87	10.168	0.965		
Above 10 years	124	38.89	8.841	0.794		
Total	256	37.83	9.633	0.602		

Source: Compiled from Field Survey

It is evident from the Table, the average perception score of the members of the groups with more than 10 years of existence found higher (38.89) than that of the groups existing for less than 10 years period. **Hence the null hypothesis (H_O) is rejected** and the difference is not significant on account of f-value calculated of 1.476 and p – value of 0.230.

The following Figure explains the above values graphically.

Diagram-5: Perceptions of SHG members on Financial Inclusive initiative of the Bank by period of the existence

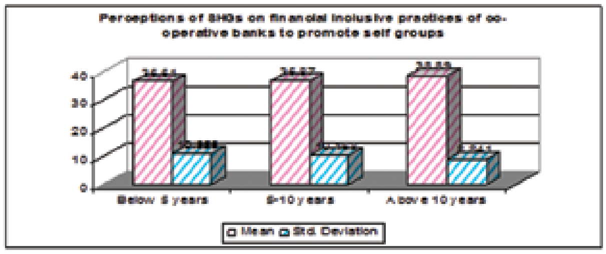


Table – 6: Perceptions of Group leaders by size on Financial Inclusive practices of DCCB by size of the group

ANOVA						
Size of the group	**N**	**Mean**	**Std. Deviation**	**Std. Error**	**f-value**	**p-value**
Up to 10 members	140	37.81	9.698	0.819	0.414	0.661
11-12 members	70	38.51	9.340	1.116		
13 and above members	46	36.84	9.993	1.473		
Total	256	37.83	9.633	0.602		

Source: Compiled from Field Survey

Table-6 presents the average perceptions of leaders of SHGs with different sizes on Financial Inclusive services of DCCB to promote Self-Help Groups. The average perceptions score of the leader of the Groups with 11 and 12members SHGs (38.51) found higher than that of the remaining group leaders. **Hence the null hypothesis (H_O)** is **rejected** and it is proven that **there is no significance difference** that the f- value calculated of 0.141 and p-value of 0.661.

The following diagram explains the above values graphically.

Diagram-6 Perceptions of Group leaders by size on Financial Inclusive practices of DCCB by size of the group

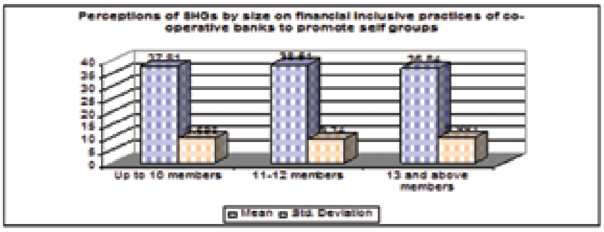


Table – 7: Perceptions of group members on awareness of Banks' Inclusive Financial Services by monthly subscription Rs.

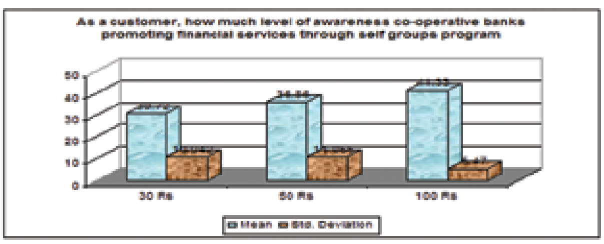
ANOVA						
Monthly subscription Rs.	N	Mean	Std. Deviation	Std. Error	f-value	p-value
30	18	30.72	10.942	2.579	16.649**	0.000
50	109	35.86	11.055	0.973		
100	129	41.33	5.470	0.524		
Total	256	37.83	9.633	0.602		

Source: Compiled from Field Survey

**Significant at 1per cent level.

It shows that the average perception score of groups' member with a monthly subscription of 50 rupees found significantly higher (41.33) than that of the other groups. Hence the **null hypothesis (H_0) is accepted** and it indicates that **there is a significant difference.** It is a result of the calculation of f-value of 16.649 found significant at 1per cent level due to the p-value (0.000) being less than 0.01.

Figure-7: Perceptions of group members on awareness of Banks' inclusive financial services by monthly subscription Rs.



Findings of the study:

- It is observed that about 48 percent of select respondents are in existence for more than 10 years, while about 43 percent of respondents are in the range of 5 to 10 years of existence The ANOVA test proves that there is no difference in the view points of SHG members.
- It is noticed that little above half of (54.7 percent) the respondents have 10 members and remaining respondents have members varying between 11 and 15. The ANOVA test shows that there is no difference in the perceptions of members
- It is perceived their more than half of the half of the SHGs (52.7 percent) are collecting Rs.100/- from each members towards moth subscription, while about two-fourth of the select SHGs are collecting subscriptions Rs.50/- per month. The ANOVA test proves that there is a significant difference of member perception.
- In the secondary data observed from study period of 2004-05 to 2013-14 that the author noted a negative growth from DCCB, Kakinada.

Conclusion:

The study inferred that group association and access to financial services certainly brings positive changes among group members leading to their group formation. However, Majority of the Bank beneficiaries felt that they have not been properly informed by the Bank regarding the Self Help Group program benefits. As part of Financial Inclusion initiatives, the Bank can inculcate saving habit among the SHGs groups through creating awareness about innovative and diversified saving products so as to keep larger tracts of small depositors under its hold. The study concluded that more than seventy per cent members having awareness about SHG services and also the study clearly shows that the SHG members were well aware of almost all types of deposits and loans of the DCCB but they were unaware of financial services of the Bank. In this context, it is suggested that the Bank shall take initiative both in starting sufficient number of Financial Literacy centers and strengthening the activities of such centers which are in existence.

Suggestions:

1. DCCB shall take initiative in organizing meetings and seminars where the SHG members will get a chance to exchange their views and be able to develop their group strength by interactions.
2. Though SHG rating is available at the branch level, it is also necessary for the DCCB to constitute a committee to study the growth and inspect the activities of SHGs. MA

References:

1. *K. Ram Kumar (2013), Financial Inclusion can be better achieved through self-help groups: NABARD, article for Business Line.*
2. *Kavaljit Singh (2014), "Financial Inclusion" in India: Ambitious but Ambiguous Plan", http://www.globalresearch.ca/financial-inclusion-in-india-ambitious-but-ambiguousplan/5405443.*
3. *Dr.Dilip Ambarkhane and Dr. (Mrs) Sheela Sahasrabudhe (2013), "Financial Inclusion and Role of Cooperative Banks", ASM'S International E-journal of Ongoing Research in Management and IT e-ISSN-2320-0065.*
4. *Dr. Christabell. P. J. And Vimal Raj. A (2012)," Financial Inclusion in Rural India: The role of Microfinance as a tool", IOSR Journal of Humanities and Social Science (JHSS) ISSN: 2279-0837, ISBN: 2279-0845. Volume 2, Issue 5, PP 21-25.*
5. *MYRADA (2002), " Impact Of Self Help Groups (Group Processes) On The Social/Empowerment Status Of Women Members In Southern India" , Paper presented at the Seminar on SHG-bank Linkage Programme at New Delhi.*
6. *Katar Singh and RS Pundir (2000), "Co-operatives and Rural Development in India", research paper for Institute of Rural Management, Anand, India.*

murthynpsvn@gmail.com
gurunadharaon@gmail.com

THE DOCTRINE OF "LEGITIMATE EXPECTATION" UNDER COMPANY LAW

Hareesh Kumar Kolichala
Chief Manager (Law)
Union Bank of India, Kolkata

Abstract

"The recent Cyrus Mistry-TATA dispute has once again highlighted the doctrine of "legitimate expectation" under Company Law. The Doctrine of 'Legitimate Expectation' had been developed and evolved by the English courts in the land mark cases, namely, Yenidje Tobacco Co. Ltd., [1916] 2 Ch. 426 (C.A.)] and Ebrahimi v. Westbourne Galleries Ltd. and Ors., (1972) 2 All ER, which are leading cases on the subject wherein the said doctrine was applied in Company law matters whereas the said doctrine is an administrative law concept.. A limited company is more than a mere juridical entity, with a personality in law of its own: that there is room in company law for recognition of the fact that behind it, or amongst it, there are individuals, with rights, expectations and obligations inter-se which are not necessarily submerged in the company structure. In general, members of a company (shareholders) have no legitimate expectations going beyond the legal rights conferred on them by the constitution of the Company, i.e., to say its Memorandum and Articles of Association. Nonetheless, legitimate expectations super imposed on a member's legal rights may arise from agreements or understanding between the members. The doctrine of "legitimate expectation" applies to closely held companies for the reasons that not only at the time of coming into association, even while continuing with such association, parties undertake obligations with certain legitimate expectations. For the authority on the principles of "legitimate expectation", reference could be made to Boyle & Birds' Company Law III Edition wherein it is stated that in a quasi-partnership type company, the Court may take account of legitimate expectations of members in deciding the inter-se rights of the shareholder members.

Indian courts have also applied the said concept in various Company Law cases and the same was invoked in the recent case of Cyrus Mistry-Tata dispute before the NCLT/NCLAT which adds an interesting dimension to the Company Law. This article explains the doctrine as evolved in the Company law jurisprudence."

The recent TATA-Cyrus Mistry dispute has once again highlighted the concept of "Doctrine of Legitimate Expectation".

The Doctrine of "Legitimate Expectation", in fact, is an Administrative/Public Law concept. A person may have a "legitimate expectation" of being treated in a certain way by an administrative authority. The expectation may arise either from a representation or promise made by the authority, including an implied representation, or from consistent past practice.

This concept of 'Legitimate Expectation' first evolved in the decision of English Law in the case of Schmidt v. Secretary of State for Home Affairs [(1969) 2 Ch. 149] wherein it was observed that an alien who had been given leave to enter the United Kingdom for a limited period had a legitimate expectation of being allowed to stay for the said permitted time and if that permission was revoked before the time expires, that alien ought to be given an opportunity of making representation. Thereafter, the said doctrine was applied in number of cases.

Clive Lewis in 'Judicial Remedies in Public Law states as follows:

"In the public law field, individuals may not have strictly enforceable rights but they may have legitimate expectations. Such expectations may stem either from a promise or a representation made by a public body. The promise of a hearing before a decision is taken may give rise to a legitimate expectation that a hearing will be given. A past practice of consulting before a decision is taken may give rise to an expectation of consultation before any future decision is taken. A promise to confer, or past practice of conferring a substantive benefit, may give rise to an expectation that the individual will be given a hearing before a decision is taken not to confer the benefit. The actual enjoyment of a benefit may create a legitimate expectation that the benefit will not be removed without the individual being given a hearing. Decisions affecting such legitimate expectations are subject to judicial review."

It is interesting to note that such concept is applied even in Company Law Jurisprudence on equitable principles. It is mainly applied in the cases of allegations of Oppression against members of the Company.

The concept of 'Legitimate Expectation' under Company Law Jurisprudence, was first developed by the House of Lords in the case of Ebrahimi v. West Bourne Galleries Ltd. [1972 2 AER 492] and hence can be said to be a landmark on the subject. In this case, the facts are as under:

1. There was a prior partnership between the only two members who later on formed the company.
2. Both the shareholders were directors sharing the

profits equally as remuneration and no dividends were declared.

3. Subsequently, one of the shareholders' son acquired shares from his father and from the second shareholder, Ebrahimi, and joined the company as the third shareholder-director with two hundred shares (one hundred from each).
4. After that, there was a complete ouster of Ebrahimi from the management by the votes of the other two directors, father and son.
5. Although Ebrahimi was a partner, Nazar had made it perfectly clear that he did not regard Ebrahimi as a partner but regarded him as an employee in repudiation of Ebrahimi's status as well as of the relationship.
6. Ebrahimi though ceasing to be a director lost his right to share in the profits through director's remuneration retaining only the chance of receiving dividends as a minority shareholder.

