

NSHM JOURNAL OF MANAGEMENT RESEARCH AND APPLICATIONS

NJMRA Volume 7, Number 1, June, 2017

Bi-annual Peer Reviewed Journal

© Copyright : NSHM Business School, NSHM Knowledge Campus Kolkata, India.

All efforts are made to ensure the correctness of published information. However the views expressed are those of respective authors and do not reflect the views of NJMRA or NBS. Every effort has been made to ensure that published information is free from copy right violations. However, authors are solely responsible for copyright violation if any and NJMRA does not accept any responsibility for any inadvertent omissions.

Printed at : BPW, Mob: 98366 78754

Chief Editor

Dr. Udayan Kumar Basu

Editorial Committee

Dr. Supriya Biswas

Dr. Soujanya Pudi

Dr. Shampa Chakraberty

Prof. Peanaky Mridha

Prof. Nilanjana Sinha

Prof. Sameek Ghosh

Publisher

NSHM Business School, Kolkata

Editorial Advisory Board

Dr. Sudip Bhattacharjee

University of Connecticut School of Business, USA

Dr. Arpita Dhar

Jadavpur University, Kolkata

Dr. Diganta Mukherjee

Indian Statistical Institute, Kolkata

Dr. Tapan Panda

School of Management, BML

Munjal University, Gurgaon

Dr. Jayanta Kumar Seal

Indian Institute of Foreign Trade, Kolkata

MESSAGE FROM THE CHIEF-MENTOR

I am glad to see the June 2017 issue of the NSHM Journal of Management Research and Applications (NJMRA), which aims at providing the much needed platform for a meaningful exchange of knowledge and ideas between the industry and the academic fraternity. Dealing with the subjects covering all possible areas of management, it is truly satisfying that NJMRA is shaping up as a standard journal by attracting innovative and quality articles from eminent academicians.

Such a steady progress would never have been possible without the sincere and sustained effort of the current editorial team and I compliment them wholeheartedly on this count.

Cecil Antony

Chief Mentor

NSHM Knowledge Campus

MESSAGE FROM THE FOUNDING DIRECTOR

It gives me great pleasure to find that the June 2017 issue of the NSHM Journal of Management Research and Applications (NJMRA) is out and ready for circulation. Needless to mention, this journal highlights NSHM Business School's commitment to research and innovation as an integral part of management training. To put such a quality research publication on a firm footing is no doubt a stupendous task and our current editorial team deserves kudos for accomplishing this mission. NJMRA has been meticulous about selection of the papers from a wide range of topics and is well poised to establish the much needed connect among researchers, academicians and company executives for a useful exchange of views and ideas.

I reiterate my deepest appreciation for the dedicated efforts by the current editorial team and wish them all the success in their endeavours.

Rajib Chanda

Founding Director

NSHM Knowledge Campus

MESSAGE FROM THE DIRECTOR

Eight years ago, when we launched the NJMRA, we had hoped to become the leading broad-based platform for the management academicians and practitioners interested and working in the areas of general management, corporate strategy, policy and governance, finance, corporate laws, public policy, IT and systems, marketing, technology and manufacturing, and related areas like economics, sociology and other social sciences. The broad spectrum was intended to reflect and capture the multi- and inter-disciplinary nature of management studies, and to highlight the fact that management training is not only about efficient decision making but producing socially responsible decision makers as well.

Today, we rededicate our efforts in maintaining the reputation of steadfastly focusing on scholarly articles based on primary research as well as best industry practices pursued, with the help and encouragement of the academic and professional fraternities through their high quality contributions. The range of articles in this issue of NJMRA bears testimony to the above efforts and results. Whether it is the concern for Mother Earth and promoting green economy through education and awareness, or fighting malnutrition among children, the articles tend to move from the abstract domain of theorizing and get into the realm of practical solutions for the societal problems. It is this accent in NJMRA that makes it unique and relevant to the stakeholders.

Wishing you a very happy and thoughtful reading,

Dr. Naveen Das

Director

NSHM Business School, Kolkata

FROM THE DESK OF THE CHIEF EDITOR

We take pleasure to present the June 2017 issue of the NSHM Journal of Management Research and Applications (NJMRA).

While bringing out the issues of NJMRA, our editorial team has steadfastly stuck to the cherished goal of providing a platform for publication of research articles of merit, book reviews adopting a broad based platform spanning key areas of management. The current issue is a collection of papers and articles from diverse areas such as financial services, human resource management and applications of technology for human development.

The first article in this issue of the journal discusses the importance of green economy for sustainable development with special reference to education and learning. The second article covers a conceptual approach on the impact of risk in the areas of investment management. The third article has dealt with the application of information technology in eradication of malnutrition. In the book review section, the book selected is 'Sell: The Art, the Science, the Witchcraft' by Subrato Bagchi.

In this issue, there are two perspectives contributed by experienced industry professionals. The first one delves into the details of different exemptions schemes under GST for MSME. The second perspective covers the leadership dimensions for successful people management.

We hope that, like the previous issues of NJMRA, this one too will be well received by the industry and academia. The editorial team would be glad to receive all kinds of comments and constructive suggestions for further improving the quality of the journal.

On behalf of the Editorial Team

Dr. Udayan Kumar Basu

THE RISE OF GREEN ECONOMY FOR SUSTAINABLE DEVELOPMENT WITH SPECIAL REFERENCE TO EDUCATION AND LIFELONG LEARNING

Archana Golwalkar

Abstract

Going green is an emerging trend which encompasses green economy, green jobs, green skills, green production, and manufacturing of green products, green collar workers, green curriculum and what not. Consciousness about the environment and the thought of sustenance of the coming generations on this globe, with ever increasing needs of the expanding population, besides the disparity in various socio economic and natural resources, is acting as a catalyst for the greening effect. Thoughtfully there remains no choice but greening for sustainable development across geographical boundaries.

The present paper is based on review, with the aim to coin the significant terms contributing towards green economy besides positioning the role of Education and lifelong learning in promoting green economy and putting forth the major issues of concern.

There is a dire need of awareness and sensitization towards inclusion of 'green' at all levels of functioning in macro and micro environment by active participation. This foundation can be very well laid by means of education and lifelong learning for green skills development nurturing the heightened demand.

Key Words

Green economy, Green Jobs, Green Skills, Lifelong learning.

Introduction

With widespread poverty and inequality, economic growth has not benefited all people. Prosperity must be conceived in ways that leave no one behind, closer integration of education, economic and employment policies would help promote inclusion of all people in the economy.

'Green skills' have emerged as a response to global sustainable development challenges linked to environmental protection, economic development and social inclusion. As a result, many countries are involved in fostering their citizens' and workers' 'green skills'. There is need to develop policies that offer clear directions on how to provide recognition,

Dr. Archana Golwalkar

Director

Aishwarya Institute of Management & IT

Udaipur (Rajasthan) India

E-mail : director@aimudr.org

validation and accreditation (RVA) of these 'skills', including those acquired in formal and informal economic sectors.

Significance

The world economy needs deep transformation in order to become more sustainable and inclusive. Education and lifelong learning are needed to make production and consumption sustainable, to provide green skills for green industries, and to orient higher education and research towards green innovation. At the same time as becoming greener, the economy must also become more inclusive.

Objectives

- Coin the terms Green Economy, Green Jobs and Green Skills.
- Identify the role of Education and lifelong learning in promoting green economy.
- Recognize the major issues of concern.

Material and Method

The present article reviews the status of green economy, green jobs and green skills on the basis of education and lifelong learning. It begins with the synthesis of the terms Green Economy, Green Jobs and Green Skills for inclusive growth and sustainability in the light of global scenario. Inputs have been taken from various sources like books, journals, Research project reports, Newspapers online.

Green Economy

The green economy is defined as an economy that aims at reducing environmental risks and ecological scarcities, and that aims for sustainable development without degrading the environment. It is closely related with ecological economics, but has a more politically applied focus. The 2011 UNEP Green Economy Report argues "that to be green, an economy must not only be efficient, but also fair. Fairness implies recognizing global and country level equity dimensions, particularly in assuring a just transition to an economy that is low-carbon, resource efficient, and socially inclusive."

Karl Burkart defines a green economy as based on six main sectors:

- Renewable energy
- Green buildings
- Sustainable transport
- Water management
- Waste management
- Land management

The International Chamber of Commerce (ICC) representing global business defines green economy as "an economy in which economic growth and environmental responsibility work together in a mutually reinforcing fashion while supporting progress on social development".

In 2012, the ICC published the Green Economy Roadmap, containing contributions from experts from around the globe brought together in a two-year consultation process. The Roadmap represents a comprehensive and multidisciplinary effort to clarify and frame the concept of "green economy". It highlights the essential role of business in bringing solutions to common global challenges. It sets out the following 10 conditions which relate to business/intra-industry and collaborative action for a transition towards a green economy:

- Open and competitive markets
- Metrics, accounting, and reporting
- Finance and investment
- Awareness
- Life cycle approach
- Resource efficiency and decoupling
- Employment
- Education and skills
- Governance and partnership
- Integrated policy and decision-making

The concepts of green skills and green jobs are often conflated. While their exact meaning often depends on the context of use, the following definitions should help us understand their essence.

Green Jobs

The United Nations defines green jobs as sectors and jobs in which waste creation and pollution is minimized (UNEP et al., 2008). The International Labour Organisation (ILO) includes in its definition of green jobs any sector that has a lower than average environmental footprint (ILO, 2012). Statistical agencies across the world usually focus their definition of green jobs on the definition of the environmental goods and services sector. The distinction between jobs and skills is important because the labour market dynamics of "greening" in the economy are, and will be, complex into the future. Skills analysis offers a disaggregated level to examine and unpick these dynamics.

Greening the economy will affect skills needs in three ways (Cedefop, 2012):

- Structural changes lead to increased demand for some occupations and decreases for others;
- New economic activity will create new occupations and there will be a need for new skills profiles and qualification and training frameworks; and
- Many existing occupations and industries will experience greening changes to tasks within their jobs, and this will require adjustments to the current training and qualification frameworks for these occupations.

The skills and training needs may be threefold:

- Upgrade skill sets in industries experiencing only minor adjustments;
- Gearing up educational institutions and firms to provide the new skills for new occupations and sectors that will emerge from the green economy; and
- Retraining and realigning skills in sectors that will decline as a result.

A recent study by the Council for Energy, Environment and Water (CEEW) and the Natural Resources Defence Council (NRDC) said unavailability of skilled manpower was one of the biggest challenges in meeting the ambitious target of 175,000 MW of renewable energy by 2022 that India has set itself.

New required skills and knowledge that a worker must have to carry out green activities are different depending on the economic sector and nature of work. Companies from the sectors “Waste Management”, “Infrastructure”, “Metal processing industry”, “Landscaping” need trainings regarding maintenance of vehicles, low-waste technologies and technologies to reduce and control pollution. In the sector “Tourism” due to specific activities of employees is determined the need for knowledge regarding the applicable standards and regulations.

Green skills

The impact on employment and skill demands of developing a sustainable, green economy is uneven over time, across countries, regions and types of worker and occupation. Consistent regulation, sustained government incentives and the mainstreaming of green economic development across employment and skills policies are important mechanisms to support a smooth transition. Improved provision of guidance on green jobs and forecasting of skill needs are needed to avert bottlenecks and facilitate vocational education training responses.

Skills for sustainability, also known as green skills, are the technical skills, knowledge, values and attitudes needed in the workforce to develop and support sustainable social, economic and environmental outcomes in business, industry and the community.

Green skills are those skills needed to adapt products, services and processes to climate change and the related environmental requirements and regulations. Cedefop defines green skills as “the knowledge, abilities, values and attitudes needed to live in, develop and support a sustainable and resource-efficient society” (Cedefop, 2012). Green skills will be needed by all sectors and at all levels in the workforce. Demand for green skills is driven by a range of factors, including public policies and targets, and defined by three main trends:

- Across occupations and industries, greening requires upgrading skills and adjusting qualification requirements;
- New or emerging economic activities create new or renewed occupations and related qualifications and skills profiles; and
- Structural changes create a need to realign sectors that will decline as a result of the greening of the economy and retrain workers accordingly.

The successful transition to a low carbon economy will only be possible by ensuring that workers are able to adapt and transfer from areas of decreasing employment to other industries and that human capital exists and is maximized to develop new industries.

Green industries demand particular skills, including basic, technical & transferable and managerial skills.

- Basic skills, including literacy and numeracy, are indispensable. Green growth reinforces the need for good quality basic and remedial education, both in countries

which have not yet reached universal enrolment at the primary and lower secondary levels, and in countries with low levels of basic skills in the adult population.

- Technical skills can be specific to green industries (e.g. diagnostic skills to measure a carbon footprint) or added to existing skills (e.g. up-to-date training in energy efficiency for construction workers with standard skills).

- Transferable and managerial skills include leadership, risk management, design, communication and commercial skills that are necessary to enable firms to make the transition towards green production. For example, those with entrepreneurial skills can seize the opportunities presented by low-carbon technology, and consulting skills can be used to advise consumers about green solutions and spread the use of green technology according to GEM Report team analysis based on Hinojosa and Pickles (2015).

Skills development is critical to unlocking the employment potential of green growth, yet skills policies and environmental policies are still often dealt with in isolation from one another.

Sustainable Development

The terms “green”, “environmental” and “sustainable” are often used interchangeably to describe companies, people or technologies that do greenish things. But they do not mean the same thing. “Green” has become a shorthand term to describe the wide range of issues, processes, products and services that relate to sustainability and the environment.

Sustainability is most often defined as meeting the needs of the present without compromising the ability of future generations to meet theirs. There are three main pillars: economic, environmental and social. These three pillars are informally referred to as people, planet and profits.

a. The Environmental Pillar

The environmental pillar often gets the most attention when it comes to sustainability. Companies are focusing on reducing their carbon footprints, packaging waste, water usage and their overall impact on the planet. Companies have found that many of the environmental wins can also have a positive financial impact. Lessening the amount of material used in packaging usually reduces the overall spending on those materials.

Other businesses that have an undeniable and obvious environmental impact, such as mining or food production, approach the environmental pillar through benchmarking and reducing. One of the challenges with the environmental pillar is that a business's impact are often not fully costed, meaning that there are externalities that aren't being captured. The all-in costs of wastewater, carbon dioxide, land reclamation and waste in general are not easy to calculate because companies are not always the ones on the hook for the waste they produce. This is where benchmarking comes in to try and quantify those externalities so that progress in reducing them can be tracked and reported in a meaningful way.

b. The Social Pillar

The social pillar ties back into another poorly defined concept – social license. A sustainable

business should have the support and approval of its employees, stakeholders and the community it operates in. The approaches to securing and maintaining this support are various, but it comes down to treating employees fairly and being a good neighbor and community member, both locally and globally.

On the employee side, businesses refocus on retention and engagement strategies, including more responsive benefits such as better maternity and paternity benefits, flexible scheduling, and learning and development opportunities. For community engagement, companies have come up with many ways to give back, including fundraising, sponsorship, scholarships and public investment at the local level.

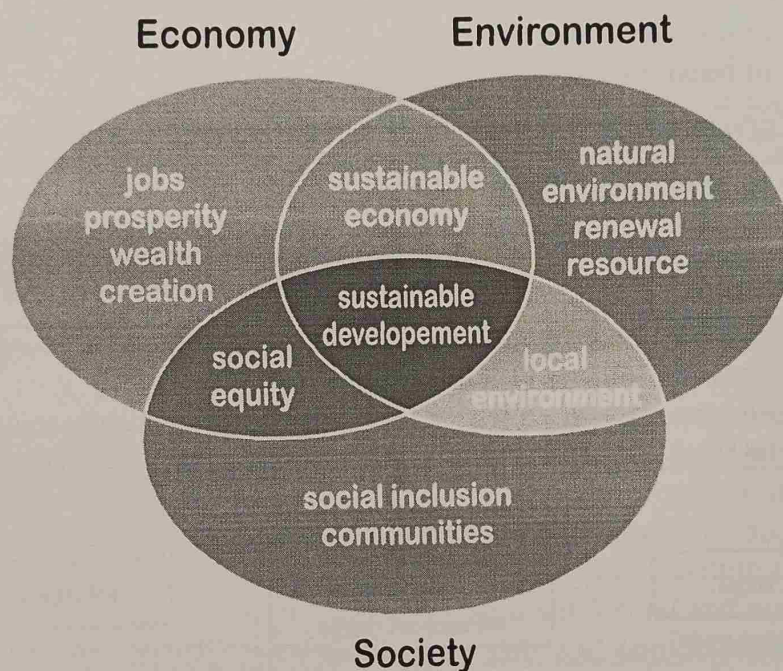


Figure 1: The three pillars of sustainability

On a global social scale, a business needs to be aware of how its supply chain is being filled. Is child labor going into your end product? Are people being paid fairly? Is the work environment safe? Many of the large retailers have struggled with this as public outrage over tragedies like the Bangladesh factory collapse, which have illustrated previously unaccounted for risks in sourcing from the lowest cost supplier.

c. The Economic Pillar

The economic pillar of sustainability is where most businesses feel they are on firm ground. To be sustainable, a business must be profitable. That said, profit cannot trump the other two pillars. In fact, profit at any cost is not at all what the economic pillar is about. Activities that fit under the economic pillar include compliance, proper governance and risk management. These are table stakes for most North American companies, but this is not true globally.

The economic pillar of sustainability is where most businesses feel they are on firm ground. To be sustainable, a business must be profitable. That said, profit cannot trump the other two pillars. In fact, profit at any cost is not at all what the economic pillar is about.

Activities that fit under the economic pillar include compliance, proper governance and management. These are table stakes for most North American companies, but this is not true globally.

Green Collar workers

Although the terms "environmental" and "sustainable" are often used interchangeably, the distinction between them is important, particularly in light of any attempt to define green collar workers, who may be working in or have skills in the environmental area, the sustainable area, or both.

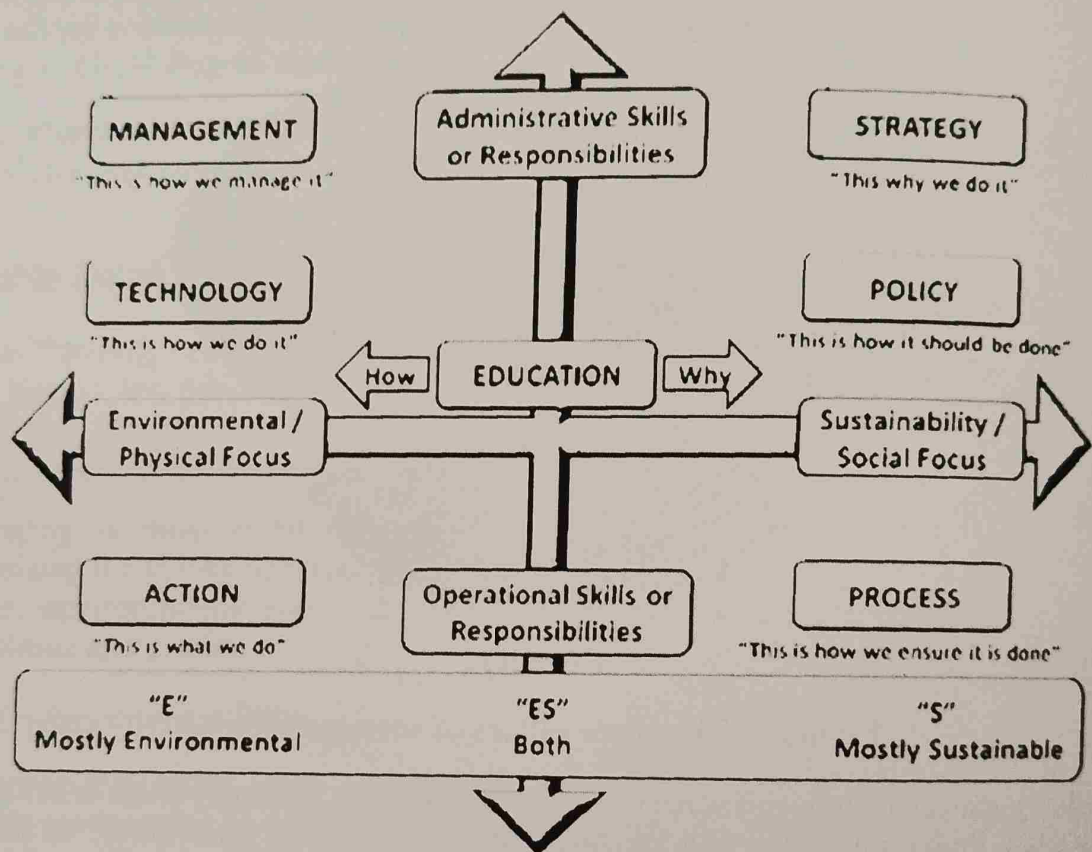


Figure 2: Green Collar Worker Conceptual Framework

Role of Education

Before 1980, learning had not been viewed as a lifelong process (Collins, 2009). At this time, Malcolm Shepherd Knowles, the father of adult learning, stated that lifelong learning (LLL) would become the organizing principle of all education, and the term of LLL is now commonly used in educational conversation (Duyff, 1999). Continuing Education (CE), professional development and LLL are synonyms that all refer to an educational or training process which is the main essential tool for an organization to succeed. Development of CE and the adult education were in the twentieth century. As the countries go to be industrialized, the demand for CE and achieving necessary skills has been aroused, challenging previous educational venues and creating opportunities for both

professional and personal skill improvement. Many reasons exist to indicate the demand to LLL in 21st century, as: increasing access to information, warp and fast technology changes, an enhancing global interactions, industry shifts, and skill requirements (Gaymer, 2006). Education needs to keep up with the changing face of work and to build sustainability in the face of climate change. Estimates show that by 2030, global warming could cast 122 million more people into poverty. Creating green industries will rely on high-skill workers with specific training – yet, by 2020, the world could have 40 million too few workers with tertiary education relative to demand.

This means green and transferable skills must be taught in schools, higher education institutions and the workplace. Existing green industries already employ large numbers of workers – 3.5 million in Bangladesh, 1.4 million in Brazil, 2 million in Germany – and the net impact of green growth on employment is positive. Yet we need to be realistic that the continued growth of green industries means that lower-skilled workers stand to lose jobs. We must support the transition by investing in on-the-job training for low and medium skilled workers; lifelong learning and training will be the key.

Lifelong learning

Lifelong learning comprises all learning activities undertaken throughout life with the aim of improving knowledge, skills and competencies, within personal, civic, social and employment-related perspectives (UIL, 2015). Lifelong learning has often been more narrowly associated with adult education, especially training to help adults compensate for poor quality schooling (UNESCO, 2000). The post-2015 development agenda conceives of lifelong learning as a process, one that begins at birth and carries through all stages of life. This approach to education incorporates multiple and flexible learning pathways, entry and re-entry points at all ages, and strengthened links between formal and non-formal structures, including formal accreditation of the knowledge, skills and competencies acquired through non-formal and informal education.

Formal education occurs in institutions designed to provide full-time education for students in a system organized as a continuous educational pathway, from pre-primary and primary education to secondary and higher education. International education policy has historically focused on efforts to ensure the provision of universal primary education and reduce the numbers of out-of-school children. Non-formal education and training occur in planned learning settings but outside the formal system. Non-formal learning activities are often job-related but also provide training in life skills and other types of self development. Both formal and non-formal education take place through organized programmes offered at schools, centres, associations or workplaces. Informal education takes place outside organized programmes and encompasses everyday activities such as reading a newspaper or visiting a museum. This kind of learning also includes intergenerational knowledge and skills passed through families and community members (UNESCO and UIS 2012).

Issues of Concern

The shift to a green economy is increasing the pace of change in labour markets and skill needs. A study of 21 countries, which represent 60 per cent of the world population, shows that economies moving towards greener production can seize the potential for job creation

if they deal effectively with the coming structural change and transformation of existing jobs. Skill Council for Green Jobs is one of the most recently launched initiatives of the Government of India aligned to the National Skill Development Mission. It is promoted by the Ministry of New and Renewable Energy (MNRE) and Confederation of Indian Industry (CII). The creation of the SCGJ was approved in the 10th meeting of National Skill Qualifications Committee held on 28th September 2015, with a mission - 'To identify skilling needs of service users as well as manufacturers/ service providers, within Green Businesses sector, and implement nation-wide, Industry led, collaborative skills development & entrepreneur development initiatives that will enable meet India's potential for "Green Businesses"'.

Skilling for green jobs will help

- Improve energy and raw materials efficiency
- Limit greenhouse gas emissions
- Minimize waste and pollution
- Protect and restore ecosystems
- Support adaptation to the effects of climate change

At the enterprise level, green jobs can produce goods or provide services that benefit the environment, for example green buildings or clean transportation. However, these green outputs (products and services) are not always based on green production processes and technologies. Therefore green jobs can also be distinguished by their contribution to more environmentally friendly processes. For example, green jobs can reduce water consumption or improve recycling systems. Yet, green jobs defined through production processes do not necessarily produce environmental goods or services.

a. Lifelong learning enables consumers and producers to contribute to sustainability

While green skills and green innovation can reduce environmental destruction caused by economic activity, the leap towards fully sustainable consumption and production requires a deeper transformation of the economy. The whole life cycle of products needs to be designed to minimize resource use, waste and pollution. Examples include certification of the entire production and consumption chain, and 'cradle-to-cradle' design where all products and waste can be used in making other products. Another approach is the service-based economy where consumers no longer own products but lease the services they provide. Developing, understanding and working with such approaches requires learning by both consumers and producers, which education policies can best address in a lifelong learning perspective.

b. Education policies will help countries adapt to a fast-changing world of work

The world of work has undergone rapid change in recent decades. ICT has dramatically changed how we live and work and how economies are structured. This change is especially apparent in more developed regions and in urban areas. In poorer countries, there has been

substantial movement from agricultural to non-farm employment. Moreover, greater integration of the global economy has opened up economic and trade opportunities across the world, enabling rapid growth in the now major economies of Brazil, China and India, while displacing industries and occupations in advanced economies through off shoring, particularly among less educated workers (Autor et al., 2014).

c. Education policies can help ensure a socially inclusive transition to greener economies

While green growth offers many opportunities for expanding employment, a degree of displacement is inevitable in environmentally unsustainable industries (Bowen and Kuralbayeva, 2015). Expanded lifelong learning policies are needed to promote education and training programmes that enable displaced workers to shift into new jobs without long spells of unemployment or inactivity.

Education as a key to overall sustainability

Education is typically linked with other Sustainable Development Goals. Education is critical to lifting people out of poverty. Education plays a key role in helping people move towards more sustainable farming methods and in understanding nutrition. Education can make a critical difference to a range of health issues including early mortality, reproductive health, spread of disease, healthy lifestyles and well being. Education of women and girls is particularly important to achieve basic literacy, improve participative skills and abilities and improve life chances.

Education and training increases the skills and the capacity to use natural resources more sustainably and can promote hygiene. Educational programmes, particularly non-formal and informal, can promote better energy conservation and uptake of renewable energy sources.

There is a direct link among such areas as economic vitality, entrepreneurship, job market, skills and levels of education. Education is necessary to develop the skills required to build more resilient infrastructure and more sustainable industrialization. Equally accessible education makes a proven difference to social and economic inequality. Education can give the people skills to participate in shaping and maintaining more sustainable cities, and to achieve resilience in disaster situations. Education can make a critical difference to production patterns and consumer understanding of more sustainably produced goods and prevention of waste. Education is the key to mass understanding of the impact of climate change and to adaptation and mitigation, particularly at the local level.

Education and training increase skills and capacity to underpin sustainable livelihoods and conserve natural resources and biodiversity, particularly in threatened environments. Social learning is vital to facilitate and ensure participative, inclusive and just societies, as well as social coherence. Lifelong learning builds capacity to understand and promote sustainable development policies and practices

Dimensions of Sustainability Education	Associate learning outcomes
Learning to know - Dynamics and content of sustainability	Sustainability Literacy Systems thinking An integral view Understanding of planetary boundaries
Learning to critique - Critical dimension of sustainability	Questioning of hegemony and routines Analysis of normativity Disruptiveness and transgression
Learning to bring about change - Change and innovation dimension of Sustainability	Leadership and entrepreneurship Unlocking of creativity, use of diversity Appreciation of complexity
Learning to be, learning to care - Existential and normative dimension of Sustainability	Connection with people, places and other species Passion, values and meaning making Moral-positioning, consideration of ethics, boundaries and limits
Source: Wals and Lenglet (2016)	

Table 1: Learning outcomes in education for sustainability

Conclusion

Environmental change is an increasingly important driver of labour demand and skills supply across all sectors. Therefore, the positive impacts of the transition to a greener economy can be maximized only by developing the skills, knowledge and competences required by resource-efficient processes and technologies; and integrating these into our businesses and communities.

Green jobs are central to sustainable development and respond to the global challenges of environmental protection, economic development and social inclusion. Engaging governments, workers and employers as active agents of change, will promote the greening of enterprises, workplace practices and the labor market as a whole. These efforts will create decent employment opportunities, enhance resource efficiency and build low-carbon sustainable societies.