In the above backdrop, the House of Lords held that the court normally would not take such position, but by seeing the company was so similar in its operation as it was when it was a partnership, allowed the petition for winding up of the Company creating what is now known as the Doctrine of Legitimate Expectation. Ebrahimi had a 'legitimate expectation' that his management function would continue and that the articles of the Company would not be used against him in this way. Based on the personal relationship between the parties, it would be inequitable to allow Nazar and his son to use their rights against Ebrahimi so as to force him out of the company and so it was just and equitable to wind it up. The company was wound up and Ebrahimi received his capital.

House of Lords further held in this case as under:

"The just and equitable provision does not entitle one party to discard the obligation he assumes by entering a company nor the court to dispense him. It does, as equity always does, enable the court to subject the exercise of legal rights to equitable considerations; considerations, i.e. of a personal character arising between one individual and another, which may make it unjust, or inequitable to insist on legal right, or to exercise them in a particular way.

The words are a recognition of the fact that a limited company is more than a mere judicial entity, with a personality in law of its own: that there is room in company law for recognition of the fact that behind it, or amongst it, there are individuals, with rights, expectations and obligations inter se which are not necessarily submerged in the company structure.

That structure is defined by the Companies Act and by the Articles of Association by which shareholders agree to be bound. In most companies and in most contexts, this definition is sufficient and exhaustive, equally so whether the company is large or small. The question is, as always, whether it is equitable to allow one (or two) to make use of his legal rights to the prejudice of his associate(s). The law of companies recognises the right, in many ways, to remove a director from the board. Section 184 of the Companies Act, 1948, confers this right upon the company in General Meeting whatever the Articles may say. Some Articles may prescribe other methods, for example a governing director may have the power to remove. And quite apart from removal powers, there are normally provisions for retirement of directors by rotation so that their re-election can be opposed and defeated by a majority, or even by a casting vote. In all these ways a particular director-member may find himself no longer a director, through removal, or non-re-election: this situation he must normally accept, unless he undertakes the burden of proving fraud or mala fides. The just and equitable provision nevertheless comes to his assistance if he can point to, and prove, some special underlying obligation of his fellow member(s) in good faith, or confidence, that so long as the business continues he shall be entitled to management participation, an obligation so basic that if broken, the conclusion must be that the association must be dissolved."

It was also held in the said case that the concept of 'legitimate expectation' was not limited to contract and that rights, expectations and obligations outside the corporate structure are also enforceable

Similarly, in O'Neill v. Phillips 1999 2 AER 961, the House of Lords has said "In a quasi partnership company, they (legitimate expectations) will usually be found in the understanding between the members when they enter into association. But there may be later promises, by words or conduct, which it would be unfair to allow a member to ignore. Nor is it necessary that such promises should be independently enforceable as a matter of contract. A promise may be binding as a matter of justice and equity although for one reason or another it would not be enforceable in law".

In Re Elgindata Ltd.: [1991] BCLC 959], it has been held as under:

"In general, members of a company (shareholders) have no legitimate expectations going beyond the legal rights conferred on them by the constitution of the Company, i.e., to say its Memorandum and Articles of Association. Nonetheless, legitimate expectations super imposed on a member's legal rights may arise from agreements or understanding between the members."

The doctrine of "legitimate expectation" applies to closely held companies for the reasons that not only at the time of coming into association, even while continuing with such association, parties undertake obligations with certain legitimate expectations.

For the authority on the principles of "legitimate expectation", reference could be made to Boyle & Birds' Company Law III Edition wherein it is stated that in a quasi-partnership type company, the Court may take account of legitimate expectations of members in deciding the inter-se rights of the shareholder members.

The case of Synchron Machine Tools Pvt.Ltd. Vs.U.M.Suresh Rao [(1994) 79CompCas 868 (Kar)] is the first one in India where the concept of "Legitimate Expectation" was discussed and relief granted on that basis. The facts of the said case are as under:

The company was formed by three unrelated persons and two of them left the company; the petitioner and the Respondent N.V.Rao purchased one share each of the outgoing shareholders resulting in the respondent holding two shares and the petitioner one. Subsequently, another shareholder, BNR, joined them, who was also made a full-time director; the issued share capital was increased for reallocation of shares. After BNR left, Mrs. Rao became a shareholder. The petitioner worked for the company as a director for several years. No dividend was declared by the company; instead, shareholders were remunerated by other means. The company is a small company with three shareholders. Even though the company did not commence as a quasi-partnership, the petitioner joined the company with an expectation that the petitioner will be entitled to participate in the management and would be properly remunerated. Subsequently, the petitioner was ousted from the management by manipulation by the Respondent. The court held that the company was being run on the understanding and expectation that the petitioner and the second respondent would be equal partners. The very fact of entertaining an idea of removing the petitioner from the management of the company by not continuing him as a director is an act which attracts the equitable considerations and also goes to prove that the ulterior motive of respondents Nos. 2 and 3 was to cause prejudice to the interest of the petitioner and deprive him from the 'legitimate expectation' of continuing as a whole time director, and to reduce him to a mere shareholder which amounted to Oppression.

It was held further as under:

"In the case of a small company which is in reality a partnership and the complaining petitioner is excluded from the management, it would be an act of oppression and would be prejudicial to the interest of the company. In such a case there would not be much difference between the interest of a company and the interest of a shareholder and, as such, the interest of a member who had ventured his capital in the business of a small private company might include the 'legitimate expectation' that he would continue to be employed as director and therefore unfair prejudice would be caused to his interest as a member."

The said doctrine of Legitimate Expectation has been applied later by the Indian Courts in various cases taking into consideration the nature of the companies involved, viz., closely held companies, family companies and companies in the nature of quasi-partnership on the ground that limiting the interests of shareholders strictly to the legal right under the constitution of the company would not be equitable as most of the times their association with those types of companies is based on personal relationship or personal dealings.

In the case of Jagjit Singh Chawla Vs.Thirathram Ahuja, the Company Law Board had held that when certain groups of shareholders who had formed a company and have been participating in the affairs of a company for a long time with remuneration, then there can be a presumption of 'legitimate expectation' and exclusion of one from the management could be an act of oppression.

In the case of Gurmit Singh Vs.Polymer Papers Ltd. [(2003)45SCL251 (CLB], the CLB held that it was the legitimate expectation of the Petitioner to continue as Managing Director of the Company and ouster of him would be an act of Oppression. In this case, the Company was in the nature of a quasi-partnership between the petitioners group and Sunil Puri's group. The first petitioner was an expert in paper technology and because of his experience, Sunil Puri Group joined him to provide financial assistance and accordingly the company was incorporated. The terms of MOU dated 18.10.1974 would very clearly indicate that the company is nothing but a quasi-partnership providing for equal participation of both the groups in the management of the company. It provides for life time directorship for Shri Gurmit Singh and also provides that he would be one of the two Managing Directors along with Shri Sunil Puri wherein the pre-emption rights were given to the parties. However, the Sunil Puri Group has removed the Petitioner Shri Gurmit Singh as MD. In the circumstances, it was held by the CLB that it was the 'legitimate expectation' of the first petitioner to continue as the MD of the company.

In Dipak Mehta v. Shree Anupar Chemicals Pvt Ltd (1999 33 CLA 33 CLB), CLB has held that it has to be examined whether the facts reflect the existence of any understanding of joint management justifying the claim of legitimate expectation of being an MD.

Haldia Petrochemicals Ltd. (HPL) is a Public Limited Company and commenced as a joint venture of Government of West Bengal, TATA, West Bengal Industrial Development Corporation (WBIDC) and Chatterjee Group. In the dispute about the allotment of shares to Indian Oil Corporation, in the case of Chatterjee Petorchem (Mauritius) co. Vs. Government of West Bengal, [(2008)143CompCas726(CLB)], Company Law Board had granted relief on the basis that in view of the assurances and commitments given by Government of West Bengal and WBIDC from time to time that management control would be given to the Chatterjee group, the petitioners in the company petition were entitled to 'legitimately expect' to get the said 155 million HPL shares from WBIDC. It had observed that the Petitioner had the following "Legitimate Expectations":

A combined reading of the MOU, JVA, Agreement dated 12.1.2002, 8.3.2002, supplemental agreement dated 30.7.2004, share subscription agreement dated 30.7.2004 and agreements dated 14th January, 2005 would reveal that the petitioners had/have the following legitimate expectations:

1. The company would be controlled by private sector and it would not become a government company
2. The WBIDC would be a minority shareholder
3. The petitioners were to hold majority shares and management control.
4. The Government of West Bengal would make available to the company exemptions and concessions and also contingent financial support
5. The WBIDC would divest its entire shareholding in the company in favour of the petitioners at a price to be determined by the valuer
6. The petitioners would have the right to nominate the managing director.

In the appeal filed by the Government of West Bengal,[(2008)143CompCas837(Cal)], the High Court of Calcutta had reversed the decision of the CLB and held as follows:

"120. In my view, the Board was not right in making the doctrine of legitimate expectation as the sole basis for exercising its jurisdiction. Legitimate expectation of the petitioners in the company petition, if there was any, could be considered relevant only for the purpose of making order after the threshold jurisdictional questions were decided in their favour, i.e. only after forming and recording affirmative opinions regarding oppression, unfair prejudice for winding up, and facts justifying a winding up order on just and equitable ground, all required by Section 397(2), the Board could consider the question of existence of legitimate expectations, if any, of the petitioners in the company petition for making an appropriate order in their favour. It was not empowered to permit the unfair prejudice proposition and the legitimate expectation doctrine to eclipse the provisions in Section 397(2), i.e., those two things could not be substituted for the three statutory conditions mentioned in Section 397(2). In none of the authorities given to me it was held that only on the basis of legitimate expectation an order granting relief can be made under Section 397 of the Companies Act, 1956.

121. Besides, there was no reason for the Board to ignore the fact that in the face of Article 33(a) of the articles of association and the agreements dated January 12, 2002, March 8, 2002 and July 30, 2004, it was not open to the petitioners in the company petition to seek their specific performance in the Section 397 proceedings invoking the doctrine of legitimate expectation, particularly when the GoWB and the WBIDC contended that the CP(M)C, having committed breach of the terms and conditions of the contracts and agreements in more ways than one, was not entitled to enforce any contract for getting any specific relief. It was not a derisory defence.

122. I think counsel for the GoWB and the WBIDC have rightly said that by granting relief in the name of the doctrine of legitimate expectation what the Board actually did is nothing but granting specific relief enforcing specific performance of the contracts and agreements, when it was not competent to do that. Once the parties entered into agreements giving full expression to their respective expectations, there was no scope for the petitioners in the company petition to get any relief, and that too with respect to a case not pleaded in the petition, on the basis of the doctrine of legitimate expectation. Once agreements are executed there is no scope to rely on the doctrine of legitimate expectation regarding the subject-matter of the agreements."

The Hon'ble Supreme Court [(2011)110SCL107(SC)] also supported the decision of the High Court that set aside the decision of the Company Law Board.