References

Green Skills Agreement, Council of Australian Governments (COAG), 2008, http://www.ivet.com.au/cgi-bin/user.pl?download_file=1&file=17 retrieved on 30-Mar-2017 4:40 PM

Green skills defined by COAG, State of NSW, Department of Education and Training, 2010, http://lrrpublic.cli.det.nsw.edu.au/lrrSecure/Sites/LRRView/8151/8151_show1.htm?keepThis=true&TB_iframe=true&height=400&width=400 retrieved on 28-Mar-2017 9:19 AM

Irina Bokova (2017) How do we skill our kids for tomorrow's green economy? United Nations Educational, Scientific and Cultural Organization (UNESCO) Thursday 12 January 2017. <https://www.weforum.org/agenda/2017/01/skills-kids-green-economy-irina-bokova-unesco/> retrieved on 28-Mar-2017 9:31 AM

Marjan Laal et al. (2014), Continuing education; lifelong learning, *Procedia - Social and Behavioral Sciences* 116 (2014) 4052 – 405 retrieved on 30-Mar-2017 3:46 PM

Mini Govindan Jaya Bhanot December (2012) , Green Jobs in India: Potentials and Perspectives http://www.fes-asia.org/media/publication/2012_GreenJobsInIndia_FES-EoT_Study_Govindan_Bhanot.pdf retrieved on 30-Mar-2017 4:10 PM

Ministry of Skill Development and Entrepreneurship retrieved on 30-Mar-2017 5:00 PM
NSDC Skill Council for Green Jobs http://sscgj.in/wp-content/uploads/2016/05/SCGJ-Brochure-V3_19-10-2016.pdf retrieved on 30-Mar-2017 6:00 PM

OECD Green Growth Studies, Greener Skills and Jobs, Highlights, European Centre for the Development of Vocational Training (Cedefop) http://www.oecd.org/cfe/leed/Greener%20skills_Highlights%20WEB.pdf retrieved on 28-Mar-2017 9:44 AM

Olga Strietska-Ilina et al. (2011) Skills for Green Jobs: A Global View Synthesis report based on 21 country studies October 2011 ILO PUBLICATIONS http://www.oit.org/wcms5/groups/public/---dgreports/---dcomm/---publ/documents/article/wcms_165282.pdf retrieved on 28-Mar-2017 1:00 PM

Partnering for Prosperity: education for green and inclusive growth, global education monitoring report 2016, United Nations Educational, Scientific and Cultural Organization, UNESCO Publishing <http://unesdoc.unesco.org/images/0024/002469/246918E.pdf> retrieved on 28-Mar-2017 10:13 AM

Recognizing Green Skills in Non-formal Learning Settings <http://uil.unesco.org/lifelong-learning/recognition-validation-and-accreditation/recognizing-green-skills-non-formal> retrieved on 28-Mar-2017 9:24 AM

Skill Council for Green Jobs grooms first crop of professionals, By Kaavya Chandrasekaran, ET Bureau | Updated: Mar 14, 2016, 06.08 AM IST <http://economictimes.indiatimes.com/news/economy/policy/skill-council-for-green-jobs-grooms-first-crop-of-professionals/articleshow/51387548.cms> retrieved on 30-Mar-2017 6:30 PM

Skills for the green economy, European Centre for the development of Vocational Training <http://www.cedefop.europa.eu/en/events-and-projects/projects/skills-green-economy> retrieved on 28-Mar-2017 9:09 AM

The Three Pillars of Corporate Sustainability Investopedia , <http://www.investopedia.com/articles/investing/100515/three-pillars-corporate-sustainability.asp#ixzz4eUWoNufj> retrieved on 28-Mar-2017 9:25 AM

Who are the Green Collar Workers? Defining and identifying workers in sustainability and the environment, A report by Connection Research in conjunction with the Environment Institute of Australia & New Zealand 2009 <https://www.eianz.org/document/item/291>
28-Mar-2017 2:46 PM

Zornitsa Stoyanova , Hristina Harizanova (2016) New green professions in Bulgaria in the context of transition to green economy, *Economics of Agriculture* 3/2016 UDC: 631.147:331.108.34(497.2) EP 2016 (63) 3 (1067-1081) <http://scindeks-clanci.ceon.rs/data/pdf/0352-3462/2016/0352-34621603067S.pdf> retrieved on 30-Mar-2017 5:50 PM

RISK- AN INEVITABLE FACTOR IN INVESTMENT MANAGEMENT

Madhushree Sur

Abstract

The objective of this study is to establish the relationship of risk with investment. For the fulfillment of the purpose few tests have been done. The figures taken for test and analysis are based on past performances of mutual funds of different companies on a 5 year basis. In investment we mainly emphasize on the factor- Return. Whenever we get higher returns from an investment we neglect all other factors. However the perception will be changed at the end of this paper.

Keywords

Investment, Risk, Return, Portfolio.

Introduction

Investment is a very critical aspect for any one especially for individuals. Investment is more than just putting the money in some schemes. It represents the time value of money. It is the extra part that is derived from the usage of money. The question is not that how much we are investing. The question lies as follows: Where are we investing? Are we investing the money in some productive areas? Are we getting back more than what we are investing? These are very analytical questions and the answers to such questions can't be found unless we analyse & discuss about the different factors of investment.

The current paper enhances the different areas, factors of investment which are considered by any customer. Thus the money invested in one purpose can't be used for another one. So before we reach to any such conclusions an in-depth analysis is made on the methods by which we can find out how different schemes perform. More than that how the customers would find out the approximate rate of return from an investment.

Different theories have been propounded on investment management at different times. The only purpose is to help the individuals or different companies to have a broad outlook of the subject. People try to get something more by using the money in some productive areas. But do they really get the money they expect back from such investment? Here lies the

Madhushree Sur

Asst. Prof. St. Hopkins College of Management

Bangalore University

Postal Address: C/O Dr. Sharanya Sur, Indian Institute of Astrophysics,

Office No. 204, 100 Feet Road, 2nd Block Koramangala,

Bangalore-560034, Karnataka

Email: madhushree.ghosh@rediffmail.com

Phone: 9686930972

dilemma. What is the essential factor that ceates a gap between the individuals' expected and actual return on investment. It is uncertainty or something else. Uncertainty is very much subjective in nature. To be more specific, it is not quantifiable. In such case it is not possible to estimate the approximate return on any investment. Then how to plan? It is very important to mention in this perspective that investment is not random in nature. If well planned it can bring good yield. But for such planning one has to know how much probability is there to get the return expected. Also it is important & relevant to know the non- probability as it will help one to know the actual position of return . This gap that occurs between the expected & actual return which is highly affected by the probability is called the Risk. It is not uncertainty. It is quantifiable as well as helps to make an investment a well-planned progress for proper utilisation of money & securing the future. The study thus focuses on how probability & risk related to an investment scheme plays an important role in management of investment.

Literature Review

Many works are there in the field of investment. Few of them are - Epstein, Larry G., and Stanley E. Zin (1991), Figenbaum, Avi, and Howard Thomas (1986), Janata, Georgas (2016), Rai, Kulwant, and N.R. Bhanumurthy (2004). The area of study in this paper is about the different factors of investment which plays important role in Indian market. The main factors being Risk, Return & inflation. However the study is restricted to the broad outlines of the above mentioned factors, the case being FII. The study was based on the assumptions made in the study about ex-ante risk & not the realized one. The conclusions drawn was that since there are unpredictable risks in the market, the regulatory authority must have some incidences regarding the secondary market manipulation. Different works are there in tis field regardig the performances of different securities.

In this work the main focus of study is to develop an understanding of risk based investment. While going through the different works in the investment zone few questions have poped up which are as follows:

- 1) Which factor is most important -Risk or Return?
- 2) What is the practical application of risk?
- 3) Is it easy for the customers to trade-off between risk and return.

We have theoritical knowledge of risk and return. But when it comes to the real world we are not confident about investments to be made. It is true that people earn money to earn livelihood. We want to secure ourselves that for that reason we want to get something extra. But is it easy to get something extra? If no, then what is the reason behind this. Another question is if it is difficult also, how to understand the procedure and find out the other way round.

For this reason only we have collected data from different institutions including various schemes available for the customers. The market for investment has been studied in details in order to understand the performances of different securities. We know that there are several formulas and theories to work out risk and return of both individual securities and market. But even after having the readymade answers it becomes difficult for the investors to understand and make decisions for investment.

Hence it can be said that the main motivation of this work is to provide a clear conception of investment where customers can invest in different schemes with the practical knowledge of risk altering the value of return. This work will be a progressive step towards people (investors) from other field than Finance.

Research Methodology

As we have selected the topic Investment for the work we have collected some data from some of the financial institutions and banks. On such data collected the analysis and interpretations are made in order to draw the conclusions. We have taken the data of annual returns of different schemes as on April 2017. The probabilities of such returns are hypothetically drawn on the basis of past few years performances of the schemes.

Data Collection, Analysis & Interpretations

SCHEMES:

1. Canara Robeco Mutual Fund with an yearly return of 39.1%
2. Birla SL Advantage fund with an yearly return of 31.3%
3. HDFC Equity Saving Fund with an yearly return of 23.9%.

TABLE-1

Schemes with different Rate of Return and Probabilities

Schemes	Returns	Probabilities
Canara Robeco Mutual Fund (CRMF)	39.10%	0.3
Birla SL Advantage fund (BSLAF)	31.30%	0.3
HDFC Equity Saving Fund	23.90%	0.4

If an individual invests in a portfolio of the following schemes his expected return from this portfolio will be:

$$(\text{Prob}_1 * E_1) + (\text{Prob}_2 * E_2) + (\text{Prob}_3 * E_3)$$

Where $\text{Prob}_{1,2,3}$ are the probabilities of the returns

and $E_{1,2,3}$ are the expected returns from individual securities.

$$\begin{aligned} \text{Thus expected returns from portfolio} &= (.3 * 39.1) + (.3 * 31.3) + (.4 * 23.9) \\ &= 11.73 + 9.39 + 9.56 \\ &= 30.68\% \end{aligned}$$

However as we can see that the expected returns from the individual securities are abide by probabilities which indicates a less than 100% chance to get these returns. Such as for CRMF there is 30 % chance of getting 39.10% which further indicates that there is 70% chances of not getting the return. This probability may differ in the real scenario.

Due the differences of the expected probabilities and actual probabilities a variation in the returns from the securities also takes place leading to a mismatch of returns expected and actual returns. This variation is termed as RISK.

From this data we will find out the degree of risk associated with the expected returns from the portfolio.

The Risk of a portfolio is denoted by Standard Deviation (σ). Thus

$$\begin{aligned} \sigma &= \sqrt{\text{Prob}_1(E_1 - \bar{E}_1)^2 + \text{Prob}_2(E_2 - \bar{E}_2)^2 + \text{Prob}_3(E_3 - \bar{E}_3)^2} \\ &= \sqrt{.3(39.1-30.68)^2 + .3(31.3-30.68)^2 + .4(23.9-30.68)^2} \\ &= \sqrt{.3(70.89) + .3(.38) + .4(45.96)} \\ &= \sqrt{21.267 + 1.14 + 18.384} \\ &= \sqrt{39.765} \\ &= 6.31\% \end{aligned}$$

Findings: We can see that the expected return from this portfolio is greater than the risk. Moreover in comparison to 30.68% return the risk is only 6%. Thus this portfolio can be claimed as a successful one.

One of the major criterias for analysing any security is to keep a watch on its trend. For this purpose we have recorded the detailed trend analysis of HDFC Equity Fund from April 2016 to April 2017. As per 5th April 2016, the value of NIFTY 500 was 6358.35. On that day the NAV(Net Asset Value) of HDFC equity fund was 408.112. However if we observe the valuation of NIFTY 500 on 3rd April 2017, it was 8053.15. On the same day the NAV was 550.489 which was 6.72 points more than the previous day (1.24%).

Not only NAV but also being an investor a person has to follow the trend of a security on various intervals basis such as monthly, half-yearly or annually.

TABLE-2

Returns from HDFC Equity Fund at different intervals basis

Different intervals(At the end)	Returns(%)
1 month	5.5
3 months	14.9
6 months	8.4
1 year	32

If an investor keeps a record of interval wise returns from a security, it will be easy for him to decide for a suitable investment. Moreover he can find out at what intervals it is profitable to claim the returns. Now for example, if we consider our case we can observe that monthly returns are the least followed by half-yearly returns. It will be good to claim a return at the end of 3 months. However from the table we can see that the Equity Fund

provides maximum return on annual basis i.e. at the end of one year. Here the return is 32%. Thus it can provide a clear picture to the investors.

TABLE-3

Absolute Returns of HDFC Mutual Fund(%)

Year	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Annual Returns
2016	-7	10.3	7.7	-6.1	6.5
2015	-	-2.1	-5.6	-	-5.4
2014	8.9	27.5	4.3	6	53.6
2013	-8.7	-1.5	-6.1	18.1	2.6
2012	19.3	-2.1	7.1	5.4	33.7

If we go through the above table we can find out that the highest return of this security is from the year 2014. However the returns from the different quarters are non-satisfactory. The annual return from the year 2016 is only 6.5%.HDFC mutual fund is a diversified equity security. By using Returns calculator we have found out this scheme's Absolute returns from the period 4/04/2016-3/04/2017 is 31.3%.

Data Interpretation through Comparison between Investment in Portfolio & HDFC mutual fund:

Thinking from the investor's point of view, an investor always tries to maximize the returns. In such a situation if we compare the data used for the case studies used here, we find that the returns from the investment in the portfolio of CRMF, BSLAF, HDFC Equity Saving Fund is 30.68%. On the other hand an investment in only HDFC equity fund is 31.3%. There is minimal difference between the two returns. Rather in case of the individual security the rate of return is more than the portfolio.

As we have already discussed about the intentions of a normal investor, in such a case he might be interested to invest in the single security rather than investing in the portfolio. But the question associated to this decision making is that- What is the guarantee of such return? What are the chances of such returns? We have calculated the risk i.e. the difference between expected returns and actual returns for the portfolio in our case. It is only 6% which is really less in comparison to the return. However in case of individual security we can see from Table 3 that the annual returns from different financial year is quiet fluctuating. In few of the quarters the returns are even negative. Thus the rate of risk in case of HDFC equity fund is very high.

Recommendations while investing:

If an individual has to invest , he should be following the steps as follows-

Step 1:- Identify the factors of investment

A person before investing should be aware of the market where there are many factors

affecting the ultimate return such as interest rates, risks.

Step 2:- Select the securities to invest in

The investor should be conscious of the securities in which to invest in. In our case we have taken a portfolio of 3 different schemes with different rates of return.

Step 3:- Selection of medium of investment

How to make an investment is another decision which has to be made by the individual. He can invest through some agencies who will be paid accordingly by the investor or he can also invest by his own.

Step 4:- Construction of portfolio

This is a vital step where the investor has to study the schemes & decide at what percentage he wants to invest in the portfolio in order to fetch maximum returns.

Step 5:- Continuous control and monitoring

Last but not the least the investor should be aware of the procedure as he should be comparing his expected return with actual returns . This will help the investor to identify the errors if any and make investment more systematically in future.

Conclusion

Whatever has been analysed in the paper, is based on real market figures collected from different schemes. The analysis has helped us to conclude that when investors makes an investment, it is not only the money invested . Rather the external factors such as interest rates are highly influential. Thus if an investor has to maximize his return, he should be aware of all other affecting factors of investment-Specially RISK. In our example we have come up with a return of approximately 31% associated with 6% risk which is really less in comparison to the return.

However if the return was 31% associated with a risk of 25%, then the investment would not be considered a good one.

Bibliography:

1. www.literaturereview.com
2. www.moneycontrol.com
3. www.investopedia.com
4. Security Analysis & Portfolio Management- S Kevin

References:

1. Britten-Jones, Mark. "The Sampling Error in Estimates of Mean-Variance Efficient Portfolio Weights." *The Journal of Finance* 54.2 (1999): 655-671.
2. Epstein, Larry G., and Stanley E. Zin. "Substitution, risk aversion, and the temporal behavior of consumption and asset returns: An empirical analysis." *Journal of political Economy* 99.2 (1991): 263-286.

3. Figenbaum, Avi, and Howard Thomas. "Dynamic and risk measurement perspectives on bowman's risk-return paradox for strategic management: An empirical study." *Strategic Management Journal* 7.5 (1986): 395-407.
4. Ippolito, Richard A. "Efficiency with costly information: A study of mutual fund performance, 1965-1984." *The Quarterly Journal of Economics* 104.1 (1989): 1-23.
5. Janata, Georgas. "Validity of the Capital Asset Pricing Model (CAPM) for Securities Trading at the Nairobi Securities Exchange (NSE)." *Business and Management Research* 5.4 (2016): p62.
6. Markowitz, Harry. "Portfolio selection." *The journal of finance* 7.1 (1952): 77-91.
7. Michaud, Richard O., and Robert O. Michaud. *Efficient asset management: a practical guide to stock portfolio optimization and asset allocation*. Oxford University Press, 2008.
8. Rai, Kulwant, and N. R. Bhanumurthy. "Determinants of foreign institutional investment in India: The role of return, risk, and inflation." *The Developing Economies* 42.4 (2004): 479-493.

A STUDY OF INNOVATIVE TECHNOLOGY SOLUTION FOR PROACTIVE AND OPTIMUM CARE OF CHILDREN WITH SEVERE MALNUTRITION

B. G. Pal
Dr. Irshat Khan

Abstract

Malnutrition continues to be one of the enduring enigmas of contemporary India. Despite years of galloping economic growth, child malnutrition rates remained unchanged for years, more than one third of world's malnourished children live in India. Among these, half of them under 3 are underweight. On the contrary, it's striking to know that a third of wealthiest children are over-nutrient in India.

The World Bank estimates that India is one of the highest ranking countries in the world for the number of children suffering from malnutrition. The prevalence of underweight children in India is among the highest in the world, and is nearly double that of Sub Saharan Africa with dire consequences for mobility, mortality, productivity and economic growth.

However, there seems to be some sign of progress in India's battle against malnutrition, although malnutrition rates remain high. Based on provisional state-wise data from a recent national survey shows that some of the most malnourished states of the country have witnessed the sharpest fall in the proportion of underweight children. But when it comes to stunting (low height for age), considered an indicator of chronic undernourishment, the ranking of states remains precisely the same as it was a decade ago.

Looking at Jun 13, 2016 report published by Save The Children, Malnutrition in India: States where malnutrition is prominent, are

- Uttar Pradesh: Most children here, in India's densest state by population, under the age of 5 are stunted due to malnutrition.
- Tamil Nadu: The state, despite high education, has a prominent child malnutrition problem. A National Family Health Survey reveals that 23% of children here are underweight, while 25% of Chennai children show moderately stunted growth.
- Madhya Pradesh: 2015 data reveals that Madhya Pradesh has India's highest number of malnourished children - 74.1% of them under 6 suffer from anemia, and 60% have to deal with malnutrition.

B.G. Pal, Chief Operating Officer
bgpal@duretechnologies.com
Dr. Irshat Khan, Sr. Business Analyst
irshat@duretechnologies.com

Dure Technologies Pvt Ltd.
Unit 301, Amfotech Park, Wagle Estate, Thane, Maharashtra, India

- Jharkhand and Bihar: At 56.5%, Jharkhand has India's second highest number of malnourished children. This is followed by Bihar, at 55.9%.

While improvement in poverty rates could have played a role in reducing the burden of malnutrition, there is very little evidence to suggest that state interventions, either in the form of broad-based programmes such as the public distribution system (PDS) for foodgrains or targeted child nutrition programs such as the Integrated Child Development Services (ICDS) played a major role in fighting child malnutrition. The recent data seems to corroborate earlier research on malnutrition in India that highlighted two key drivers of malnutrition in: (1) the absence of sanitation, which leads to rampant spread of diseases, and (2) the low social status of women, which is reflected in low birth weights.

This paper is an attempt to explain how technology can be an enabler in addressing malnutrition issues and demonstrate how Dure Technologies, a Geneva based Software Company with offices in India, is implementing innovative technology solutions to improve effectiveness and efficacy of malnutrition program. This paper discusses the different aspects of implementation involving all stakeholders leveraging Dure's Real-time monitoring (RTM) solutions, iMonitor+ Program (RTM).

iMonitor+ Program is a real-time evidence based system for public health program management, which helps program staff to know about on-the-ground activities, generate alerts for timely action with evidence and manage various program indicators in real-time.

Besides, iMonitor+ Program, Dure Technologies have two other technology solutions viz., (1) iMonitor+, a real-time evidence based community/ citizen engagement and collaboration platform, and (2) iVizard, a data visualization platform dashboard, reports and map-based visualization for data analysis for decision making. Together, these three platforms ensure a 360-degree Monitoring & Evaluation (M&E) for Public Health programs.

Background

A nationwide survey called the Rapid Survey on Children (RSOC), conducted by the ministry of women and child development in 2013-14 in league with UNICEF, showed that the proportion of underweight children in India was 29.4%, and that of stunted children 38.7%. While these figures indicate high levels of under-nutrition, they show a marked improvement over what the last nationwide survey, the National Family Health Survey (NFHS), had reported in 2005-06: the ratio of underweight children at 42.5%, and the ratio of stunted children at 48%.

Severe Acute malnutrition (SAM) is the most dangerous form of malnutrition amongst children in India. India is the home to the largest pool of children with SAM in the world; we have around 80 lakh children which consist of 42 % of Global load of children with SAM.

According to NFHS-IV conducted in 2015-16, data for 15 states shows that 37 per cent of children under the age of five in these states is stunted, a fall of just five percentage points in a decade. Bihar and Madhya Pradesh are the worst off, with 48 and 42 per cent respectively of children stunted. The proportion of underweight children has reduced

equally slowly, from 39 per cent to 34 per cent, with Bihar and Madhya Pradesh the worst off again. The one success has been in the area of child wasting (low weight for height). The states for which data is available have more than halved their proportion of wasted children in the last decade, from 48 per cent to 22 per cent, the new data shows. India has also failed to make progress on reducing anemia. The proportion of anemic children aged 6 to 59 months fell just five percentage points to 61% in 2014.

For example, Maharashtra has reported 36% children under 5 years who are underweight (weight for age) with rural areas accounting for 40%. Similarly stunting among children under age 5 years reported is 34.4% (rural areas reported 38.4%). In the Amravati District, NFHS-4 data highlights 38.1% stunting and 33% underweight among children under 5 years.

Severe acute malnutrition is defined by very low weight-for-height/length (Z- score below -3SD of the median WHO child growth standards), a mid-upper arm circumference <115 mm, or by the presence of nutritional edema. SAM increases significantly the risk of death in children less than five years of age. It can be an indirect cause of child death by increasing the case fatality rate in children suffering from common illnesses such as diarrhea and pneumonia.

Children with Severe Acute Malnutrition (SAM) have nine times higher risk of dying than well-nourished children. In India, the prevalence of SAM in children remains high despite overall economic growth. With appropriate nutritional and clinical management, many of the deaths due to severe wasting can be prevented.

It is proven by the NFHS data and confirmed by Ministry of Health and Family Welfare, GOI and also after the assessment of the Amravati District data that the problem of children with SAM is mostly in most deprived populations like scheduled tribes, Primitive Tribes and in Scheduled Caste communities, children youngest- under 2 years and in girl children.

To prevent deaths due to severe acute malnutrition (SAM), specialized treatment and prevention interventions are required with strong food security and feeding drive. Programmatically, it is helpful to categorize children with SAM into 'complicated and uncomplicated' cases based on clinical criteria and can be managed through

- Facility/hospital-based care for SAM children and medical complications. (MTC)
- Home/community-based care for SAM children but without medical complications using Medical Nutrition Therapy (MNT)

Literature Survey

There are studies and papers in the public domain related to the subject. A touch-screen computer to help detect illness from malnutrition in older adults has been created by researchers from the University of Sheffield. The Novel Assessment of Nutrition and Ageing (NANA) system, which was showcased at an event at the Houses of Parliament in London, will measure what older adults are eating at home, to support research into malnutrition. NANA is the result of a three-year project to develop a simple and easy to use system for measuring diet, cognition, mood, and physical function. The system makes it simple for anyone to enter items of food and drink taken throughout the day, both as

complete meals and snacks. NANA keeps track of what you actually consume by comparing before and after you eat and drink.

The researchers from the International Centre for Tropical Agriculture (CIAT), a global agricultural research partnership, said the Nutrition Early Warning System (NEWS) will be able to process and detect signs of food shortages long before they become a crisis. The technology is based on a technique known as machine learning where computers track complex and constantly changing data in order to learn and make predictions. "The technology will use big data approaches to process large volumes of information from multiple sources in detecting early signs of food shortages already affecting South Sudan and looming in Nigeria and Somali,.

In Indonesia, mobile phones are used to collect data on the nutritional status of children and to deliver tailored messages to encourage healthier eating. Indonesia has one of the highest absolute numbers of undernourished children in the world. The country has more than 7.5 million children below the age of five too short for their age (stunted) and 2.8 million children too thin for their height, according to UNICEF's 2013 report on improving child nutrition(Barnett 2014).

The new information technology affords an opportunity for the poor and malnourished to have a voice in policy making and program design. Public institution can share as much as nutrition data and information as possible via the Internet and other mechanism (Gillespie, 2003)

The globalization of Information technology provides several opportunities for accelerating the reduction in malnutrition. A vast amount of food and nutrition information and data is already available to anyone via access to the Internet. Such information can be easily accessed to find out about new nutrition initiatives, determine the latest thinking on exiting nutrition problems, obtain best practices, and map food production and undernutrition by country and region within country (Bonila et al., 2003).

Problem Statement and Opportunity

On detailed review of the existing processes of data collection, analysis and response management, we observed three key areas where technology can play an important role in addressing the gaps and improve program effectiveness:

- 1. Data collection:** The process of collecting data is heavily dependent on paper-based formats at each intervention points, leading to data accuracy.
- 2. Delay in availability of Data for action:** due to the sheer size and scale of the program, the process of data collection and data entry synchronization is a challenge, leading to delay in overall process of data availability, monitoring and evaluation. Besides, due to current method of manual reporting of data from field to block to district to State Levels, the decision-making process is longer and the data is often not available for immediate programmatic action.
- 3. Data Quality:** Tracking of data accuracy at each intervention points such as screening, enrollment, treatment and treatment outcome is tedious as the data processing is heavily dependent on and limited by the number of data entry personnel, experience and

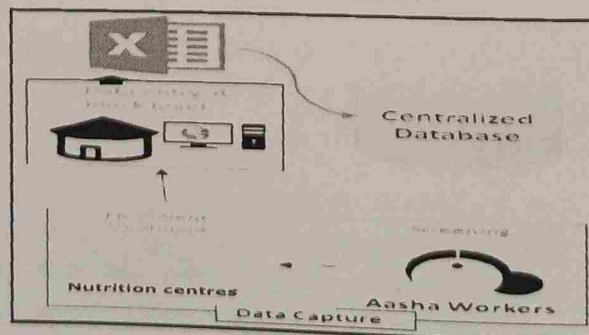
competency of data entry staff, there by leading to data entry errors and data inconsistencies. These observations led to an immediate need for strengthening the processes and systems prior to a large-scale roll-out of the program to drive effectiveness and efficacy of the program:

- Improving and strengthening the data capture process by implementing additional processes and systems controls as well as new functionalities and features, which will automatically improve the data quality. For example, capture of data at source in real-time, GIS location for evidence-based data capture, creation of Unique ID to uniquely identify and track the child, etc. Also, inclusion of mandatory fields at the time of data entry results in reducing the errors during the manual entry.
- Review of data being captured at each intervention points and its relevance as a data for action on the ground and its relevance to program outcomes.
- Review of the reports and analysis of data for effective decision-making, on coverage, quality of treatment, supply chain of EDNS and treatment outcomes. Also bring in intelligent analysis of data to steer actions
- Improving use of data for action management – training of staff, workload assessment etc.

The below table summarizes the challenges at various stages within the existing process:

	Screening phase	Enrolment phase	Treatment and Post treatment phase
Data Capture in various paper based forms	Low literacy ASHAs	Low literacy ANMs and high work load	Competing priorities for Data Manager although they are well supported and incentivized.
Data Entry into MIS system		High workload, Lack of validation checks in the data entry forms. Lack of understanding of business and data.	
Data Reporting into MIS system			
Data Analysis	Lack of clarity on the use of data at each level. Limited focus on process and outcome level data use.		
Data use in program actions	The data has been used for outcome monitoring and improving the aggregated cascade monitoring at each district and MSTs. However, its use in local level action monitoring and response was limited		

The following is the functional flow of information:



The data is captured in paper-based formats maintained by the ASHA and ANM. The paper-based forms are collected and entered into an online system at block level. The centralized database in excel provides data for analysis and interpretation of the processes and the required outcomes.

The online system being dependent on several factors often delays reporting of data from the centralized database.

Also, the limited understanding of the data entry operators about the program often leads to wrong entry of data or errors which are not validated by the system on its own. The database at individual level does not have inbuilt system to support feedback.

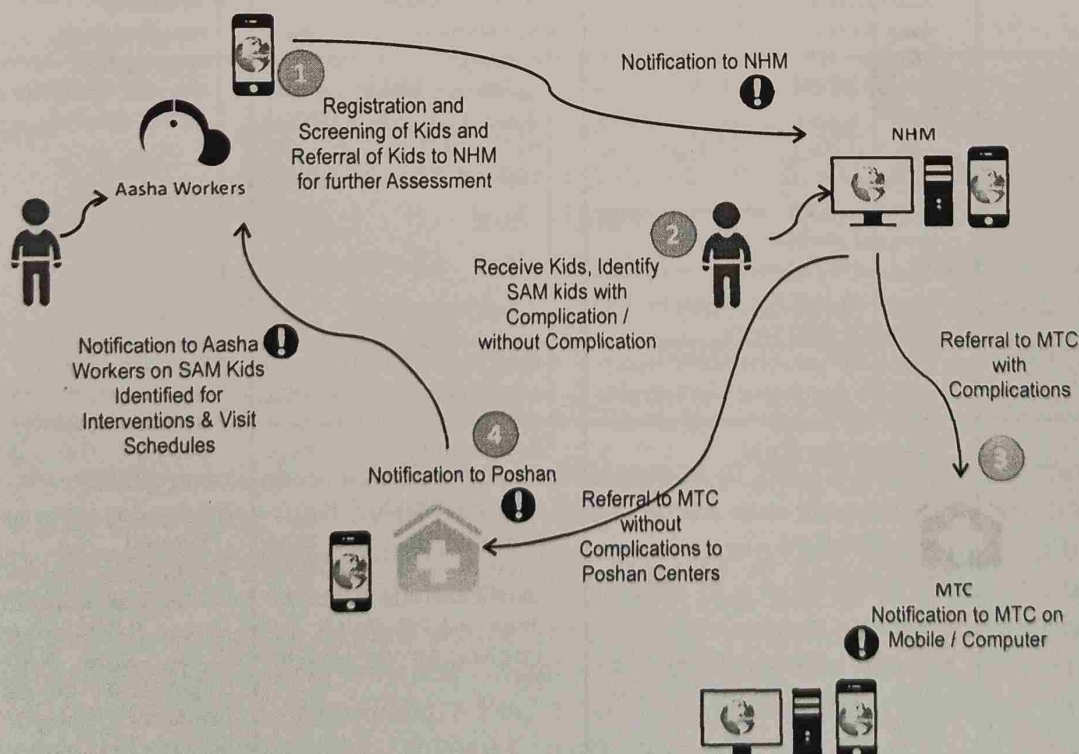
Community Based Management of Acute Malnutrition: Approach:

The CMAM approach is comprised of four components: (a) community outreach and mobilization; (b) outpatient management of SAM without medical complications; (c) in-patient management of SAM with medical complications; and (d) services or programs to manage moderate acute malnutrition (MAM), such a supplementary feeding program.

Implementation of the various components of CMAM can vary across geographic areas and implementers, but all CMAM programs include the outpatient management of SAM without medical complications and are designed with a community component.