The issue has once again been highlighted in the recent case of Cyrus Investments Pvt.Ltd. Vs. Tata Sons Ltd. [(2017)2CompLJ332], in the dispute over the removal of Mr.Cyrus Mistry from the position of Director of Tata Sons Ltd. The Petitioner contended that Tata Sons Limited' was a group company comprising of 'Tata Trusts', 'Tata Family' and 'Tata Group Cos.' and other group is the 'Shapoorji Pallonji Group', that the 'Tata Trusts' and 'Tata Group Companies' along with 'Tata family members' collectively held over 81% of total shareholding while the 'SP Group' holds over 18% of the equity share capital of 'Tata Sons Limited' and the nature of relationship between the 'Tata Group' and the 'SP Group'. ' indicate that 'Tata Sons Limited' is in effect is a quasi-partnership-company, a concept well recognised in company law jurisprudence and as such the relationship between the two groups though not formally reflected in the Articles of Association but is based on the mutual trust and confidence which has given rise to a 'legitimate expectation' of being treated in a mutually just, honest and fair manner.

However, the National Company Law Tribunal(NCLT), Mumbai, had dismissed the petition, inter alia, indicating that the concept of legitimate expectation of a body of shareholders would not be applicable to a large public limited company like TATA group and is applicable to only quasi partnerships and family companies. In the appeal filed against the said order, in the case of Cyrus Investments Pvt.Ltd. Vs.Tata Sons Ltd.[(2020)157SCL360], the National Company Law Tribunal (NCLAT) held that that the company's affairs have been or are being conducted in a manner 'prejudicial' and 'oppressive' to members including Appellants, Mr. Cyrus Pallonji Mistry as also 'prejudicial' to the interests of the company and its group companies indicating that Mr.Cyrus Pollonji Mistry's legitimate expectations have been violated. It is interesting that the Counsel for Mr.Ratan Tata had argued before the NCLAT that 1) Appellants (Mr. Cyrus Mistry) cannot claim any 'legitimate expectations' as Indian Law do not permit any 'legitimate expectations' under Section 241 of the Companies Act, 2013. 2) that the term 'legitimate expectations' is borrowed from public law, as a label for the 'correlative right' to which a relationship between company members may give rise in a case when, on equitable principles, it would be regarded as unfair for a majority to exercise a power conferred upon them and 3) It was also submitted that the term 'legitimate expectations' from public law cannot be made applicable for the purpose of Company Law.

Presently, the order of the NCLAT has been stayed by the Supreme Court. The concept of "Legitimate Expectation" would further evolve in the decision of the Supreme Court enriching the ever evolving Company Law Jurisprudence. MA

References

1. *Cyrus Investments Pvt.Ltd. Vs.Tata Sons Ltd. [(2020)157SCL360].*
2. *[(1969) 2 Ch. 149]*
3. *[(1972) 2 AER 492]*
4. *[1999 2 AER 961]*
5. *[1991] BCLC 959]*
6. *[(1994) 79CompCas 868 (Kar)]*
7. *[2004]119CompCas385(CLB)*
8. *[(2003)45SCL251 (CLB]*
9. *(1999 33 CLA 33 CLB)*
10. *[(2008)143CompCas726(CLB)]*
11. *[(2011)110SCL107(SC)]*
12. *[(2017)2CompLJ332]*
13. *[(2020)157SCL360]*

kshk.hareesh@gmail.com

ENTRY-EXIT GAS PIPELINE TARIFF CHARGING METHOD - ITS ADAPTABILITY IN INDIAN SCENARIO

CMA Neeraj Pasricha
Head (Regulatory & Corporate Affairs)
Pipeline Infrastructure Limited
New Delhi

Abstract

Most important step in the process of fixing gas transportation tariff is to allocate total cost to the users in fair and transparent manner ensuring the efficiency of the gas pipeline. In India mainly two methods have been used for such allocation (i) Postalize Method and Zonal Method. Purpose of this paper is to study theEntry-Exit method's adaptability in Indian Scenario. It has been observed that each method of tariff charging has its own benefits, considering the stage of Gas Industry, objective of the country etc. tariff method has to be adopted.Entry-Exit being the complex method can be adopted in India in a phased manner considering the requirement of the country.

Introduction:

In the process of fixing gas transportation tariff, first step is to work out the total transportation cost, also called allowed revenue, which is to be recovered from the users transporting natural gas in the pipeline. Next and equally important step is to allocate total cost to the users of the pipeline in fair and transparent manner ensuring the efficient use of the gas pipeline. In India mainly two methods have been used for such allocation of cost, (i) **Postalize Method:** Under this method total cost is allocated uniformly from all the users of the respective trunk pipeline, irrespective of source or destination of the gas flow. This method in long trunk line is generally preferable at the initial stage of the development or in small distribution networks. (ii) **Zonal Method**: This method is preferable in long transmission lines with multiple source entry point and exit point of gas flows.

Discussions in the country are going to explore the other method of gas transportation like Entry-Exit tariff mechanism for natural gas pipeline. This method is mainly prevalent in European countries, these discussions prompted me to study this concept in detail and analyse about its adaptability in Indian Scenario. After going through the information available in public domain as well as what I have learned during by 25 years of experience in this Industry my observations are deliberated in this paper.

What is Exit Entry tariff mechanism:

Entry Exit is the mechanism of pricing the transmission tariff where in capacity is booked separately at point of entry/ injection into the pipeline system and at point of exit/offtake from the pipeline system by paying Entry charge and Exit charge respectively.In this method separate tariff is determined for each entry and exit point. This mechanism can be used for major trunk lines with well-defined Entry and Exit points.

Steps in working out Entry and Exit charges:

1. First step is to work out total Cost to be recovered through the tariff i.e. allowed Revenue requirement of transportation entity.
2. Then matrix of each entry and exit point on the transmission line is prepared. Expected volume is

mapped to each entry and exit point. While mapping, due consideration needs to be given to factors at each Entry/Exit point like supply constraints, demand/ supply scenario, etc.

3. Then comes the most critical path of allocating cost to each entry and exit point. There can be different drivers to allocate cost, some of the drivers are as below:

   a. Cost

   i. **Historical cost basis**: Under this method cost is allocated based on the actual cost of receiving or delivering gas at the Entry/Exit point.

   ii. **Marginal cost basis**: Under this method marginal cost is worked out considering the impact of any additional flow on the system. While working out such cost, impact of additional flow is work out from each entry and exit point which makes this a cumbersome process. Purpose of this method is to allocate cost based on the cost of impact of any new volume at each entry or exit point on the system as whole so that the system can be used efficiently. Mathematical tools are used to allocate cost among each entry and exit point. Benefit of marginal cost over historical cost is there when the contractual flow and physical flow are not same, which generally happens in complex network scenario.

   However, under both the above method, tariffs are further scaled to match the cost required to be recovered.

   b. Uniform cost: This is simple method where total required cost is allocated equally on each point. However, this may result in higher cost of transportation for consumers located near to the source.

   c. Distance: Total cost to be recovered is linked to the total distance travelled by the total volume and based on distance between each entry and exit point total cost is allocated to each entry and exit point. This is cost reflective method under the simple network scenario when contractual and physical flow are in synchronization, however, this may not be cost reflective in case of divergence between contractual path and physical flow.

4. Features of Exit-Entry:

   a. Contractual path is broken into two parts Entry and Exit. In other method it is a linked contract path.

   b. Gas can enter into system without disclosing buyer and Gas can exit the system without disclosing seller.

   c. Consumer of gas upfront aware of the tariff, no information of source of gas is required, this enables the anonymity of players.

   d. Enable virtual balancing point concept.This can help in developing gas trading with/without linkage to the physical location of the trading hub.

   e. Main feature of Entry-Exit system is breaking of contractual path and separately booking entry capacity without disclosing the exit and booking exit capacity without disclosing entry point, this makes it trading friendly as consumer is upfront aware of the tariff. This method of Entry -Exit method was started in UK and some other European Countries this allows booking of capacity without specifying beforehand where this gas should go. Precondition for Entry-Exit method is clear demarcation Entry and Exit point in the gas pipeline system.The other important feature of Entry-Exit tariff is efficient use of network by allocating cost based on marginal cost, however, practically situation is difficult to achieve and the difference between the cost allocated based on marginal cost and the total cost required to be recovered is achieved by scaling the tariff.

   f. This method also helps in introducing the demand-supply based pricing of tariff at entry and exit points with linkages of distance travelled. If applied across all the network, this method can also help in removing the pan-caking impact of tariff of different networks.

Power Sector in India has also introduced power transmission tariff system on similar lines. To understand the reason of introducing the Exit-Entry based tariff better, the Industry scenario has been compared in the following Table 1:

Table 1

Parameter	UK Gas Pipeline situation	Indian Gas Pipeline Situation	Indian Power situation
Network	Developed	Under Developed	Developed
Market condition	Mature	Nascent	More Experienced
Network Ownership	Single owner	Multiple owner	Multiple owner
Network structure	Complex	Mainly linear	Complex
Gas Trading scenario	Prevalent	Not present	Trading scenario under development

5. Issues in Entry Exit:

   a. Complex working involving matrix of all entry and exit point.

b. Ideal for mature market with fairly balanced demand-supply of natural gas and preferred in single owner operated gas pipeline system. Clubbing of revenue and working out tariff in case of multiple owners have its own challenges.

c. There are complexities in implementing this system where competing multi-owner transmission networks are involved and become more complex if covered the same territory. In such case either put in place an independent entry-exit system for each network or try to build a joint system, where the customer only needs to book one entry point and one exit point per territory.Concerns of multi owner or competitive pipelines may be addressed by creation of an entity to control and coordinate all the transporters with an obligation to cooperate in different fields including congestion management; but legal problems may arise, as such an obligation affects the entities private assets.

d. On long run, this method does not provide appropriate congestion management and signal for investments as capacities are booked on short term and capacity needed on each part is uncertain.

6. **Unified Tariff** – Other method which is being discussed in the gas industry is Unified Tariff. Under unified tariff method single tariff can be charged across the network. All trunk lines covered under the uniform tariff are considered as national grid. But this method also, with multi-ownership scenario in the country, has same complexities. This method is similar to the method of Uniform Cost under Entry Exit mechanism.

7. Main features of the Entry-Exit tariff and its comparison with other major methods is given below in Table 2.

Table 2

Feature	**Entry-Exit**	**Postalize**	**Zonal**	**Unified Tariff**
Contractual path split	**Yes**	**No**	**No**	**No**
Upfront identification of Buyer and Seller	**No**	**Yes**	**Yes**	**No**
Tariff is known to consumer upfront without linking with source	**Yes**	**No**	**No**	**Yes**
Enable virtual balancing point	**Yes**	**No**	**No**	**Yes**
Complex working matrix	**Yes**	**No**	**No**	**No**

Adaptability in Indian Scenario:

1. If we analyse Table 1, none of the scenario which prompted entry exit in UK, exists in Indian scenario.
2. Implementing entry exit tariff may also require clear demarcationof entry or exit point, for which we may have to modify our existing network boundaries. Ideally it would be better to have entry or exit point which is further connected to number of sources and consumption points and market participants have freedom to transact in natural gas, this will enable the trading of natural gas and capacity in large volumes.
3. In India gas trunkpipelines are multi-owner operated which has its own challenges to implement Entry – Exit Tariff. Power transmission in India also faced similar situation and to address this issue they have devisedthe transmission charges sharing regulations. To implement Entry-Exit tariff in India working on the similar lines would also be required.
4. Therefore, there is a need to review at what stage we have to opt for such type of tariff method which involves complex method of tariff workings and other logistic requirements.
5. From the above Table 2, it can be seen that there is close similarity in features between Entry-Exit and Unified tariff, except under Unified tariff there is no split in contractual path and unified tariff is simpler in working than Entry-Exit tariff. Unified tariff can be considered as simple form of Entry-Exit except the total cost is loaded at Exit point. User at destination point is aware of the tariff to be paid and accordingly can negotiate the gas price from the source. However, this may result in higher tariff for users located near to the source.
6. In view of the above, before moving towards the Complex Entry - Exit Tariff mechanism, we may adopt the Unified Tariff covering all the natural gas trunk pipelines and then shift to the complexities of Entry-Exit. However, while adopting the same we may have to address the issueslike higher tariff for the users located near to the source, mechanism of revenue sharing and cooperation in pipeline operations.

Each method of tariff charging like Postalize, Zonal, Exit-Entry, Unified, etc. has its own uses, considering the stage of Gas Industry, gas market maturity, objective of the country etc. Therefore, we need to analyse our requirement and adopt the tariff method accordingly, if required can customize the method specific to Indian requirements. MA

References

1. *Entry-Exit Transmission Pricing with Notional Hubs, Oxford Institute for Energy Studies, by Paul Hunt, 2008*
2. *Study on Entry-Exit Regime in Gas, by DNV-KEMA in Collaboration with COWI,2013*
3. *Potential Shortcomings of the Entry-Exit System, GTE report, 2003*

neeraj.pasricha@pipelineinfra.com

EASTERN INDIA REGIONAL COUNCIL

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA BHUBANESWAR CHAPTER

As part of the Professional Social Responsibility, Eastern India Regional Council and the Chapter have donated amounting to Rs.5.00 Lakh (Rupees Five Lakh only) to Odisha Chief Minister's Relief Fund on 27.05.2020 in view of the present crisis due to the pandemic Novel Corona Virus (COVID-19) . CMA Niranjan Mishra, Central Council Member and Chairman Indirect Taxation Committee, ICAI , CMA Uttam Kumar Nayak, Secretary, ICAI-EIRC, CMA Saktidhar Singh, Chairman, ICAI-Bhubaneswar Chapter, CMA Mukesh Chaubey, Vice Chairman, ICAI-Bhubaneswar Chapter and CMA Mihir Mohapatra, Past Chairman, CJK Chapter handed over the cheque to Shri Ranendra Pratap Swain, Hon'ble Cabinet Minister of Food Supplies & Consumer Welfare, Co-Operation, Govt of Odisha . The Team also discussed with the Hon'ble Minister regarding the role of CMAs to support the Govt. on various initiatives undertaken by Govt. to boost the economy of the State and Country to a right track.

SOUTHERN INDIA REGIONAL COUNCIL

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA HYDERABAD CHAPTER

On April 5, 2020 the chapter discussed on Latest Developments in GST. CMA D.V. Rambabu garu detailed about Amendment made in GST law through various notifications, circulars and order issued to implement 39th GST council meeting recommendation held on 14-03-2020. On April 6, 2020, Patient Level Costing in Health Care. It is imperative for hospitals to have a System to Control the Costs, while at the same time providing High Quality Service to the Patients. Ms. Latesh Sen- Director, MediQ Healthcare Group, seasoned CMA with more than 22 years of experience, have designed various cost models and strategic pricing structures for health systems other than automation of healthcare cost accounting systems in many hospitals. This webinar mainly focus on Indian Healthcare Industry, Challenges of costing in Healthcare, Hospital Paradigm, Importance of Costing, Correct Design, Costing Solution, Achievement. On April 08, 2020 – Precautions - Corona Virus. There being no vaccine currently, we may reduce the chances of being infected with COVID-19 by taking some simple precautions. Dr. S. Krishna Murthy Sastry advised the precautions like washing hands, avoiding social gatherings; covering mouth and nose with face masks, cleanliness etc. 11.04.2020 – GST Study Circle Meeting. Latest issues in GST have been discussed for the benefit of the participants. 14.04.2020 - Covid-19 Post Lockdown and Challenges of Revival By CMA (Dr.) A.S. Durga Prasad garu, CMA V. V. Ravi Kumar garu, CMA B. Mallikarjuna Gupta garu. Fears and uncertainties are escalating that prolonged quarantines, supply chain disruptions and a sharp fall in several sectors could weaken the global economy or even cause a recession. In this scenario we had an intellectual session with CMA (Dr.) A.S. Durga Prasad garu, CMA V. V. Ravi Kumar garu, CMA B. Mallikharjuna Gupta garu about post lockdown challenges of Revival of Economy. 24.04.2020 - Clarifications in respect of various measures announced by the Govt for providing relief to the taxpayers in view of spread of Novel Corona Virus(Covid-19). Dr. Purushottam garu - Principal Commissioner, Shri Raghu Kiran garu - Joint Commissioner, Madhusudhan Reddy garu – Deputy Commissioner, Shri Arun Kumar garu, Superintendent of GST have taken initiation in organizing this programme. Government has issued the certain notifications in order to provide relief to the taxpayers in view of spread of Novel Corona virus. Shri Arun Kumar garu, Superintendent of GST has explained about those notifications through his technical PPT. 30.04.2020 - Economic Revival Post Covid 19 by CMA K. Narasimha Murthy. The impact of the Coronavirus(COVID 19) outbreak on economy of India prospects is severe. Growth was weak but stabilising until the coronavirus (COVID -19) hit. When India will come to normal routine and what are the measures/tools to soften the impact of COVID-19 on Indian Economy? These are the questions arising in everyone's mind. Banking, Financial Expert K. Narasimha Murthy has detailed about the impact of inflation on growth and GDP of our country, the various packages needed to be announced by the Govt. to get out of the current situation and the responsibility of CMA in going through forward.

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA
BENGALURU CHAPTER

The Chapter organized Karnataka CMA Convention on February 22 and 23, 2020. Communication and Soft Skill Training Programmes were organized by the chapter on 6th and 7th March, 2020. Pre Orientation Training programmes were also organized from 12th to 21st March 2020.

WESTERN INDIA REGIONAL COUNCIL

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA
NAVI MUMBAI CHAPTER

The Chapter organised the following programmes during the Lockdown Period A Webinar on " Introduction to Blockchain" on 17th May 2020 . Speaker on the Webinar was Mr. Sunil Senapati Director Trade Finance of Bolero, Singapore. The Programme commenced with the traditional welcome of the speaker and the audience) by CMA Vivek Bhalerao. CMA L. Prakash introduced the speaker, and highlighted the importance of understanding Blockchain in the new economic scenario that is coming up. The Speaker dealt on the subject in detail right from the Three Pillars on which it Stands viz Decentralization , Transparency & Immutability , how it works , and how we can use it by providing numerous practical examples for bringing in the Trust Factor in many of our Business Processes . The session was very interactive and speaker thanked all participants for making session interesting with their questions and discussion.The programme ended with felicitation of speaker Mr Sunil Senapati by thePD Chairman CMA Vivek Bhalerao .Chairman Sirish Vasant Mohite gave the vote of thanks and specially thanked the Speaker , Audience, Management Committee Members for their active participation. A Webinar on "E Invoicing & Upcoming Return Filing System in GST-A New Dimension " on 26th April 2020 . Speaker on the Webinar was CMA Amit Sarkar Sr Director Deloitte Haskins & Sells LLP and Advocate Harshill Vora Manager Deloitte Haskins & Sells LLP The Programme commenced with the traditional welcome of the speaker and the audience) by CMA Vivek Bhalerao. The Speaker dealt on the subject in minute details . The session was very interactive and speaker thanked all participants for making it interesting with their queries and discussion. The programme ended with felicitation of speakers CMA Amit Sarkar & Advocate Harshill Vora by the PD Chairman CMA Vivek Bhalerao .Chairman Sirish Vasant Mohite gave the vote of thank and specially thanked the Speaker and Audience for their active participation. On 7th April 2020 Webinar Classes for Final Year Students was commenced and now even Webinar Classes for Intermediate Students have also started and there has been a very positive response from the Students & Faculties. On 11th April,2020 a meeting of the management committee was taken on Video Conferencing due to Lockdown situation to discuss various matters pertaining to the Chapter activities.

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA AHMEDABAD CHAPTER

Looking to the situation of lockdown due to COVID-19 , the chapter started online coaching of foundation ,intermediate and final students from 7th of April,2020 and arranged lectures all the seven days of the week without break of single day till date. We plan to complete the course on online by end of second week of May. A very good Response has been received from the Students. The chapter had organized Series of Webinar. First webinar organized on "Emotional intelligence" on 23rd of April, 2020. CMA P D Modh explained about Emotional Intelligence. 20 members have participated in Webinar. Second Webinar Organized on "Office Automation for Professional Firms" on 24th of April, 2020. CMA Dakshesh Choksi-Chairman of P D Committee Welcomed Speaker.CA Parag Soni explained about how small and medium Professional firm can save time, cost and energy by office automation. Third Webinar Organized on "Yoga Prana Vidya" on 25th of April, 2020. CMA Dakshesh Choksi Welcomed Speaker. Mr.Alok Vasavda explained how to increase Immunity System by yoga and Pranayam. The Chapter organized Pre-placement Orientation Training Program for the fresh CMAs passed out of December19 exam from 12/03/2020 to 15/03/2020. 12 days Pre-placement orientation program was inaugurated by CMA Maulik Jasani, CFO, Harsha Engineering. Ladies wing of Ahmedabad chapter celebrated International women's day on 8th March at our chapter office. Chief Guest of the program was Anjali Bothra.

DIRECT & INDIRECT TAX UPDATES - MAY 2020

DIRECT TAXES

- **Circular No 11/2020 dated 8th May 2020**: Clarification in respect of residency under section 6 of the Income-tax Act, 1961: Section 6 of the Income-tax Act, 1961 (the Act) contains provisions relating to determination of residency of a person. The status of an individual, as to whether he is resident in India or a non-resident or not ordinarily resident, is dependent, inter-alia, on the period for which the person is in India during a previous year or years preceding the previous year.

  In order to avoid genuine hardship in such cases, the Board, in exercise of powers conferred under section 119 of the Act, has decided that for the purpose of determining the residential status under section 6 of the Act during the previous year 2019-20 in respect of an individual who has come to India on a visit before 22nd March, 2020 and:

  (a). has been unable to leave India on or before 31 st March, 2020, his period of stay in India from 22nd March, 2020 to 31 stl March, 2020 shall not be taken into account; or

  (b). has been quarantined in India on account of Novel Corona Virus (Covid-19) on or after 1 st March, 2020 and has departed on an evacuation flight on or before 31 st March, 2020 or has been unable to leave India on or before 31 st March, 2020, his period of stay from the beginning of his quarantine to his date of departure or 31 st March, 2020, as the case may be, shall not be taken into account; or

  (c). has departed on an evacuation flight on or before 31 st March, 2020, his period of stay in India from 22nd March, 2020 to his date of departure shall not be taken into account.

- **Circular No 12/2020 dated 20th May 2020:** Clarifications in respect of prescribed electronic modes under section 269SU of the Income-tax Act, 1961 : In furtherance to the declared policy objective of the Government to encourage digital transactions and move towards a less-cash economy, a new provision namely Section 269SU was inserted in the Income-tax Act, 1961 ("the Act"), vide the Finance (No.2) Act 2019. This section requires every person carrying on business and having sales/turnover/gross receipts from business of more than Rs 50 Crores ("specified person") in the immediately preceding previous year to mandatorily provide facilities for accepting payments through prescribed electronic modes. Subsequently vide notification no. 105/2019 dated 30.12.20 19 (i) Debit Card powered by RuPay; (ii) Unified Payments Interface (UPI) (BH IM-UPI); and (iii) Unified Payments Interface Quick Response Code (UPI QR Code) (BHIM-UPI QR Code) were notified as prescribed electronic modes.

  In view of the above, it is hereby clarified that the provisions of section 269SU of the Act shall not be applicable to a specified person having only B2B transaction s (i.e. no transaction with retail customer/consumer) if at least 95% of aggregate of all amounts received during the previous year, including amount received for sales, turnover or gross receipts, are by any mode other than cash.