Proposed Workflow Post Assessment of Technology Solution for improving the effectiveness of CMAM

The following diagram shows the work flow of the proposed approach using technology:



Possible Solutions for Information Management System

Considering the challenges highlighted in the previous section and to bring an agile system to support Information Management System for a nutritional programme like CMAM, following solutions are proposed:

Possible Solutions	Features	Implementation Suitability	Scalability Options
1. Smartphone-based application	<ul style="list-style-type: none"> • Comes with pre-designed data entry forms with in business rules validation • Provides high accuracy and consistency of data – validates entries due to inbuilt business logic • Automatically records additional information such as time, location of data entry • Can transfer data directly to a centralized database avoiding re-entry of data and enabling immediate availability of data at all levels • Improves throughput and productivity at all levels 	<ul style="list-style-type: none"> • Suitable for implementation only using smart phones / tablets with GPS capability • Requires mobile network for data transfer • Usage requires certain level of literacy with handheld devices and software applications. But this can be overcome through some training and awareness programs • Minimum training is required. 	<ul style="list-style-type: none"> • Provides anywhere anytime access • Scalable – the app will be available Google Play Store for easy download by users and installed on phones & tablets. No IT support required • Due to low availability of smartphones with ASHA and ANM, rollout can be a cause of concern. Also availability of mobile data network and data connectivity cost may be a deterrent to adoption
2. SMS/USSD-based data entry	<ul style="list-style-type: none"> • Limited number of characters (160) supported for SMS. As a result, there will be restriction on data elements that can be transferred using SMS, eg., data entry can be done for Unique ID, weight, MUAC, height of the child, etc. • Has ability to validate entered data for digits and alphabets. • Works both in smart and normal mobile phones. • Cannot identify/ locate position of the user at the point of data entry. 	<ul style="list-style-type: none"> • Registration to be continued with existing system of data entry at Sub centres – which creates a unique code for each child. • Subsequent data capture during treatment phase can be done using SMS/USSD by referencing the Unique ID 	<ul style="list-style-type: none"> • Registration information containing name, address etc. not be possible with SMS/USSD. • Training and handholding is required to ensure that the correct information being entered.
3. Interactive Voice Response System based data entry	<ul style="list-style-type: none"> • Limited sets of data entry can be done such as weight, MUAC, height using unique code of the child. • Has the ability to validate the entered data for digits and alphabets. • Can identify the user at the level of data entry – thus validates the user. • Works without smartphones and even from landline phones. 	<ul style="list-style-type: none"> • Registration to be continued with existing system of data entry at Sub centres – which creates a unique code for each child. • Subsequent data capture during treatment phase can be done using IVRS by referencing the Unique ID 	<ul style="list-style-type: none"> • Registration information containing name, address etc. Cannot be possible with IVRS. • Chances of error are limited. • Can be easily scaled up with minimum training even IVRS can act as a user guide each time the user access the system • IVRS may not suitable

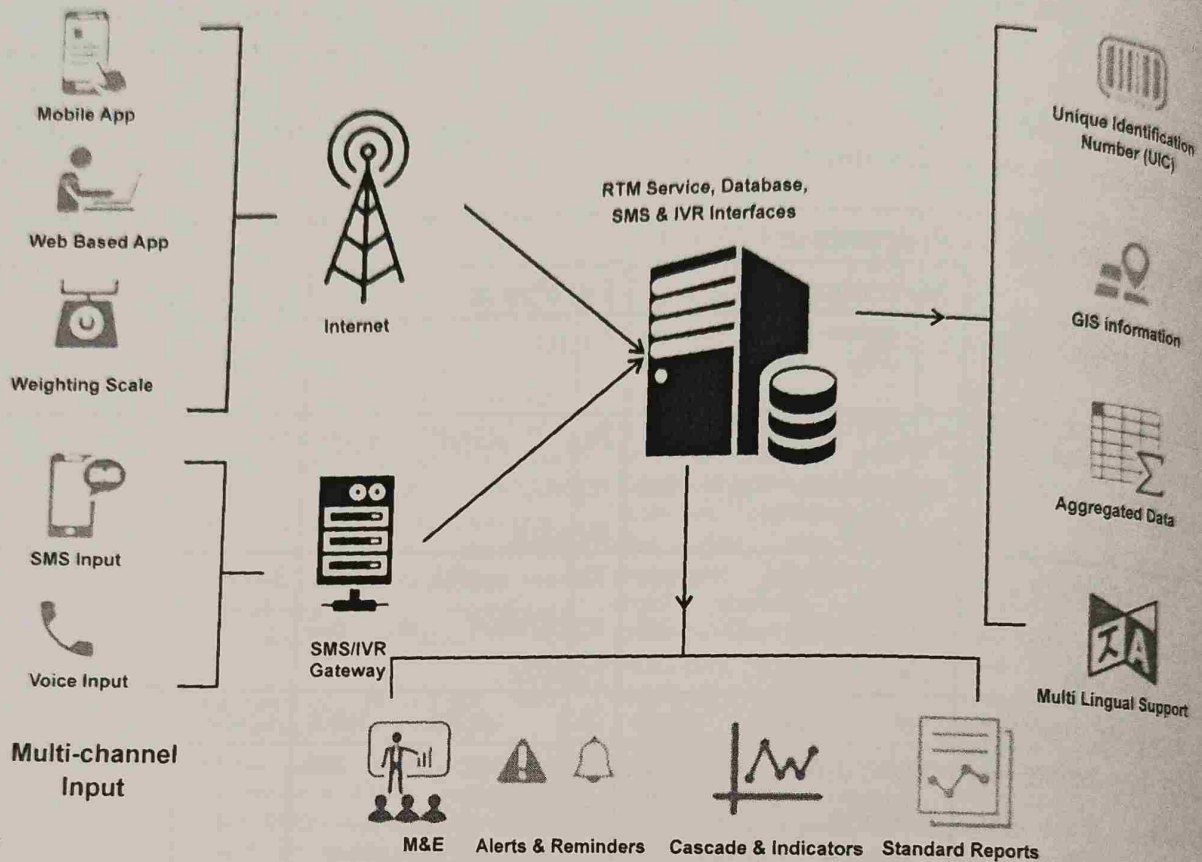
Steps to implement CMAM Information Management System

It is very important to understand the feasibility of above solutions on ground based on the user experience, demography, capacity to support entire processes of CMAMIMS and support decision making at various levels. Based on Dure Technologies' experience and current understanding of the alternatives, find below a high-level assessment of the systems and its effectiveness at each stage of process:

Possible Solutions	Processes in CMAM		
	Screening	Enrolment	Treatment
1. Smartphone-based app	Useful	Useful	Useful
2. SMS/USSD-based data entry	Not useful, since registration is not possible	Not useful, since registration is not possible	Useful
3. Interactive Voice Response System based data entry	Not useful, since registration is not possible	Not useful, since registration is not possible	Useful
4. Weighing machine-based data capture and upload of data from facilities like PHCs equipped with computer and internet	Not useful, since registration is not possible	Not useful, since registration is not possible	Useful
5. Data capture in MS Excel files	Useful. Data being currently captured and maintained at Block/District level. Limitations for real-time, evidence-based data availability and timely decision making.	Useful. Data being currently captured and maintained at Block/District level. Limitations for real-time, evidence-based data availability and timely decision making.	Useful. Data being currently captured and maintained at Block/District level. Limitations for real-time, evidence-based data availability and timely decision making.

The above matrix is based on our limited understanding of the existing MIS system and on the field processes being used by users i.e. ASHA, ANM and Medical Officers for CMAM Program. However, in order to arrive at the most appropriate technology solution for effective and successful roll-out of the program, there is a need for a detailed study of the business process, operating model, challenges faced by various stakeholders at each stage of the program, technological benefits/ limitations / adoption, etc. have to be conducted and feasibility assessed. Also, if required, a PoC needs to be conducted with the various options and suitable operating model and system may be worked out.

Proposed Solution Capabilities:



System is designed to support multiple channels of input.

Proposed implementation approach

Following approach is proposed for implementation:

Steps	Relevance	Outcomes
<p>Step 1: Assessment of current Information System and feasibility of proposed solutions Assessment to better understand the current system solution and feasibility of incorporating changes in the current environment and use of proposed solutions</p>	<ul style="list-style-type: none"> • Technology system review including data capture, use, processing and quality checks • Complete understanding of the usefulness of each solution at each step of the CMAM program – data entry, data reporting and data use. 	<ul style="list-style-type: none"> • Recommendations to use the technology that supports data quality and automated data processing • Proposed information and system design • Recommendations for the best suited option that is scalable and sustainable for the local environment including focus on devices, training, user knowledge and change management.
<p>Time required 3-4 weeks Essential conditions: Access to staffs and NIC team who have worked on the software</p>	<ul style="list-style-type: none"> • Recommendations to understand the suitability of implementation, training, change management for each of the technologies. 	<ul style="list-style-type: none"> • Recommend costing options for implementation and scalability • Working prototype demonstrating how the solution would work

<p>Step 2: Pilot in at least one block the solution identified during the assessment</p> <p>Time required – 8-10 weeks</p> <p>Essential conditions – Availability of necessary equipment or infrastructure (depending on solution identified – weighing scales at least in one centre, SMS, USSD and IVRS gateways etc.)</p>	<ul style="list-style-type: none"> • Supports the team to test and recommend the suitable option which meets the end objective of CMAM Programme 	<ul style="list-style-type: none"> • Validation and finalization of the solution, processes, SOPs and implementation approach to scale across the program based on the availability of devices, technology scalability.
<p>Step 3: Scale-up implementation of the solution across the entire program across districts</p> <p>Time required – 10-12 weeks</p> <p>Essential conditions – Availability of the devices, external systems, staffs needed to operationalize</p>	<ul style="list-style-type: none"> • Supports the program team to implement and use the proposed solution for day to day local decisions. 	<ul style="list-style-type: none"> • Implement the solution at a scale with all round support for any technology issues.

The development effort and timelines for the selected options & preferences will have to be reviewed post the Assessment Phase.

Requirements for Effective implementation of Pilot Project

The following are key requirements for effective implementation of Pilot Project.

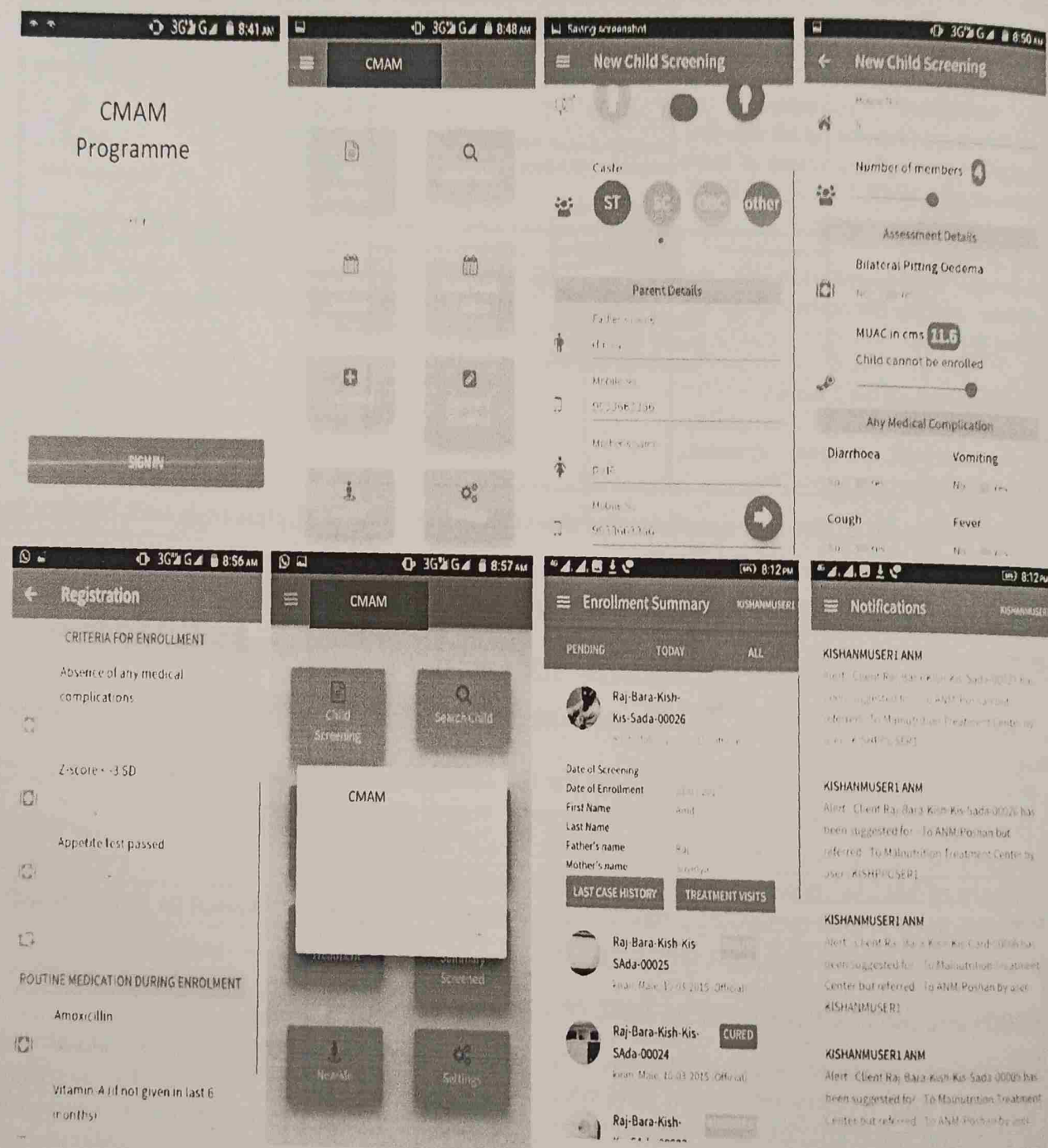
1. Task shifting of the ANM, ASHA – to carry out the screening, enrolment and weekly progress monitoring.
2. Provision of incentives and travel cost for the staffs and volunteers involved
3. Training of the District, Block and Sub-centre teams and ASHA workers
4. Supply of EDTF and other essential medicines of the program
5. Supply of MUAC tape, weighing machine
6. Provision of sound technology based real time monitoring solution such as IVRS based reporting of the child and alert management.