- **Notification No. 23/2020 dated 6th May 2020**: Amendment of mutual agreement procedure laid down in Income Tax Rules 1962.

- **Notification No. 24/2020 dated 8th May 2020:** In the exercise of the powers conferred by clause (b) of sub-section (2) of section 80G of the Income-tax Act, 1961 (43 of 1961), the Central Government hereby notifies "SHRI RAM JANMABHOOMI TEERTH KSHETRA" (PAN: AAZTS6197B) to be place of historic importance and a place of public worship of renown for the purposes of the said section from the year F.Y. 2020-2021, relevant to the Assessment Year 2021-2022.

- **Notification No. 25/2020 dated 20th May 2020:** Amendment of Income tax Rules 1962 to provide safe harbour rules. In the Income-tax Rules, 1962,—

  (i) in rule 10TD, after sub-rule (3A), the following rule shall be inserted, namely: "(3B) The provisions of sub-rules (1) and (2A) shall apply for the assessment year 2020-21";

  (ii) in rule 10TE, in sub-rule (2), after the third proviso, the following proviso shall be inserted, namely: "Provided also that nothing contained in this sub-rule shall apply to the option for safe harbour validly exercised under sub-rule (3B) of rule 10TD."; and

  (iii) in Appendix II, in Form No 3CEFA, in the heading, in the brackets, for the word and figure "rule 10" the word, figure and letters "rule 10TE" shall be substituted.

- **Notification No. 26/2020 dated 21st May 2020**: In exercise of the powers conferred by clause (46) of section 10 of the Income-tax Act, 1961 (43 of 1961), the Central Government hereby notifies for the purposes of the said clause, 'Kerala Cooperative Development and Welfare Fund Board', Trivandrum (PAN AACTT3875A), a Board constituted by the Government of Kerala, in respect of the following specified income arising to that Board, namely:- (a) Membership Fees; (b) Annual Renewal Fees; (c) Risk Fund Contribution and Assistance; and (d) Interest earned on (a) to (c) above.

This notification shall be effective subject to the conditions that Kerala Cooperative Development and Welfare Fund Board,- (a) shall not engage in any commercial activity; (b) activities and the nature of the specified income shall remain unchanged throughout the financial years; (c) shall file return of income in accordance with the provision of clause (g) of sub-section (4C) of section 139 of the Income-tax Act, 1961; and (d) shall file the audit report along with return, duly verified by the accountant as provided in explanation to section 288(2) of the Income-tax Act, 1961 along with a certificate from the chartered accountant that the above conditions are satisfied.

This notification shall apply with respect to the assessment years 2019-2020, 2020-2021, 2021-2022, 2022-2023 and 2023-2024.

- **Notification No. 27 /2020 dated 27th May 2020**: —In exercise of the powers conferred by clause (46) of section 10 of the Income-tax Act, 1961 (43 of 1961), the Central Government hereby notifies for the purposes of the said clause, 'Cochin Special Economic Zone Authority', Kochi (PAN AAAGC0659L), a authority constituted by the Government of India, in respect of the following specified income arising to that Authority, namely:-

  (a) Lease rent (charged as per Government prescribed rate); (b) Interest from banks on RDRs; (c) Receipts from I-Card and permit fee; (d) Allotment Fee in respect of Standard Design Factories (SDF); (e) Auction/Bid amount in respect of Plots/Buildings which fall vacant; (f) Transfer charges in respect of Plot/Building; (g) Fee for issue of Form-I for exemption of Building Plans; (h) Processing fee for approval of Building Plans; (i) Usage charges from Service provided; (j) License fee for allotment of Staff Quarters to the Staff; (k) Integrated Water Management Systems (IWMS) (Water Treatment Plant (WTP), Common Effluent Treatment Plant (CETP), Incinerator, Biogas Plant) charges/fees/fine etc.; (l) Power Distribution Business; and (m) From the sale of miscellaneous scrap/waste.

- **Notification No. 28 /2020 dated 27th May 2020:** In exercise of the powers conferred by clause (46) of section 10 of the Income-tax Act, 1961 (43 of 1961), the Central Government hereby notifies for the purposes of the said clause, 'Uttarakhand Environment Protection & Pollution Control Board', Dehradun(PAN AAALU0160D), a Board constituted by the Government of Uttarakhand, in respect of the following specified income arising to that Board, namely:

  (a) consent fee; (b) no objection certificate fee; (c) bio medical waste fee; (d) hazardous fee; (e) stack/analysis fee; (f) bank guarantee forfeited; (g) income against RTI application charges; (h) reimbursement of the expense received from Central Pollution Control Board towards National Air Monitoring Programmes; (i) monitoring fees; (j) interest from savings accounts & FDRs; (k) public hearing fee; (l) interest from house loan advance to staff; and (m) income by sale of old scrap items and tender fee etc.

- **Notification No. 29 /2020 dated 27th May 2020**: Remuneration to be paid to an eligible Fund Manager under section 9A of Income Tax Act 1961.

  In the Income-tax Rules, 1962 (hereinafter referred to as the principal rules), - (a) in rule 10V,

  (i) after sub-rule (10), the following shall be inserted, namely: -

  "(11) The provisions of sub-rule (5) to sub-rule (10) shall not apply on or after the 1st day of April, 2019.

  (12) the amount of remuneration to be paid by the fund to a fund manager, referred to in clause (m) of sub-section (3) of section 9A, shall be calculated in the following manner, namely: -

  (i) In case where the fund is Category-I foreign portfolio investor referred to in item (i), item (ii) or item (iii), and sub item III of item (iv) of clause (a) of regulation 5 of the Securities and Exchange Board of India (Foreign Portfolio Investors) Regulations, 2019, made under the Securities and Exchange Board of India Act, 1992 (15 of 1992), the amount of remuneration shall be 0.10 per cent of the asset under management.

  (ii) In other cases, the amount of remuneration shall be, -

  (a) 0.30 per cent of the asset under management; or

  (b) 10 per cent of profits derived by the fund in excess of the specified hurdle rate from the fund management activity undertaken by the fund manager, where it is entitled only to remuneration linked to the income or profits derived by the fund; or

  (c) 50 per cent of the management fee, whether in the nature of fixed charge or linked to the income or profits derived by the fund from the management activity undertaken by the fund manager, paid by such fund in respect of the fund management activity undertaken by the fund manager as reduced by the amount incurred towards operational expenses including distribution expenses, if any:

Provided that the provisions of this sub-clause shall apply only in case the fund is also making payment of management fee to any other fund manager.

Provided further that in case where the amount of remuneration is lower than the amount arrived at under clause (i) or clause (ii), the fund may, at its option, apply to the Member, Central Board of Direct Taxes referred to in sub-rule (2) of rule 10VA seeking approval of the Board under said rule for that lower amount to be the amount of remuneration, and, on receipt of such application the Board may, after satisfying itself considering the relevant facts, approve such lower amount to be the amount of remuneration.

- **Notification No. 30 /2020 dated 28th May 2020:** In exercise of the powers conferred by section 285BB read with section 295 of the Income-tax Act, 1961 (43 of 1961), the Central Board of Direct Taxes hereby makes the following rules further to amend the Income-tax Rules, 1962, namely:— 1. Short title and commencement.-(1) These rules may be called the Income-tax (11th Amendment) Rules, 2020. (2) They shall come into force with effect from the 1st day of June, 2020.

  2. In the Income-tax Rules, 1962 –

  (I) rule 31AB shall be omitted;

  (II) after rule 114H, the following rule shall be inserted, namely:-

  "Annual Information Statement 114-I. (1) The Principal Director General of Income-tax (Systems) or the Director General of Income-tax (Systems) or any person authorised by him shall, under section 285BB of the Income-tax Act,1961, upload in the registered account of the assessee an annual information statement in Form No. 26AS containing the information specified in column (2) of the table which is in his possession within three months from the end of the month in which the information is received by him.

  (3) The Board may also authorise the Principal Director General of Income-tax (Systems) or the Director General of Income-tax (Systems) or any person authorised by him to upload the information received from any officer, authority or body performing any function under any law or the information received under an agreement referred to in section 90 or section 90A of the Income-tax Act,1961 or the information received from any other person to the extent as it may deem fit in the interest of the revenue in the annual information statement referred to in sub-rule (1).

  (4) The Principal Director General of Income-tax (Systems) or the Director General of Income-tax (Systems) shall specify the procedures, formats and standards for the purposes of uploading of annual information statement referred to in sub-rule (1)."

- **Notification No. 31 /2020 dated 29th May 2020:** In exercise of the powers conferred by section 139 read with section 295 of the Income-tax Act, 1961 (43 of 1961), the Central Board of Direct Taxes hereby makes the following rules further to amend the Income-tax Rules, 1962, namely:—

  1. Short title and commencement.–(1) These rules may be called the Income-tax (12th Amendment) Rules, 2020. (2) They shall come into force with effect from the date of publication in the Official Gazette.
  2. In the Income-tax Rules, 1962,
  (a) in rule 12, in sub-rule(1)
  (I) in clause (a), in the proviso,- (i) in item (V), the word or shall be inserted at the end; (ii) items (VII) and (VIII) shall be omitted;
  (II) in clause (ca), in the proviso, item (VI) shall be omitted.
  (b) in Appendix II, for Form —Sahaj (ITR-1), Form ITR-2, Form ITR-3, Form Sugam (ITR-4), Form ITR-5, Form ITR-6, Form ITR-7 and Form ITR-V, the following Forms shall, respectively, be substituted.

INDIRECT TAXES

- **Notification No. 38/2020 – Central Tax dated 5th May 2020**: Seeks to make fifth amendment (2020) to CGST Rules. In the Central Goods and Services Tax Rules, 2017 (hereinafter referred to as the said rules), with effect from the 21st April, 2020, in rule 26 in sub-rule (1), after the proviso, following proviso shall be inserted, namely: - "Provided further that a registered person registered under the provisions of the Companies Act, 2013 (18 of 2013) shall, during the period from the 21st day of April, 2020 to the 30th day of June, 2020, also be allowed to furnish the return under section 39 in FORM GSTR3B verified through electronic verification code (EVC)."

  In the said rules, after rule 67, with effect from a date to be notified later, the following rule shall be inserted, namely: - "67A. Manner of furnishing of return by short messaging service facility.- Notwithstanding anything contained in this Chapter, for a registered person who is required to furnish a Nil return under section 39 in FORM GSTR-3B for a tax period, any reference to electronic furnishing shall include furnishing of the said return through a short messaging service using the registered mobile number and the said return shall be verified by a registered mobile number based One Time Password facility.

- **Notification No. 39/2020 – Central Tax dated 5th**

May 2020: Seeks to make amendments to special procedure for corporate debtors undergoing the corporate insolvency resolution process under the Insolvency and Bankruptcy Code, 2016.

In the said notification (i) in the first paragraph, the following proviso shall be inserted, namely: - "Provided that the said class of persons shall not include those corporate debtors who have furnished the statements under section 37 and the returns under section 39 of the said Act for all the tax periods prior to the appointment of IRP/RP."

(ii) for the paragraph 2, with effect from the 21st March, 2020, the following paragraph shall be substituted, namely: - "2. Registration.- The said class of persons shall, with effect from the date of appointment of IRP / RP, be treated as a distinct person of the corporate debtor, and shall be liable to take a new registration (hereinafter referred to as the new registration)in each of the States or Union territories where the corporate debtor was registered earlier, within thirty days of the appointment of the IRP/RP or by 30th June, 2020, whichever is later."

- **Notification No. 40/2020 – Central Tax dated 5th May 2020:** Seeks to extend the validity of e-way bills till 31.05.2020 for those e-way bills which expire during the period from 20.03.2020 to 15.04.2020 and generated till 24.03.2020. In exercise of the powers conferred by section 168A of the Central Goods and Services Tax Act, 2017 (12 of 2017) (hereafter in this notification referred to as the said Act), read with section 20 of the Integrated Goods and Services Tax Act, 2017 (13 of 2017), and section 21 of Union Territory Goods and Services Tax Act, 2017 (14 of 2017), the Central Government, on the recommendations of the Council, hereby makes the following amendment in the notification of the Government of India in the Ministry of Finance (Department of Revenue), No.35/2020- Central Tax, dated the 3rd April, 2020, published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (i), vide number G.S.R. 235(E), dated the 3rd April, 2020, namely:-

  In the said notification, in the first paragraph, in clause (ii), the following proviso shall be inserted, namely: -

  "Provided that where an e-way bill has been generated under rule 138 of the Central Goods and Services Tax Rules, 2017 on or before the 24th day of March, 2020 and its period of validity expires during the period 20th day of March, 2020 to the 15th day of April, 2020, the validity period of such e-way bill shall be deemed to have been extended till the 31st day of May, 2020."

- **Notification No. 41/2020 – Central Tax dated 5th May 2020:** Seeks to extend the due date for furnishing of FORM GSTR 9/9C for FY 2018-19 till 30th September, 2020. – In exercise of the powers conferred by sub-section (1) of section 44 of the Central Goods and Services Tax Act, 2017 (12 of 2017) (hereafter in this notification referred to as the said Act), read with rule 80 of the Central Goods and Services Tax Rules, 2017 (hereafter in this notification referred to as the said rules), and in supersession of notification No. 15/2020-Central Tax, dated the 23rd March, 2020, published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (i), vide number G.S.R. 198(E), dated the 23rd March, 2020, except as respects things done or omitted to be done before such supersession, the Commissioner, on the recommendations of the Council, hereby extends the time limit for furnishing of the annual return specified under section 44 of the said Act read with rule 80 of the said rules, electronically through the common portal, for the financial year 2018-2019 till the 30th September, 2020.

- **Notification No. 42/2020 – Central Tax dated 5th May 2020:** Seeks to extend the due date for furnishing FORM GSTR-3B, Jan-March, 2020 returns for the taxpayers registered in Ladakh.

  In the said notification, in the first paragraph, for the sixth proviso, the following provisos shall be substituted, namely: – "Provided also that the return in FORM GSTR-3B of the said rules for the months of November, 2019 to February, 2020 for registered persons whose principal place of business is in the Union territory of Jammu and Kashmir, shall be furnished electronically through the common portal, on or before the 24th March, 2020:

  Provided also that the return in FORM GSTR-3B of the said rules for the months of November, 2019 to December, 2019 for registered persons whose principal place of business is in the Union territory of Ladakh, shall be furnished electronically through the common portal, on or before the 24th March, 2020:

  Provided also that the return in FORM GSTR-3B of the said rules for the months of January, 2020 to March, 2020 for registered persons whose principal place of business is in the Union territory of Ladakh, shall be furnished electronically through the common portal, on or before the 20th May, 2020."

  This notification shall be deemed to come into force with effect from the 24th Day of March, 2020

- **Notification No. 43/2020 – Central Tax dated 16th May 2020:** Seeks to bring into force Section 128 of Finance Act, 2020 in order to bring amendment in Section 140 of CGST Act w.e.f. 01.07.2017. — In exercise of the powers conferred by sub-section (2) of section 1 of the Finance Act, 2020 (12 of 2020) (hereafter in this notification referred to as the said Act), the Central Government hereby appoints the 18th day of May, 2020, as the date on which the provisions of section 128 of the said Act, shall come into force.

- **Circular No. 138/08/2020-GST dated 6th May 2020**: Seeks to clarify 'issues in respect of challenges faced by the registered persons in implementation of provisions of GST Laws'.

  Circular No.136/06/2020-GST, dated 03.04.2020 and Circular No.137/07/2020-GST, dated 13.04.2020 had been issued to clarify doubts regarding relief measures taken by the Government for facilitating taxpayers in meeting the compliance requirements under various provisions of the Central Goods and Services Tax Act, 2017 (hereinafter referred to as the "CGST Act") on account of the measures taken to prevent the spread of Novel Corona Virus (COVID-19). Post issuance of the said clarifications, certain challenges being faced by taxpayers in adhering to the compliance requirements under various other provisions of the CGST Act were brought to the notice of the Board, and need to be clarified.
- **Notification No. 21/2020-Customs dated 5th May 2020**: Seeks to amend notification No. 18/2019-Customs dated 6th July, 2019 so as to increase effective rate of Road and Infrastructure Cess (RIC) collected as additional duty of customs on petrol and diesel by Rs. 8 per litre.
- **Notification No. 22/2020-Customs dated 12th May 2020:** Seeks to confirm the provisional increase of 5% in the rate of duty of customs levied vide notification No. 29/2019-Cus dated 04.09.2019, for a period of 180 days, on imports of "Refined Bleached Deodorized Palmolein and Refined Bleached Deodorized Palm Oil", falling under tariff item [1511 90 10] or tariff item [1511 90 20] of the First Schedule to the Customs Tariff Act, 1975, originating in Malaysia and imported under India-Malaysia Comprehensive Economic Cooperation Agreement.
- **Notification No. 23/2020-Customs dated 14th May 2020:** Seeks to further amend Customs Notification No. 50/2017-Customs dated 30.06.2017 so as to extend the period of validity of existing Export Performance Certificates for FY 2019-20 up to 30.09.2020.
- **Notification No. 24/2020-Customs dated 21st May 2020:** Seeks to amend notification No. 56/2000-Customs dated 05.05.2000, No. 57/2000-Customs dated 08.05.2000 and No. 40/2015-Customs dated 21.07.2015 providing for extension of last date of export by six months, for those cases where the last date of export falls between 01.2.2020 and 31.7.2020 due to the outbreak of COVID-19 pandemic.
- **Notification No. 25/2020-Customs dated 21st May 2020:** Inclusion of Gopalpur Port [INGPR1] as notified port for getting benefits under AA/EPCG schemes and other export incentive schemes like MEIS/SEIS and other such schemes.
- **Circular No. 24/2020 –Customs dated 14th may 2020:** Implementation of PGA e-SANCHIT–Paperless Processing under SWIFT-Uploading of Licenses/ Permits/ Certificates/ Other Authorizations (LPCOs) by PGAs
- **Circular No. 25/2020 – Customs dated 18th May 2020:** Electronic Sealing-deposit in and removal of goods from Customs Bonded Warehouse.
- **Circular No. 26/2020 – Customs dated 29th May 2020:** Review of Circular No. 17/2020 dated 03.04.2020 namely, 'Measures to facilitate trade during the lockdown period- section 143 AA of the Customs Act, 1962
- **Notification No. 5/2020-Central Excise dated 5th May 2020**: Seeks to amend notification No. 05/2019-Central Excise dated 6th July, 2019 so as to increase effective rate of Special Additional Excise Duty (SAED) on petrol by Rs. 2 per lire and on diesel by Rs. 5 per litre.
- **Notification No. 6/2020-Central Excise dated 5th May 2020:** Seeks to amend notification No. 04/2019-Central Excise dated 6th July, 2019 so as to increase effective rate of Road and Infrastructure Cess (RIC) collected as additional duty of excise on petrol and diesel by Rs. 8 per litre.

Sources:

1. *Income Tax Portal*
2. *GST Portal*
3. *www.cbic.gov.in*

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

(STATUTORY BODY UNDER AN ACT OF PARLIAMENT)

CMA BHAWAN, 12, SUDDER STREET, KOLKATA – 700 016.

Kolkata, the 19th May, 2020

NOTIFICATION

No. CMA (1)/2020: In exercise of powers conferred by Regulation 146 of the Cost and Works Accountants Regulations, 1959, the Council of the Institute of Cost Accountants of India through Resolution by Circulation and at the 324th Meeting of Council held on 17th and 18th May, 2020, has made following amendments to the Cost Accountants Chapters' Bye-Laws, 2019. The amendments shall come into force with immediate effect.

Sl.	Provision in Chapters Bye-Laws	Current Provision of the Cost Accountants Chapters' Bye-Laws, 2019	Amendment
1.	**Clause 15. Sub-Committees**	**Clause 15. Sub-Committees-** (1) ..... (2) ...... (3)	**Clause 15. Sub-Committees-** **Insertion of clause 15 (4)-** (1) Same (2) Same (3) Same (4) The sub-committee shall follow the procedure with regard to time and place of the meeting, procedure for transaction of business and minutes as are applicable to the managing committee of the Chapters.
2.	**Passing of resolution by circulation**	No provision available	**Insertion of new Clause 18A.** **Passing of resolution by circulation-** (1) The Chairman may, in emergent cases, circulate papers among the members of the Managing Committee for decision of any question: Provided that, at least 1/3rd members of the Managing Committee require that any question should be decided at a meeting, the Chairman shall withdraw the papers from circulation and have the question decided at a meeting of the Managing Committee. (2) Where the papers relating to any question are circulated among the members, a period of ordinarily not less

1

Sl.	Provision in Chapters Bye-Laws	Current Provision of the Cost Accountants Chapters' Bye-Laws, 2019	Amendment
			than ten days, commencing from the date of circulation of the papers shall elapse before any decision is arrived at on the question. (3) Every resolution passed by circulation of papers shall be communicated to all the members of the Managing Committee.
3.	**Clause 20. Notice of Meetings**	**Clause 20. Notice of Meetings-** (1) In case of a General Meeting at least fourteen days' notice of the meeting specifying the date, place and hour of the meeting and in case of special business, the general nature of such business shall be given. Copies of notice of all General Meetings shall be sent to the Regional Council concerned at the same time as they are sent to the members of the Chapter. (2) In the case of the meeting of Managing Committee or any of sub-committee, at least seven days' notice specifying the date, place and hour of such meeting shall be given to the members.	**Clause 20. Notice of Meetings-** **Insertion of clause 20 (3)-** "In case of emergent situations, the meeting of the Managing Committee or any of its sub-committee may be held through video conferencing or any other electronic mode as may be appropriate to transact the business of the Managing Committee or the sub-committee, by specifying the date and time of such meeting to all the members of the Managing Committee or the sub-committee."
4.	**Clause 21. Quorum**	**Clause 21. Quorum-** The Quorum shall, in case of a General Meeting, be eight members, and in the case of a meeting of Managing Committee or sub-committee, one third of the total membership of the Managing Committee or the sub-committee as the case may be. If the quorum is not present within half and hour of the time fixed for the meeting, the meeting shall stand adjourned to such date, time and place as may be fixed by the Chairman of the General meeting, Managing Committee or sub-committee as the case may be. Provided that where a meeting has been adjourned for want of a quorum, any business which was intended to be transacted at the original meeting may be transacted at such adjourned	**Clause 21. Quorum-** **Insertion of Proviso to clause 21** Provided further that the provisions of the quorum of meeting shall be applicable to all meetings held through video conferencing or any other electronic mode as provided in clause 20(3).