System modules developed as part of the Pilot Project

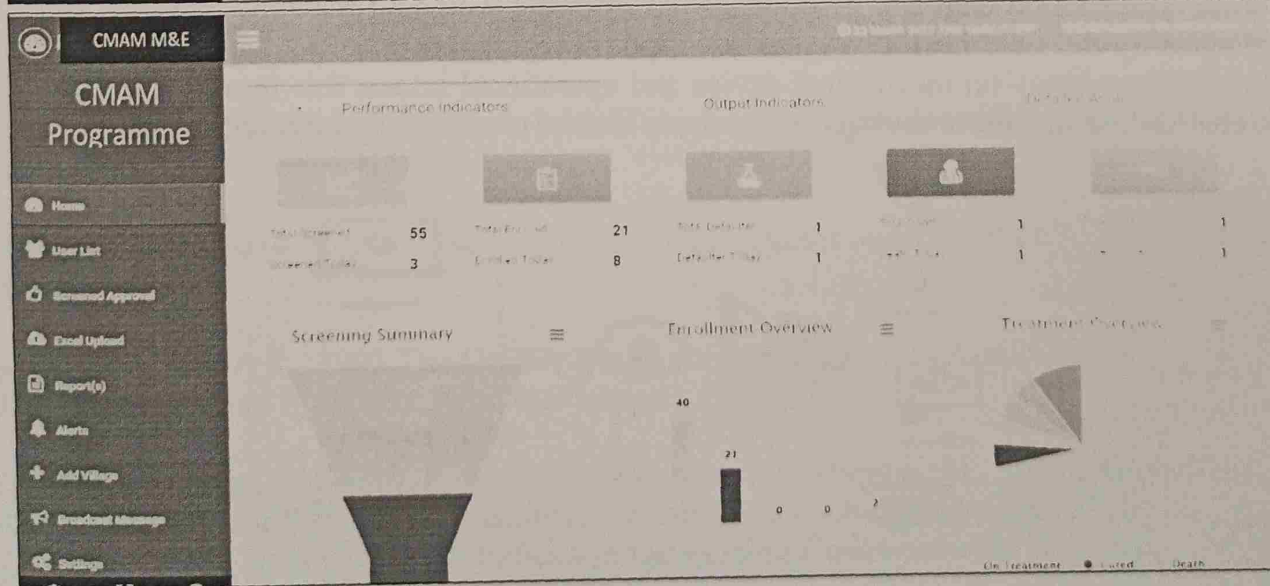
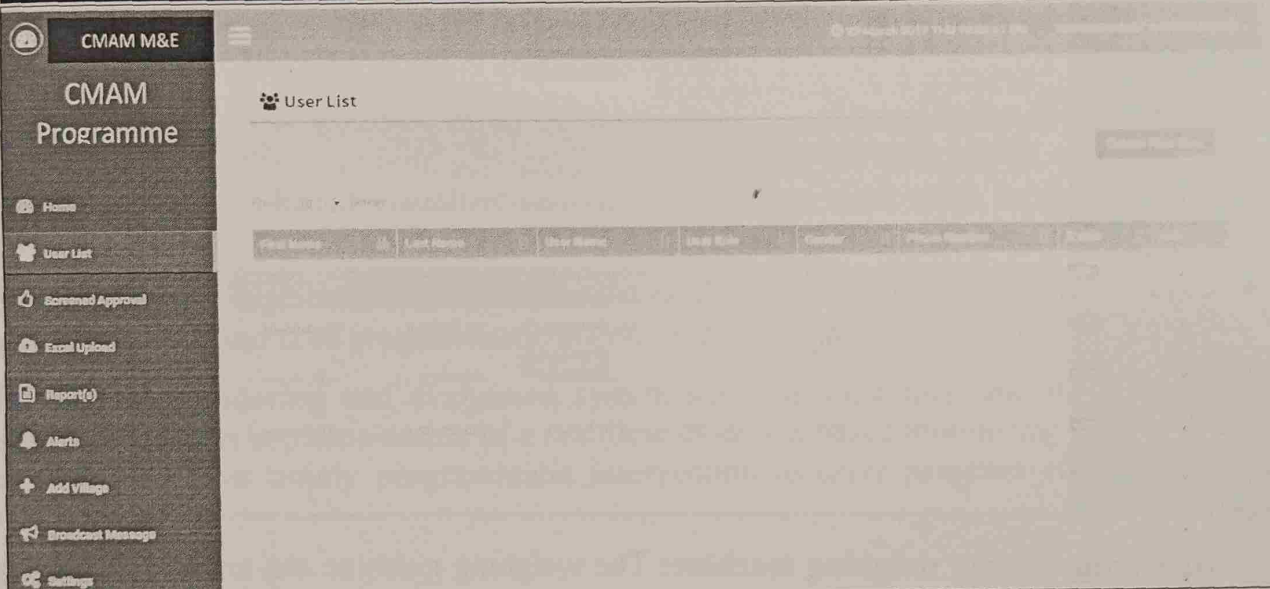
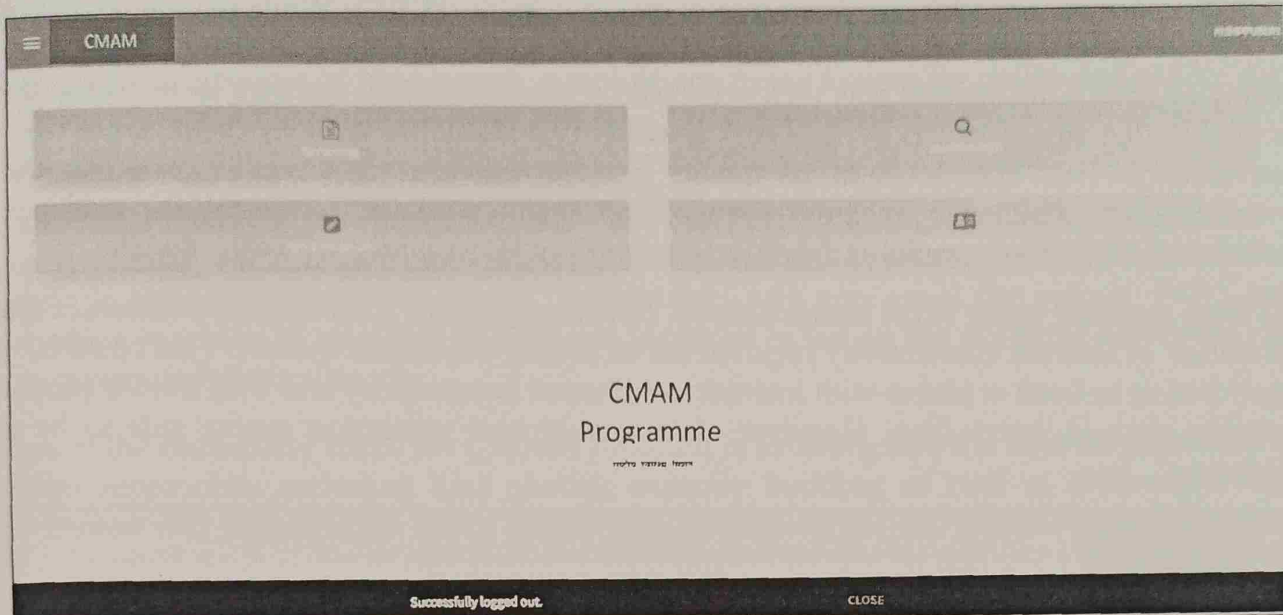
Five distinct systems were developed for data capture for CMAM child screening, enrolment, and weekly treatment data along with a dashboard for program management. The systems were successfully tested during the pilot in 5 sub-centres of Baran district in Rajasthan.

i) Data capture using Mobile app: Mobile Application based data capture by ASHA and ANM staff and its integration with the central system (online, real-time) Usage of Mobile app for data capture requires availability of smart phones and stable internet access. As per our experience, in few districts, due to poor infrastructure of mobile networks, the mobile app could not be adapted across all reporting units. However, we believe that with improved mobile data connectivity, availability for smart phones and offline data capture facility,

mobile data capture system will provide an opportunity for data capture in real-time and evidence based. This will ensure data collection at source and avoid or reduce data quality issues due to multiple data entry points.

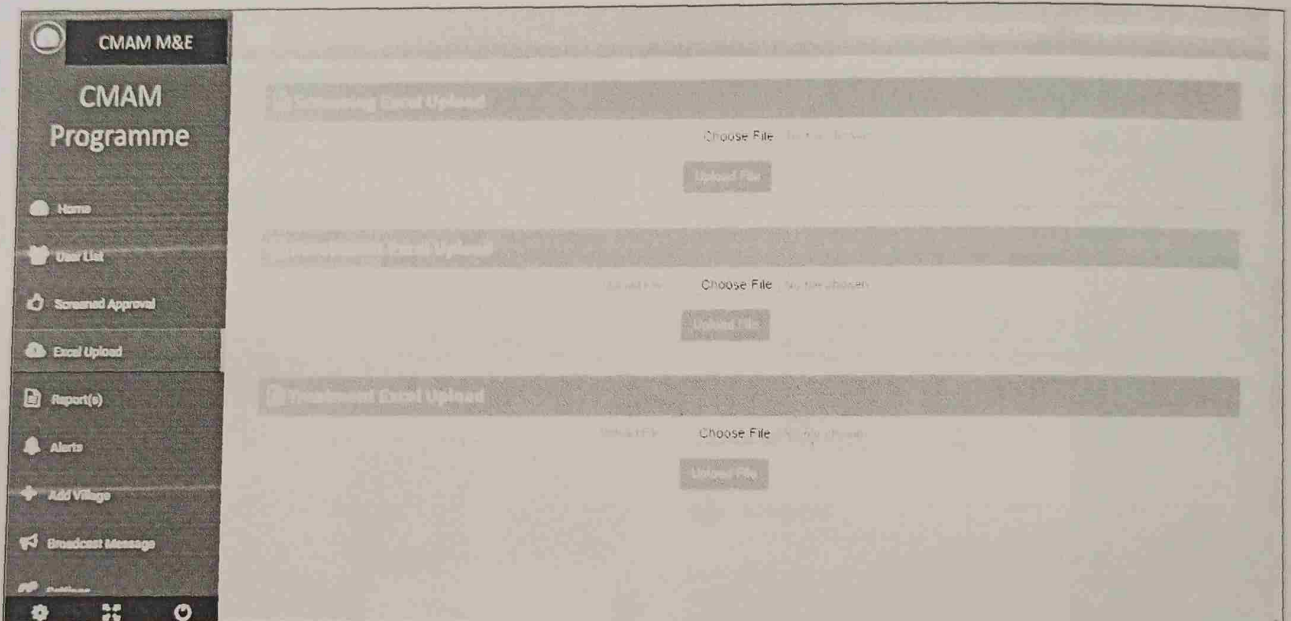


ii) **Data capture using web based online system:** Web based online data capture system at block / district level. The web-based online system was easy for use by the Block operators. However, this requires continuous availability of internet connectivity. At the same time, it is not a suitable platform for data capture at source and leads to duplication of work. This system was tested for capture of data over a phone call made by the ANM to a helpdesk at block level.

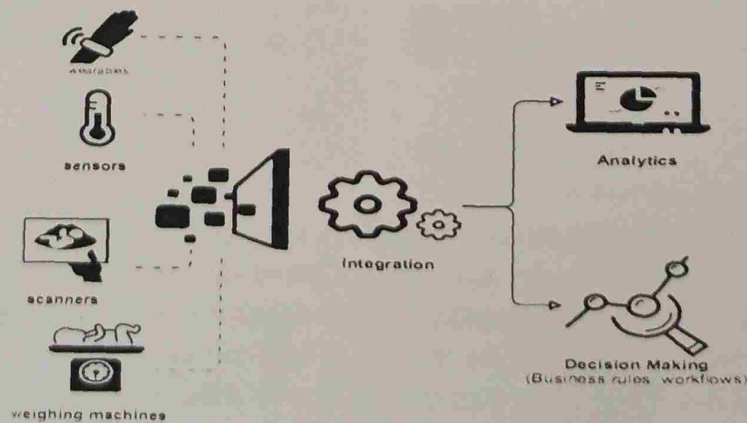


iii) **Data capture using interactive voice response system (IVRS):** While there were initial challenges to adopt IVRS for data capture, ASHA works got used to using IVRS after couple of tries. This module was well accepted by the field health workers as its use is not limited by the smart phones or internet connectivity and can be used by them as per their convenience. But from a point of quality of data entry, it is directly related to the comprehension skills and attention span of the health workers. Similarly, the evidence linked with UIC, photographs and date & time may not be validated with this module.

iv) **Data capture using excel based upload. (Offline system):** This module overcomes the limitation of internet connectivity required for an online web-based system. This could be a good tool to be used at places with intermittent internet connectivity and with trained people entering data in excel files. However, data quality and correction seems still to be a challenge.



v) **Data Capture using weighing machine:** The weighing machine can act as a data entry option. The entered data can be downloaded from the weighing machine and then can be uploaded by the field health workers into a portal with appropriate secure logging facility. Due to dependency on mechanical device and operational issues, this model was found to be challenging in current settings either due to lack of electricity or internet for data transfer.



Conclusion:

Based on the outcome of field testing, a mobile app based system for online and offline data capture at the field in real-time is the most preferred option, primarily, in view of improved data quality, avoidance of rework and timely availability of data for action.

Said that, considering the ground realities and considering availability of smart phones for field workers, mobile data network availability and its stability, it is recommend that multiple options for data capture viz., mobile app, web app, excel file upload, IVRS and weighing machine be explored at different locations based on the available resources e.g. manpower, infrastructure, etc.

One of the immediate focus for CMAM Program is to strengthen the data management & usage approaches including data quality, capacity building of staff at different levels, awareness and sensitization about timely data collection, use and action. Once these data management processes are standardized, data quality improved and use of data to timely monitor the program is achieved, this would allow the program to further adapt and scale with the different data capture modules and maximize the value these can provide in the field to the Asha & ANM workers and the program.

Making data evidence based by capturing the geolocation of SAM kids will help in tracking and reaching out the child with services immediately and the data can be validated through an interactive map-based visualization. This will reduce time spent in trying to retrieve evidence on any data that normally needs to be verified, audited and corrected.

The program management dashboard along with alerts and notifications will allow tracking and monitoring and take programmatic action in real-time or near real-time.

End-to-end monitoring and evaluation system needs to be robust and this can only be achieved through implementation of a real-time evidence-based monitoring system to make data available for timely programmatic intervention to drive program effectiveness and efficacy.

References

1. Wikipedia - https://en.wikipedia.org/wiki/Malnutrition_in_India
2. Save the Children - <https://www.savethechildren.in/articles/malnutrition-in-india-statistics-state-wise>
3. Barnett, Inka. 2014. 'Can mobile phones help fight against undernutrition?', The Gurdian, website
4. Gillespie, Stuart R., 2003. The Double Burden of Malnutrition in Asia: Causes, Consequences, and Solutions, Sage Publications, New Delhi.
5. Bonilla, E. Diaz, Babinard, P., Pinstруп-Andersen, P & Thomas, M., 2003., 'Globalizing Health Benefits for Developing Countries', in the book 'Globalization, Global Health Governance and National Health Politics in Developing Countries', eds. Wolfgang

Hein&Kohlmorgen Lars, DeutschesUberseeInstitut, Hamburg.

6. www.sheffield.ac.uk/news/nr/touch-screen-technology-helps-prevent-malnutrition-1.223315, last accessed on 11/8/17

7. news.xinhuanet.com/english/2017-05/29/c_136324450.htm, last accessed on 11/8/17

Acronyms used

ANM	Auxiliary Nurse Midwifery
ASHA	Accredited Social Health Activist
CMAM	Community based Management of Acute Malnutrition
EDNS	Energy Dense Nutrition Supplement
EDTF	Energy dense therapeutic food
GPS	Global Positioning System
ICDS	Integrated Child Development Services
IMS	Information Management System
IVRS	Interactive Voice Response System
MIS	Management Information System
MNT	Medical Nutrition Therapy
MOIC	Medical Office In Charge
MTC	Malnutrition Treatment Center
MUAC	Mid-Upper Arm Circumference
PDS	Public Distribution System
SAM	Severe Acute Malnutrition
SNP	Supplementary Nutrition Program
USSD	Unstructured Supplementary Service Data
WHO	World Health Organization

About Dure Technologies

Dure Technologies is a Geneva-based software company with offices in US, Thane, Maharashtra and Delhi. We are focused towards developing innovative technology products and solutions in Public health for effective and efficient program management and to improve quality of life of citizens. Our products cater to 360-degree program Monitoring & Evaluation with real-time and evidenced-based data for action.