2

Sl.	Provision in Chapters Bye-Laws	Current Provision of the Cost Accountants Chapters' Bye-Laws, 2019	Amendment
		meeting, notwithstanding that there is no quorum. Provided however in case a Chapter is constituted by relaxing the minimum requirement of members by the Council under Clause 6 of these bye laws, the Council may allow a lower quorum un writing on an application made in this respect by the Chairman of the Managing Committee.	
5.	**Clause 26** **Accounts and Audit**	**Clause 26** **Accounts and Audit-** (6) Chapters shall submit budget in the format provided by the Finance Directorate time to time duly approved by the Managing Committee latest by 15th March of the previous year for which the budget is prepared.	**Clause 26** **Accounts, Audit and Budget-** (6) Chapters shall submit budget in the format provided by the Finance Directorate from time to time duly approved by the Managing Committee latest by 31st January of the previous year for which the budget is prepared.

Further, in exercise of powers conferred by Regulation 146A of the Cost and Works Accountants Regulations, 1959, the Council of the Institute of Cost Accountants of India at its 324th Meeting held on 17th and 18th May, 2020, has given the following relaxations in view of outbreak of COVID-19. The relaxations shall come into force with immediate effect.

1. **Annual General Meeting of the Chapter for the year 2020.**

   The due date of holding of Annual General meeting of the Chapter under Clause 18(1) of the Chapters Bye-Laws, 2019 stands extended to 30th June, 2020 in respect of Annual General Meeting for the year 2020 which was due to be conducted by 31st May, 2020.

2. **Adoption of Annual Accounts of the Chapter for the financial year 2019-20.**

   The due date of consideration and adoption of annual accounts of the Chapter under Clause 18(1)(ii) of the Chapters Bye-Laws, 2019 stands extended to 30th June, 2020 in respect of annual accounts for the financial year 2019-20 which were due to be adopted by 31st May, 2020.

3. **Forwarding of Annual Accounts of the Chapter to the Council & Regional Council concerned for the financial year 2019-20.**

   The due date of "16th May" specified in Clause 26(5) of the Chapters Bye-Laws, 2019 stands extended to "16th June, 2020" in respect of annual accounts for the financial year 2019-20.

4. **Election of office bearers of the Chapter for the year 2020-21.**

   Attention is drawn to Clause 12(1) of the Chapters Bye-Laws, 2019 which states as follows:

3

“Every Managing Committee of a Chapter at its first meeting to be held on the same day and immediately after the Annual General Meeting shall elect from among the elected members a Chairman, a Vice-Chairman, a Secretary and a Treasurer thereof for not exceeding one year tenure, and so often as any of these offices becomes vacant, the Managing Committee of the Chapter shall elect another person from among its members to hold that office for remaining tenure only.”

It is clarified that pursuant to extension granted under Clause 18(1) of the Chapters Bye-Laws, 2019, the Annual General Meeting of the Chapter can be held by 30th June, 2020. Consequently, the date of election of the office bearers of the Chapter for the year 2020-21 automatically stands extended up to 30th June, 2020, which shall be held in accordance with Clause 12(1) of the Chapters Bye-Laws, 2019.

5. Office bearers of the Chapter for the year 2019-20.

Attention is drawn to Clause 14 of the Chapters Bye-Laws, 2019 which states as follows:

“*Term of Office— The Chairman, Vice-Chairman, Secretary and Treasurer shall hold office for a period of one year from the conclusion of the Annual General Meeting of the Chapter, which shall in no case extend beyond 31st May… ….”*

The due date referred to in Clause 14 of the Chapters Bye-Laws, 2019 stands extended to 30th June, 2020 in respect of office bearers of the Chapter who hold office till 31st May, 2020.

6. **Revised procedure for conducting the Annual General Meeting for the year 2020.**

On account of emergent situation arising out of outbreak of COVID-19, the Annual General Meeting for the year 2020 under Clause 18 of the Chapters Bye-Laws, 2019 can be conducted through video conferencing or any other electronic mode subject to the condition that due notice for Annual General Meeting should be issued through email or any other electronic mode and the requisite quorum should be present through video conferencing or any other electronic mode. Relaxation from Clause 20 & 21 of the Chapters Bye-laws, 2019 is granted to allow issue of notice of meeting through email or any other electronic mode and the presence of requisite quorum through video conferencing or any other electronic mode.

K Banerjee

CMA Kaushik Banerjee
Secretary

ADVISORY FOR RENEWAL OF CERTIFICATE OF PRACTICE FOR 2020-21

The members of the Institute holding Certificate of Practice (CoP) having validity up to 31st March, 2020 are requested to comply with the following guidelines for renewal of their Certificate of Practice:

1. The following changes consequent to amendment of the Cost and Works Accountants Regulations, 1959 vide Notification dated 4th February, 2011 published in the Gazette of India may be noted:
   a. The validity of a Certificate of Practice (CoP) is for the period 1st April to 31st March every year unless it is cancelled under the provisions of the Cost and Works Accountants Act and Regulations, 1959 as amended.
   b. The Certificate of Practice issued shall automatically be renewed subject to submission of prescribed Form M-3 and payment of renewal fee* and annual membership fee*.
   c. From the year 2011-12 onwards, letter for renewal Certificate of Practice is not being issued. However, the members concerned may download the renewal status from the Institute's website www.icmai.in.
2. It may please be noted that under Section 6 of the Cost and Works Accountants Act, 1959, **both the Annual Membership Fee* and Fee for Renewal of Certificate of Practice*** falls due on 1st April each year.
3. Special attention is invited to the fact that the validity of a Certificate of Practice expires on **31st March** each year unless it is renewed on or before the date of expiry in terms of the amended Regulation 10 of the Cost and Works Accountants Regulations, 1959. Hence, a member shall be required to renew his certificate within **31st March** every year.
4. **If the Certificate of Practice of a member is not renewed within 31st March, 2020, his/her status of CoP from 1st April 2020 till the date of renewal would be "Not Active".**
5. Subject to what has been mentioned in Sl. No. 4 above, a member can get his/her Certificate of Practice for 2020-21 renewed within **30th June,** 2020. If application for renewal of Certificate of Practice is made after 30th June, 2020, the member's Certificate of Practice for 2020-21 will not be renewed but will be considered as a case of fresh issuance with effective date being the date of the application or receipt of the prescribed fee * for Certificate of Practice, whichever is later.
6. It may please be noted that mere payment of fees * alone will not be sufficient for renewal of Certificate of Practice. Application in prescribed Form M-3 is to be used for Renewal of Certificate of Practice duly filled in and signed is **mandatory.** The soft copy of prescribed Form M-3 for Renewal of Certificate of Practice can be downloaded from Institute's website www.icmai.in.
7. The Institute has introduced a scheme of Continuing Education Programme (CEP) and the same is mandatory in accordance with proviso to sub-regulation (1) of Regulation 10 of the Cost and Works Accountants Regulations, 1959, as amended, whereby no Certificate of Practice and renewal thereof shall be issued unless a member has undergone minimum number of hours of such training. The detailed guidelines in this connection are available on Institute's website www.icmai.in.
8. **Other relevant issues for Renewal of Certificate of Practice are as follows:**
   a. Application for renewal of Certificate of Practice upto 31st March, 2021 has to be made in prescribed Form M-3 which may be filed online or through hard Copy of form duly filled in and signed on both sides together with Renewal Certificate of Practice fee * of Rs.2,000/- and all other dues to the Institute on account of annual membership fees * and entrance fees *.
   b. The annual membership fee* for Associate and Fellow members are Rs.1,000/- and Rs.1,500/- respectively. The entrance fee * for Associate and Fellow members is Rs. 1,000/- each payable at a time at the time of application for admission to Associateship or advancement to Fellowship, as the case may be.
   c. The fees * may be paid online or by Demand Draft/at par cheque payable at Kolkata if remitted by post to the Headquarters of the Institute.
   d. Members should note that the **renewal of Certificate of Practice can be effected only after receipt of the prescribed fees* along with duly filled in form at the Headquarters of the Institute and on meeting the stipulated CEP credit hours.** Mere submission of the same at the Regional Councils or Chapters will not be sufficient. Members are advised to make payment directly to the Headquarters or use the online facility of submission of application and payment to avoid any delay.

All practicing members are advised to send their application for renewal of Certificate of Practice for the year 2020-21 along with other requirements as indicated above immediately so as to reach the Institute's Office at Kolkata well in advance to enable the Institute to issue the renewal of Certificate by 31st March, 2020.

Renewal of Part-time Certificate of Practice

1. For renewal of part-time Certificate of Practice, it is also essential to furnish a certificate from the employer in the following form or in a form as near thereto as possible if the practising member has undertaken any employment or there has been a change in employment:

   "Shri/Smt …………………………………………….. is employed as (designation) …………………….. and (name of Organisation)…………………. …… ……………... he/she is permitted, notwithstanding anything contained in the terms of his/her employment, to engage himself/herself in the practice of profession of Cost Accountancy in his/her spare time in addition to his/her regular salaried employment with us.

   Signature of Employers with seal of Organisation"

2. It may be noted that members holding Part-time Certificate of Practice (CoP) are not eligible to undertake statutory assignments like Cost Audit, Central Excise Audit, etc.

**GST is applicable against payment*

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA
(STATUTORY BODY UNDER AN ACT OF PARLIAMENT)

RESCHEDULED TIME TABLE & PROGRAMME – JUNE 2020

FOUNDATION COURSE EXAMINATION

Day & Date	Foundation Course Examination Syllabus-2016 Time 2.00 p.m. to 5.00 p.m.
Tuesday, 21st July, 2020	Fundamentals of Economics & Management
Thursday, 23rd July, 2020	Fundamentals of Accounting
Saturday, 25th July, 2020	Fundamentals of Laws & Ethics
Monday, 27th July, 2020	Fundamentals of Business Mathematics & Statistics

Examination Fees

Foundation Course Examination	**Inland Centres**	**` 1200/-**
	Overseas Centres	**US $ 60**

1. **The Foundation Examination will be conducted in Offline mode only. Each paper will be of 100 marks.**
2. Application Forms for Foundation Examination has to be filled up through online and fees will be accepted through online mode (including Payfee Module of IDBI Bank).
3. STUDENTS OPTING FOR OVERSEAS CENTRES HAVE TO APPLY OFFLINE AND SEND DD ALONGWITH THE FORM.
4. (a) Students can login to the website www.icmai.in and apply online through payment gateway by using Credit/Debit card or Net banking.