Over the past 4 years we have delivered over 75+ projects for 35+ clients across 12 countries. Some of clients include WHO, UNAIDS, USCDC, USAIDS, Avenir, STOPTB, Save The Children, Reckitt & Benckiser, National Aids councils in South Africa, Kenya & Thailand, PHFI, and various Governments including Government of India.

To know more about the company and our products and solutions, please connect to. You can also write to us at contact@duretechnologies.com.

PERSPECTIVE IS EXEMPTION UNDER GST A MYTH OR A REALITY FOR MSME?

Timir Baran Chatterjee

Unregistered Dealer

In terms of Section 22(1) of the Central GST Act, every supplier (i.e. manufacturer, traders etc) shall be liable to be registered under the Act and to pay GST on his taxable supply in case his aggregate turnover exceeds Rs. 20 lacs in a financial year (Rs. 10 lacs for North-eastern states). However, let us see to what extent this exemption scheme will be helpful to the B to B suppliers (i.e. For Business to Business Supply)

(a) The above limit of Rs. 20 Lacs /10 Lacs is to be calculated after taking into account supply of all taxable and even exempted goods and services. In fact, export sales are also to be added to find out whether the aggregate turnover is below Rs. 20/10 lacs or not. As a result, there will be hardly any industry whose aggregate turnover will be less than the above threshold limit. For example if the exempted supplies are Rs. 19.50 lacs and the taxable supplies are Rs. 1.00 lacs in the preceding year , the supplier will come under the purview of GST and will be liable to pay GST in respect of its taxable supplies.

(b) No exemption will be available even if the aggregate turnover is less than Rs. 20 lacs/10 lacs where the supplier is in the business of supplying goods on inter-state business i.e. from one state to another and in such case there will be need for compulsory registration irrespective of his annual turnover value which may be less than the above threshold limit;

(c) No exemption will be available, if the supplier receives /consumes certain category of goods or services which are subject to payment of GST under reverse charge mechanism by the recipient in terms of Section 9(3) of The CGST Act (e.g. Advocate's Fee, Goods Transport Agency charges, Sponsorship fee, import of services etc) ;

(d) Every electronic commerce operator needs to be registered irrespective of its aggregate turnover value.

From the above, it is very clear that although there is a threshold exemption limit but due to various restrictions, such benefit can hardly be enjoyed by the supplier of goods and services in a B to B segment.

Now, even after considering the above restriction, there could be still some SMES whose

Timir Baran Chatterjee
M.Com, FCS, ACMA, MBA(IIFT), MIIA(USA)
Chief Corporate officer
DIC India Limited
Chairman- Indirect Tax Committee
Bengal Chamber of Commerce & Industry

aggregate turnover may be less than the threshold limit and be entitled to get the exemption benefit. However, let us see whether they would be able to continue to do their business as an unregistered dealer under GST regime:

(a) All unregistered dealer will have to procure raw materials/services by making payment of GST but they would not be able to get any tax credit. As a result, the tax paid by them on such purchases will be part of their cost. Whereas, a registered dealer of the same industry will be able to procure inputs and services by paying tax but would get 100% tax credit. As a result cost of a product of a registered dealer and unregistered dealer will vary by approx 18-20% and it will be difficult on the part of the un-registered dealer to offer competitive price to its customers .

(b) Any purchase of goods/services by registered dealer from an unregistered dealer will be subject to payment of tax by the recipient of goods/ services under reverse charge mechanism although the above provision of RCM is kept in abeyance upto 31.3.2018. It is just suspended and not withdrawn. In other words, the receiver of goods or services i.e. registered dealer is to pay tax as applicable on such goods /services and also to deposit the tax by actual payment in the same month as if the receiver is the supplier after 31.3.2018 unless it is fully withdrawn. This will not only block working capital but also invite lot of compliances on the part of receiver of goods and services. In such case, why a registered dealer would go for procuring materials from an unregistered dealer? He will rather try to source the same goods/services from a registered dealer and would enjoy normal tax credit facility with cheaper rate..

Composition Dealer

To provide an alternate relief to the small suppliers (Traders/Manufacturers etc), there is a composition scheme applicable for those whose aggregate turnover in the preceding financial year do not exceed Rs. 100 lacs (Rs. 75 lacs for north - eastern states). Under this scheme, the registered person has only to pay output tax of 2% (manufacturer)/1 % (trader) with a very nominal compliance .

Following are the major challenges under this scheme:

(a) Composition dealer will not be able to get input tax credit in respect of its input of goods and services; As a result it will be part of their cost.

(b) Composition dealer will have to pay tax on his unregistered purchase under Reverse Charge.

(c) Composition dealer has to pay output tax of 1%/2% in respect of its output supplies but cannot charge to the customer 5% in case of restaurant services.

Considering the constraints as stated under (a), (b) and (c) above, the cost of composition dealer will always be higher by at least 18-20% as compared to the normal registered dealer and it will be difficult to be competitive in the open market.

Conclusion

Considering the above facts into account we may conclude that while exemption/composition

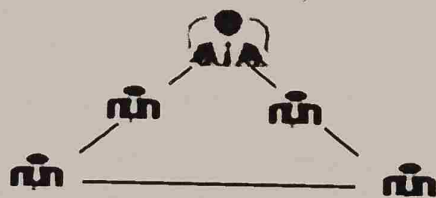
scheme may be helpful for small traders in B to C (Business to Consumer) segment, it will not be helpful for SMES in B to B transactions. It would always be prudent on the part of SMES to take GST Registration (even if it falls under exemption limit) to get the full benefit of GST and make its product more cost friendly and competitive.

PERSPECTIVE MANAGING WITHOUT A TITLE: PEOPLE LEARN FROM WHAT LEADERS DO AND NOT WHAT THEY SAY

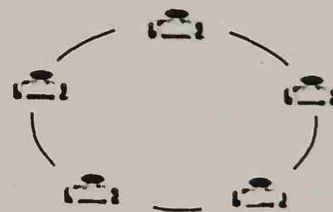
Suman Sasmal

The Background

If supervisors in a company were asked to take their job titles off, and were hypothetically asked to work with very similar teams in a different company and deliver similar results – how do you think their performance would be? I know many of you may be in agreement that many such leaders would fail to deliver at the same levels! Isn't that an awkward situation! Practically it gives a feeling that 'I do not know who I am'. This is no doubt a challenging scenario. A total shift of leadership paradigm currently redesigns and reengineers one's identity in the management pyramid. The irony is: the pyramid is on the verge getting collapsed under the present state of affairs. Obvious outcome is the supervisor or manager facing the challenges of deeper introspection about how rich he or she is with the qualities of a manager and ways and means to leverage them. So, how to create spectacular results catapulting the organization above the mediocrity, awaken the inner leader within! There are many books and artifacts on the subject; nevertheless, considering the gravity of the topic under the present day perspectives where most of the things are getting either uncertain or unstructured, I have shared my observations in different organizations to elaborate the subject. This write-up is an attempt to highlight some practical insights on leadership based on the experiences of a practitioner.



Conventional Management Pyramid



Redesigned Management Team

The Learning Concept Reference

Both structured and unstructured learning have helped me personally. The basic literature on leadership had always focused on visioning and motivational aspects of leadership. Having

Suman Sasmal
Author Profile

A Mechanical Engineer from Jadavpur University, MBA from XLRI Jamshedpur, acted as Head of Infosys Bangalore Development Center, spent a year in social sector, as Managing Director – Asia for Wadhvani Foundation. Currently an independent consultant and consulting for leading B-schools like IIM Bangalore, IISc and served as guest faculty: Columbia University @ NYC, Fudan University @ Shanghai, IIM Kolkata, XLRI Jamshedpur, ISB Hyderabad, IIT Kharagpur among others.

worked in the knowledge industry for over 30 years, it was not too difficult to appreciate how critically important was leading by example. At the end of the day, people learn from what leaders do and not what they say. The conventional courses in leadership provide good pointers and foundational concepts, however, one needs that moment of realization to make that real change.

The Challenge

Many managers simply use the power of their hierarchical position to get things done. Such teams deliver in a given organizational construct and would do alright if they are not required to think or stretch. However, tasks are seldom standardized or follow-the-routine any more. Today, it is imperative for the managers to explore and resolve the situations that lie beyond the routine. Intellect, innovation, insight have to work in tandem. That is what some companies mention in their tagline 'Experience Certainty' or 'Powered by intellect and Driven by values'. Thanks to the stellar growth of technology, the invisible gaps in the past have now become very visible and highly accountable. The days of storytelling are over, now decisions are focused on facts, data and figures. Today's and future managers have to become more and more aware of such state of affairs. Mass customization and $n = 1$ are driving work in smaller teams and pushing for increased need for innovation. The need is innovation and how we can make it an everyday, everybody and everywhere item. When daily innovation becomes the name of the game, the inputs and outcomes are not clearly defined. Such situations are more prevalent with the rising incidences of disruptive technology. This is where the traditional pattern of leadership struggles to deliver. Look at the fate of typewriter, WordStar (the most popular word processing software in the 80s and early 90s), table top telephones or even the fate of post offices! Right from the top to the bottom line persons, innovation should lead the organization, there should be the right environment to innovate, adequate motivation to innovate and rewards for innovation. It is time that 'Management by Innovation' rules the roost.

Moreover, the world is flattening by the day and so are our societal structures. The societal hierarchy is disappearing fast with everyone becoming a member of just social clubs like Facebook & Whatsapp. It's a great leveler and has an impact on organizational hierarchy as well. The hierarchical leadership therefore is no longer dominant and is getting substituted by one that is collaborative, motivational and visionary. Telling isn't effective any more, the new approach is in Show & Tell. In other words, just being a good communicator means nothing, on the other hand being with the people, standing by their side and showing them about 'how to' rather than 'what to' counts a lot. However, the mindset has to change. Back in the early 90s, I bagged multiple orders for IT training from the staff association of a lead bank located in Cuttack. When I went and met my customer – the association leader, I felt my job title, rank and position would be of no use to him. Company brand counted a lot but then, there were equal players in the fray – so why should they take me? I only had to position myself in his 'DNA' to win his confidence, particularly at a time when 'staff union and computers' were not on favorable terms. Of course, business talks were there but the body chemistry had to match first. Therefore get off the ladder of position, set your feet on the ground and act naturally.

In this new paradigm, the position in the hierarchy is a weak link. It's the natural influence that a leader has on the team, which counts the most. Think of the super stars who endorse

brands in the TVCs – they have the power within to help the millions of viewers to form a favorable opinion about the product. Incidentally, they are not managers of the product companies, but actors or players who entertain the mass and who are believed by the mass. India's great leader, NR Narayana Murthy believed in leading by example. He gave out subtle messages to all in the company by doing simple things. For example, there was no question of “entitlement” for anyone in the company. Now, he could have said this standing in a Town Hall, but he chose to do it by simply standing in the canteen queue often, paying for the meal and eating the same food with everyone. We learnt those leadership basics from him, that is etched forever.

So, how do we motivate a team so that they perform without being pushed, when the team leader is not carrying a job title? How can we steer and direct the team towards success? And no one would be telling them either, what they should do on a daily basis. That subtle inner voice has to prompt “let me go for it”. What matters the most is - what they do, when no one is watching them.

One of the things I practiced as a Business leader was not to exercise the hierarchy consciously. When I visited any location, a common practice was the local HR person would arrange for a Town Hall meeting. And they would typically push everyone to fill up the Hall, so that it looked good for everyone. I told them one thing and they never followed the conventional practice thereafter. I simply said " Do you have to push the people, if NRN was visiting this campus? If not, why? Because, people felt it was NRN who made the Town Hall meeting valuable and worthwhile. So, it is my onus to make it valuable and worthwhile and people have the right to reject it....."

Points to ponder in this regard:

- Are we committed towards our responsibilities?
- Are we truly involved in what we are assigned?
- Are we passionate about what we are doing?

And last and the final one is:

- Are their voices heard?

The manager without title breaks the barrier and reaches the team and listen to their voice because, it is the source of innovation, and one idea sparks the other that is how innovation matures to realization.

If you have right and responsible people in the team, bother less about controlling them; think about motivating, mentoring and guiding. Right directions are more important than controlling, particularly at the time of crisis when the team looks forward to it. Day to day control (sitting behind the coder to ensure he or she is at the job) is the primitive mode of supervision where the supervisor endeavors to do justice to the title of his position.

I used to work closely with a manager who was extremely competent when it came to Project delivery. However, she used to be both influencing and intimidating in her approach. I realized she believed leadership was all about control and that is what I needed to change. I took up the challenge to minimize her desire to control, while enhancing her intent to influence.

The Resolution

There is enough and more literature in management dealing with motivation, leadership style,

team engagement, and so on. I have relied on a few basic principles of leadership and they have helped me immensely to lead by influence. And I have never had to use my position or job title to get things done. What I did to bring in change in the lady colleague I talked about. There was no formal framework. It was just a natural process, the way I believe it should be. I did not preach or lecture. I sought to lead by example and hoped that she would learn from this.

The very first resolution: how to make the team your friend! I would always remind myself of my very first day at college when each one of us made friends with tons of strangers. I just try doing the same for a new team. It is no different. It is just that most of them went to a different college and at a different time. I take out any feeling from mind that I am their manager. I am with them and responsible for their success, their aspirations and accountable for outcomes. The primary objective is to reach a level of comfort, first with the person and then with the professional. This helps build an emotional connect right up-front and a relationship is established, that is long term. These are not transactional or short-term, as I believe relationships are what you do, when you are not looking for any help...! In an era where global economy is thriving upon contributions from services and human being is the sole resource for its performance, establishing cordial and friendly relationship with the resource people is very important. In Adrian Payne's six market model of relationship marketing, two markets are focused on employees – one is employee market and the other is internal market. Employee markets form a focal point for relationship marketing achieved through inducting right people and to devise systems to retain them. Internal Markets comprises of employees who have the ability to determine the style and ethics of the business environment with their actions and beliefs. It describes the application of marketing internally within the firm. This seems to be an area where practice appears ahead of theory.

Second, I start most discussions with the question why. As Simon Sinek says it in his book *Start With Why*, no one wants to be told what to do. It's a soft form of insult to ignore the rational mind of human beings, especially if they are white collared. Giving the big picture and the context always helps, even if the worker is a technician or a daily-wage earner. Be it a tough project that the team needs to deliver or the policies that the management must implement. Very often, questions are not raised and answers not volunteered, as orders pass down the hierarchy at high speed without any checks. I would travel that extra mile to know the larger context so that the team can appreciate their involvement and commitment. I have been largely successful in doing so and such communication gives out an additional sense of purpose and importance. That makes a huge difference. The power of vision can do wonders. As best practices, I have led award-winning projects involving large teams where the purpose of the project was printed on a post-card and pinned-up on cubicles of every team member, as a daily reminder.

Third, beyond being natural and a friend of the team – there is no need to lecture around people for motivating them. I treat them as adults. I tell my team “It's your career, it's your life. You decide what you want and what your priorities are”. I would guide them, help them identify their natural strengths, and where they are likely to deliver their best. The rest is left to them. They are all intelligent adults and very quickly learn how to take responsibility of their own career and life. Learning to take responsibility of their own career and life become a huge source of motivation and has really worked.

Moreover, they learnt from their leaders through observations. It was a slow but an assured process. It made an impact on my colleague and she was a much better influencer and rarely would need to invoke her positional power to get things done.