   (b) Students can also pay their requisite fee through pay-fee module of IDBI Bank.
5. **Last date for receipt of Examination Application Forms is 20th May, 2020.**
6. Examination Centres: Adipur-Kachchh(Gujarat), Agartala, Agra, Ahmedabad, Akurdi, Allahabad, Asansol, Aurangabad, Bangalore, Baroda, Berhampur(Ganjam), Bhilai, Bhilwara, Bhopal, Bewar City(Rajasthan), Bhubaneswar, Bilaspur, Bikaner (Rajasthan), Bokaro, Calicut, Chandigarh, Chennai, Coimbatore, Cuttack, Dehradun, Delhi, Dhanbad, Duliajan (Assam), Durgapur, Ernakulam, Erode, Faridabad, Ghaziabad, Guntur, Guwahati, Haridwar, Hazaribagh, Howrah, Hyderabad, Indore, Jaipur, Jabalpur, Jalandhar, Jammu, Jamshedpur, Jodhpur, Kalyan, Kannur, Kanpur, Kolhapur, Kolkata, Kota, Kottakkal (Malappuram), Kottayam, Lucknow, Ludhiana, Madurai, Mangalore, Mumbai, Mysore, Nagpur, Naihati, Nasik, Nellore, Neyveli, Noida, Palakkad, Panaji (Goa), Patiala, Patna, Pondicherry, Port Blair, Pune, Raipur,Rajahmundry, Ranchi, Rourkela, Salem, Sambalpur, Shillong, Siliguri, Solapur, Srinagar, Surat, Thrissur, Tiruchirapalli,Tirunelveli, Trivandrum, Udaipur, Vapi, Vashi, Vellore, Vijayawada, Vindhyanagar, Waltair and Overseas Centres at Bahrain, Dubai and Muscat.
7. **A candidate who is completing all conditions for appearing the examination as per Regulation will only be allowed to appear for examination.**
8. **Probable date of publication of result: To be announced in due course.**

*** For any examination related query, please contact exam.helpdesk@icmai.in**

Kaushik Banerjee
Secretary

15THE INSTITUTE OF COST ACCOUNTANTS OF INDIA
(STATUTORY BODY UNDER AN ACT OF PARLIAMENT)

RESCHEDULED TIME TABLE & PROGRAMME FOR INTERMEDIATE AND FINAL EXAMINATION– JUNE 2020

	PROGRAMME FOR SYLLABUS 2016			
	ATTENTION: INTERMEDIATE & FINAL EXAMINATION (JUNE – 2020 TERM) WILL BE HELD ON ALTERNATE DATES FOR EACH GROUP.			
Day & Date	INTERMEDIATE (Time: 2.00 P.M. to 5.00 P.M.)		FINAL (Time: 2.00 P.M. to 5.00 P.M.)	
	(Group – I)	(Group – II)	(Group – III)	(Group – IV)
Monday, 20th July, 2020	Financial Accounting (P-05)	-------------------	Corporate Laws & Compliance (P-13)	-------------------
Tuesday, 21st July, 2020	-------------------	Operations Management & Strategic Management (P-09)	-------------------	Corporate Financial Reporting (P-17)
Wednesday, 22nd July, 2020	Laws & Ethics (P-06)	-------------------	Strategic Financial Management (P-14)	-------------------
Thursday, 23rd July, 2020	-------------------	Cost & Management Accounting and Financial Management (P-10)	-------------------	Indirect Tax Laws & Practice (P-18)
Friday, 24th July, 2020	Direct Taxation (P-07)	-------------------	Strategic Cost Management – Decision Making (P-15)	-------------------
Saturday, 25th July, 2020	-------------------	Indirect Taxation (P-11)	-------------------	Cost & Management Audit (P-19)
Sunday, 26th July, 2020	Cost Accounting (P-08)	-------------------	Direct Tax Laws and International Taxation (P-16)	-------------------
Monday, 27th July, 2020	-------------------	Company Accounts & Audit (P-12)	-------------------	Strategic Performance Management and Business Valuation (P-20)

EXAMINATION FEES

Group (s)		Final Examination	Intermediate Examination
One Group	(Inland Centres) (Overseas Centres)	`1400/- US $ 100	`1200/- US $ 90
Two Groups	(Inland Centres) (Overseas Centres)	`2800/- US $ 100	`2400/- US $ 90

1. **Application Forms for Intermediate and Final Examination has to be filled up through online only and fees will be accepted through online mode only (including Payfee Module of IDBI Bank). No Offline form and DD payment will be accepted for domestic candidate.**
2. **STUDENTS OPTING FOR OVERSEAS CENTRES HAVE TO APPLY OFFLINE AND SEND DD ALONGWITH THE FORM.**
3. **(a) Students can login to the website www.icmai.in and apply online through payment gateway by using Credit/Debit card or Net banking.**
   (b) Students can also pay their requisite fee through pay-fee module of IDBI Bank.
4. **Last date for receipt of Examination Application Forms is 20th May, 2020.**
5. **The provisions of direct tax laws and indirect tax laws, as amended by the Finance Act, 2019, including notifications and circulars issued up to 30th November, 2019, are applicable for June, 2020 term of examination for the Subjects Direct Taxation, Indirect Taxation (Intermediate), Direct Tax laws and International Taxation and Indirect Tax laws & Practice (Final) under Syllabus 2016. The relevant assessment year is 2020-21. For statutory updates and amendments please refer to: https://icmai.in/studentswebsite/Syl-2016.php**
6. **Companies (Cost Records and Audit) Rules, 2014 as amended till 30th November, 2019 is applicable for June, 2020 examination for Paper 12- Company Accounts and Audit (Intermediate) and Paper 19 - Cost and Management Audit (Final) under Syllabus 2016. For updates and amendments please refer to the link: https://icmai.in/studentswebsite/Syl-2016.php**
7. **The provisions of the Companies Act 2013 are applicable for Paper 6 - Laws and Ethics (Intermediate) and Paper 13 - Corporate Laws and Compliance (Final) under Syllabus 2016 to the extent notified by the Government up to 30th November, 2019 for June, 2020 term of examination. Additionally, for applicability of ICDR, 2018 for Paper-13 - Corporate Laws & Compliance (Final) under Syllabus 2016 refer to relevant circular in website for June, 2020 term examination by following link: https://icmai.in/studentswebsite/Syl-2016.php**
8. **For Applicability of IND AS and AS for Paper 5 - Financial Accounting, Paper 12 - Company Accounts and Audit (Intermediate) and Paper 17 - Corporate Financial Reporting (Final) refer to relevant circulars and notifications in website for June, 2020 term examination in the given link: https://icmai.in/studentswebsite/Syl-2016.php**
9. **Pension Fund Regulatory and Development Authority Act, 2013 is being included in Paper 6-Laws and Ethics (Intermediate) and Insolvency and Bankruptcy Code 2016 is being included in Paper 13 - Corporate Laws and Compliance (Final) under Syllabus 2016 for June, 2020 term of examination. Please refer to the link: https://icmai.in/studentswebsite/Syl-2016.php**
10. **Examination Centres: Adipur-Kachchh (Gujarat), Agartala, Agra, Ahmedabad, Akurdi, Allahabad, Asansol, Aurangabad, Bangalore, Baroda, Berhampur (Ganjam), Bhilai, Bhilwara, Bhopal, Bewar City(Rajasthan), Bhubaneswar, Bilaspur, Bikaner (Rajasthan), Bokaro, Calicut, Chandigarh, Chennai, Coimbatore, Cuttack, Dehradun, Delhi, Dhanbad, Duliajan (Assam), Durgapur, Ernakulam, Erode, Faridabad, Ghaziabad, Guntur, Guwahati, Haridwar, Hazaribagh, Howrah, Hyderabad, Indore, Jaipur, Jabalpur, Jalandhar, Jammu, Jamshedpur, Jodhpur, Kalyan, Kannur, Kanpur, Kolhapur, Kolkata, Kota, Kottakkal (Malappuram), Kottayam, Lucknow, Ludhiana, Madurai, Mangalore, Mumbai, Mysore, Nagpur, Naihati, Nasik, Nellore, Neyveli, Noida, Palakkad, Panaji (Goa), Patiala, Patna, Pondicherry, Port Blair, Pune, Raipur, Rajahmundry, Ranchi, Rourkela, Salem, Sambalpur, Shillong, Siliguri, Solapur, Srinagar, Surat, Thrissur, Tiruchirapalli, Tirunelveli, Trivandrum, Udaipur, Vapi, Vashi, Vellore, Vijayawada, Vindhyanagar, Waltair and Overseas Centres at Bahrain, Dubai and Muscat.**
11. **A candidate who is fulfilling all conditions specified for appearing in examination will only be allowed to appear for examination.**
12. **Probable date of publication of result: To be announced in due course.**

*** For any examination related query, please contact exam.helpdesk@icmai.in**

Kaushik Banerjee
Secretary

Benevolent Fund

FOR THE MEMBERS OF THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

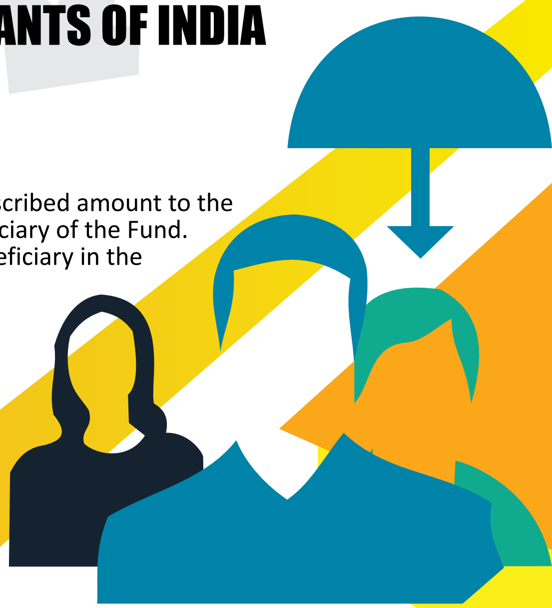
CMA Bhawan, 12 Sudder Street, Kolkata - 700016

OBJECTIVE

The Fund has been created to provide outright grant of prescribed amount to the member in the event of critical illness of a member / beneficiary of the Fund. It is also for outright grant of prescribed amount to the beneficiary in the event of death of a member of the Fund.

LIFE MEMBERSHIP FEE

Onetime payment of ₹7500/-



BENEFITS

- ***Income Tax Benefit under section 80G***
- ***Outright grant not exceeding ₹3,00,000.00/- in each case to the beneficiary in the event of death of the member.***
- ***Outright grant not exceeding ₹1,50,000.00/- in each case to the member and beneficiary for critical illness duly certified by the doctor under whom the treatment is continuing.***

Coverage of Critical Illness, leading to hospitalization, may cover the following -

- Cancer / Malignancy
- Coronary Artery Bypass Graft Surgery
- Stroke / Cerebral Attack / Paralysis
- Heart Valve Replacement Surgery
- Myocardial Infarction (heart attack) / Heart Failure / Pace Maker Surgery / Kidney Dialysis(CKD)/ Renal Failure
- Major Organ Transplant
- Hemophilia
- Thalassaemia
- Neurological Diseases
- Flue Blown acquired Immune Deficiency Syndrome
- Multiple sclerosis
- Tuberculosis / Bronchopneumonia/ Pleurisy
- Permanent disablement
- Any other disease that may be considered by the Board of Trustees to be critical in nature.

To apply for life membership or for further details please visit

https://eicmai.in/External/Home.aspx#

RNI NO. 12032/1966

Postal Registration No.: KOL RMS /139 /2019 – 2021
'D' Number MH/MR/TECH/47/10/2020-21
License to post without prepayment, WPP License No.: MR/TECH/WPP/KOL RMS/354/2019-21
Posted at Mumbai Patrika Channel Sorting Office, Mumbai - 400 001
Posting Dates: 10th, 11th & 12th day of each English month only
Date of Publication: 10th of every month

Our portfolio of

100+	50+
COFFEE TABLE BOOKS	ANNUAL REPORTS
35	7
CUSTOM MAGAZINES	CONSUMER TITLES

is a testament of our expansive clientele and multidisciplinary repertoire.

WE OFFER MORE THAN SOLUTIONS; WE CREATE RELATIONSHIPS

We believe that your brand and services are best served by reaching out regularly to your stakeholders. Custom publications to us are **RELATIONSHIP PUBLICATIONS** that effectively strengthen your brand with your customers.

Contact Spenta Multimedia Private Limited to see how we can help your brand to grow.

PRINT PARTNERS TO

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

SPENTA MULTIMEDIA PVT LTD

2nd Floor, Peninsula Spenta, Mathuradas Mill Compound,
N.M. Joshi Marg, Lower Parel, Mumbai - 400013.
Tel: 022 2481 1010 / 6734 1010
Email: ho@spentamultimedia.com
Website: www.spentamultimedia.com

Spenta Multimedia wins four awards at the 57th (ABCI)Association of Business Communicators of India-Annual Awards 2017.

PUBLISHING | PRINTING | ONLINE | EVENTS