Conclusion

I have never had to use my title or use the position of hierarchy to influence the team at work or their behavior. I believe, today's leadership is all about how much one can influence and what impact does one make. It's not about leadership by control any more. Neither, it is valued by the size of the department one manages. Increasingly, the real contributors will be process owners and project leaders that are able to provide cross-functional leadership where the title doesn't count. Give up the dream of holding on to the title and do not even bother to have a formal authority to do the job; doing the best work should be all that matters most.

References

- Payne, Adrian, Relationship Marketing: Six Markets Framework, Working Paper, Cranfield School of Management, 1991.
- Sharma, Robin, 'The leader who had no title', Jaico Publishing House, Mumbai, 2016
- Sinek, Simon, 'Start with Why: How Great Leaders Inspire Everyone to Take Action', Penguin Books Ltd; London, United Kingdom, 2011.

BOOK REVIEW

'SELL: THE ART, THE SCIENCE, THE WITCHCRAFT' BY
SUBRATO BAGCHI, HACHETTE INDIA, 2017, PAGES 244

Supriya Biswas

The opening paragraph of the book unfolds author's forty years experience with a humble beginning at a government outfit and eventually rising to the position of executive chairman of India's first start-up IT Company. The length of time spent in the industry truly qualifies him to take up such an interesting but critical subject called 'Sell'. The art, science and witchcraft in it have been meticulously explained by the author through assortments of experiences, most of which are not his own, but from the people termed as 'Druids' by him. This seems to be the greatest USP of the book and also it has set the tone of his text – instead of using his convincing skills, he has been successful in persuading the readers to accompany him in the entire journey of understanding and relishing the subject matter.

Thirty chapters are short, crisp and fascinating enough to prevent the readers pause for a moment till the end. Each chapter is rich with parables, live examples. Incidentally those were not just limited to IT world. McDonalds, Starbucks, Michelin tires, Wal-Mart, even the not-so-known fishmongers of Kolkata market, photo-framer of Bengaluru featured the list of inclusions and references. Detailing has been done to clarify what it takes to acquire successful selling skills.

The tagline of the book is 'Selling is an empathy-led discipline'. Selling cycle is a long drawn process, starting from lead generation to closing with success or failure. Each event on the cycle has its own importance and the movement from one to the other is smooth and logically coordinated without a trace of jump-cut. Like an experienced conductor of an orchestra, the author elaborated about how to tune the sales pitch at every point of the cycle.

The most interesting line in the book - 'There are a million ways to connect with the customers. Look for the story behind the product you are selling'. It is a fact that most customers would love to connect with great stories instantly and appreciate, leading to a positive response to shake hands with them. TCS, Wipro, Infosys and miscellaneous others close to their status can tell such stories demonstrated through their first ten slides in the pre-sale presentations. But what about those who do not own such stories? Selling innovative or niche products could have been one of the answers. However, a few lines from the selling guru would have addressed this gap.

Though selling and marketing are two different disciplines in the academic world nevertheless they work in tandem in industry. The third force that seamlessly integrates these two is relationship marketing. There have been indirect references to relationship marketing mentioned in a lighter vein - the sales person should also know the name of the customer's pet. This might be true for low value products. But for high value solutions, particularly in

Dr. Supriya Biswas
Professor – NSHM Business School, Kolkata
E-mail: supriya.biswas.kol@nshm.com

a B2B scenario, there is doubt if this approach can really add major value to relationship building. The basic tenets of customer relationship can be similar across the industries. In the gamut of IT solutions and services for a large and mid size enterprise with a high value solution, it is much more than a 'fishy business' starting from prospecting to closing. In fact, closing is one such event in the selling cycle that everybody looks forward to, but difficult to have grip on it by both parties because it is a very sensitive and slippery event. Benu-da's view on closing is logical and practical – 'both you and customer have to be on the same page'. Instead of reminding the customer that you are the best choice, I feel customers should be convinced within themselves through your acts that they are not left with better alternatives.

While dealing with the prospects, the gentle but wise advice about the types of prospect one has to deal with and how to understand who are likely to be converted as clients has rightly depicted the typical scenario prevailing in the business. Example of confidence in customer handling is relevant. Leaving aside the non IT companies, in most cases, the references encompass the overseas IT clients. Couple of cases pertaining to domestic clients and how to architect the fabric of the sales pitch for such clients would have given better insight into the domestic space.

Kudos to the author for his frank and fair confessions in elaborating the power of persuasion in the chapter 'Greek or Latin' – no doubt it should be a great lesson for all Indian parents. Perhaps this gives the best answer to the question of superiority of the 'power of persuasion' over the 'power of convincing'. Most marketing professionals tend to fall in the trap of convincing exercise, sometimes it may work but that is a very rugged approach of selling which fails to give satisfactory return in the long run.

Some chapters like the 'Fishing in the Right Pond' or 'The Power of the Point' do not seem to deliver any special message although it gives a good reading pleasure. These are the elementary skills expected from any sales professional. Those unaware of such marketing basics should go back to some B School for a refresher course. Also the point on 'cut and paste' that most marketing professionals, particularly the juniors, succumb to, is not an unknown syndrome. This is very common across any industry and his note of caution should act as a reminder.

Referring to the chapter 'Champions', the champs are expected to meet the target effortlessly. Evidently the skill required to reach the comfort of effortlessness is a matter of years of experience and hard work. Nevertheless the market changes with time and taking a cue from IT industry, the software professionals are paid handsomely for their productive efforts. IT solutions embodies concept selling – if you are innovative, you have the market otherwise you are out of it. The arrows on the cover of the book or at the headers of each chapter symbolize meeting the targets. To meet the business targets, team effort is essential and on top of it, the role of the business leader counts a lot. Without effort nothing can be won and this is one of the reasons why Indians software professionals are hired and admired abroad

'Gracious Loser' is one lesson that everyone should learn. There are cases that even after losing a deal, the solution provider is back just because of maintaining a graceful exit

with the assurance that we are there with you. The letter to the customer shows the approach towards building an effective customer relationship.

To sum up, the flow of its contents from the beginning to the end is well designed and presented. This book can provide lot of tips to practicing sales professionals. It is a must for B School students aspiring to pursue their career in sales and marketing.

ABOUT THE JOURNAL AND CALL FOR PAPERS

Mission

NSHM Business School is publishing NSHM Journal of Management Research and Applications (NJMRA). The objective of NJMRA is to present current research and ideas in the field of management in a lucid format accessible to both the academia and industry. The journal is also expected to act as a platform for industry professionals to share their best practices.

NJMRA invites original research-based papers, articles, book reviews and management cases on topics of current concern in the areas of management, development economics and related social sciences. It looks for conceptually sound and methodologically robust articles that harness and extend knowledge in all domains of management through empirical work or by building on existing concepts, and draws out the implication of the research for practitioners. The section on practices on the other hand is expected to extend the knowledge of the academic researchers in this discipline. Consequently, we expect the articles to have the potential to advance both management theory and practice through the bilateral exchange and synthesis of ideas and information.

Frequency

The journal will be published twice a year in the months of June and December.

Content Mix

In view of the broad spectrum of readership, NJMRA invites contributions to any of the various sections of the journal:

- Research Papers
- Conceptual
- Empirical
- Practice
- Perspectives
- Book Reviews
- Case Studies

Here are some of the suggested themes on which contributions are welcome

General Management, Corporate Strategy, Policy and Governance; Finance, Control and Corporate Laws; Public Policy; IT and Systems; Marketing; OB/HR; Technology, Production and Operations; Economics, Sociology and other Social Sciences

Articles that consist of literature surveys or discussion on practices in industry and reviews of books that have been published within one to two years of the receipt of the review will be also considered. Industrialists, CEOs, entrepreneurs and corporate professionals may submit articles on management practices which enable them to share their experiences in exploring new and under researched areas in management.

Review Process

NJMRA is a refereed journal. All manuscripts submitted for publication would be screened by the editorial board for relevance to the journal. They would then be put through 'double blind review process' that may normally take four months. Manuscripts accepted for publication will have to be edited to suit the Journal's format. The Editorial Board of NJMRA reserves the right to shortlist a paper/article for a particular section of the Journal depending on its suitability. Wherever possible, reviewer's feedback will be provided.

Manuscripts are judged on the basis of the following criteria:

Overall contribution of the paper to the field of management, originality of the content, adequacy of the literature review, conceptual or methodological rigor, logical and technical soundness, organization of the content, writing quality, implication of the research references.

After the review process is completed, the author(s) will be informed about the decision of the reviewers by email.

Guidelines for Contributors

Articles/Papers should not exceed 10,000 words, and book review should be neatly typed MS Word document on one-side of A4 size paper with double spacing in Times New Roman, 12-point font size justified text.

Cover page should provide the title of the paper, name(s), and designation and contact details of the author, along with a short biography of the author within 100 words.

An abstract (150-200 words) should be included in the beginning of the paper followed by key words. The number of keywords should be restricted to a maximum of ten.

All sections and subsections are to be numbered. Example: 1, 1.1, 1.2, etc

All tables, charts, graphs, diagrams should be in black and white and not in color. The images should be of high resolution and in black and white only. Number and complexity of such exhibits should be as low as possible. All charts and graphs should be drawn legibly

and figures should be indicated in suitable and appropriate scale. All charts, graphs, images, etc. should also be numbered and referred to in the body of the text.

Footnotes to the text should be avoided. If required, they should be numbered consecutively and presented as endnotes.

The primary heading should be in capitalized form (Uppercase), and boldface. The sub-headings should be in title-case capitalization (first letter of each word in capital) and in bold

Citations of other works should be limited to the name of the author and year of publication. Short quotations should be included in the text within parentheses, while quotations of more than 30 words should be placed in a separate paragraph indented from the main body of the text.

References should be indicated in the text by giving the title of author(s), with the year of publication in parentheses. All references should be alphabetically listed at the end of the paper. Format of all citations should as far as possible follow the American Psychological Association (APA) referencing style. For example:

A. For Articles in Journals

Mintzbert, H. and Lampel, J. (1999): Reflecting on the strategy Process, Sloan Management Review, Vol.40, No 3, pp.21-30.

Singh, G., Kala, S.P. and Singh, S. (2006): Impact of Advertising Attitude on Consumer, Amity Business Review, Vol. 7, No 2, pp. 60-63.

United States Agency for International Development (USAID), (2008): Private Health Insurance in India: Promise & Reality.

World Bank Report (1994): Averting Old Age Crisis

B. For Articles in Books (Edited Volumes)

Manimala, M.J. (1999): Entrepreneurial Politics and Strategies – The Innovator's Choice, New Delhi: Sage Publications, pp. 114-123.

C. For Working Papers and Thesis

Balasubramanian, N. (1997): Equity Returns in India: An Empirical Study of the Experience of the Nineties, Working Paper No. 5/1997, UTI-IIMB, Centre for Markets Education & Research, Indian Institute of Management, Bangalore.

D. For Websites

Gerwig, K. and Carlson, R. (2001): AT&T & Comcast: Dividing Their Business to Conquer, Current Analysis,
<http://www.currentanalysis.com/CurrentComplete/Eventview.cfm?reportid=6744&nav=1>

10. When citing sources within text, only the author surname(s) and year should be mentioned as illustrated below.

If the market exists it would help the victims to get assured good quality treatment at low cost through either risk-pooling (Arrow, 1963) or income-pooling (Nyman, 2003).

One unique thing of private health insurance (PHI) in Canada is the coverage of prescription drugs outside of hospitals that is not provided by public coverage (Glied, 2001; Colombo and Tapay, 2004).

This regulation needed well defined and informative materials regarding the future prospect of the insurance products at the time of sale, claims procedure, proper functioning of policyholders services and so on (USAID, 2008).

11. In case of more than two authors only the first author surname must appear followed by et al as shown below :

This indicates the presence of substitution relation in richer countries between private and public provisioning of healthcare related services; if quality of public service is not up to the mark relatively more affluent people may opt out (Sekhri et al. 2005).

12. If a contribution is accepted for the sections – Conceptual/Empirical Research

Papers/Practice/Case Studies then the author will be paid an honorarium of Rs. 3,500. For accepted Book Reviews and articles appearing in "Perspectives" the honorarium will be Rs.1000. Authors will also receive a complimentary copy of the issue of NJMRA in which the article is published.

Correspondence

In the covering letter accompanying the manuscript, the author(s) should certify that the manuscript has neither been published anywhere nor is it being considered elsewhere for publication. Copyright of all accepted papers for publication and use in any form/format will vest with NSHM Business School. Each author of the paper will have to sign the Pre-Publication Author Disclosure Form and the scanned soft copy of this form with signature of the author(s) duly attested by the head of their institute(s) has to be submitted to the editor through email.

For submission of articles papers, files can be attached in the email addressed to the Editor, NJMRA and sent to editor.njmra@nshm.com. In the subject column of the mail, indicate "Article for the Journal".

The manuscript should be sent on the following address:

The Editor

NSHM Journal of Management Research and Applications,

NSHM Business School

NSHM Knowledge Campus

124(60) B.L.Saha Road, Kolkata - 700 053

West Bengal, India

<http://www.nshm.com/quicklinks/njmra.php>

NSHM Journal of Management Research and Applications Pre-Publication Disclosure Form

Author and co-authors of the article must fill-in and sign a copy of this form and submit it to the office of NSHM Journal of Management Research and Applications before an accepted article will be scheduled for publication.

I/We _____, (Author (s) name), the copyright owner(s) of
the Article _____

do hereby authorize you to publish the above said article in NSHM Journal of Management Research and Applications

I/WE FURTHER STATE THAT:

1) The Article is my/our original contribution and has not been plagiarized from any source/individual. It does not infringe on the rights of others and does not contain any libelous or unlawful statements and all references have been duly acknowledged at the appropriate places.

2) The work has been submitted only to NSHM Journal of Management Research and Applications and it has not been previously published or submitted elsewhere for publication in a refereed or copyrighted publication.

I/We hereby authorize you to edit, alter, modify and make changes in the Article to make it suitable for publication in NSHM Journal of Management Research and Applications.

I/We hereby assign all the copyrights relating to the said Article to NSHM Journal of Management Research and Applications KOLKATA.

I/We have not assigned any kind of rights of the above said Article to any other person/institute/publication.

I/We agree to indemnify NSHM Journal of Management Research and Applications, Kolkata against any claim or action alleging facts which, if true, constitute a breach of any of the foregoing warranties.

Name: First Author

Name: Second Author

Signature:

Signature:

Date:

Date:

Subscription Form

I wish to subscribe/renew my subscription to "NSHM Journal of Management Research and Applications for 1/2/3 year(s). A bank draft / cheque bearing no. _____ for ₹/US\$ _____ drawn in favour of "H.C. Garg Charitable Trust" towards subscription is enclosed.

Name _____

Address _____

City _____ Pin _____

Country _____

Phone _____ Fax _____

E-mail _____

Signature with date

Please send the amount by DD/Crossed account payee cheque favouring "H. C. Garg Charitable Trust" for timely receipt of Journal.

For outstation cheques, Please add ₹ 30 towards bank charges.

SUBSCRIPTION RATES			
Category	1 year	2 year	3 year
Indian in ₹			
Institutions	300	550	800
Individuals	200	350	500
Alumni	150	225	350
Students	150	225	350
Foreign in US\$			
Air-Mail	75	125	175
Sea Mail	60	100	135

Please send your subscription form along with your DD/Crossed Account Payee Cheque to :

Mrs. Supriya Banerjee,

NSHM Knowledge Campus - Knowledge Group
124(60) B. L. Saha Road,
Kolkata 700053, West Bengal, India