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NAVBHARAT MEMORIAL FOUNDATION

(A tribute to Late Shri Narendra Singh Kothari)

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नवभारत मेमोरियल फाउन्डेशन

परिचय

नवभारत मेमोरियल फाउन्डेशन स्वर्गीय श्री नरेन्द्र सिंह जी कोठारी को समर्पित वह संस्थान है जहाँ जरूरतमंद विद्यार्थियों को आर्थिक तथा तकनीकी सहायता प्रदान की जाती है ताकि वे शिक्षित होकर समाज में अपनी एक स्वच्छ छवि बना सकें।

स्वर्गीय श्री नरेन्द्र सिंह जी कोठारी का सम्पूर्ण जीवन हमें जीवन में हर विकट परिस्थिति का सामना करने के लिए प्रेरित करता है। इनकी माताजी का बाल्यकाल में ही देहान्त हो गया था तथा इनके पिता भीलवाड़ा में पुलिस में थानेदार के पद पर थे। एक बार डाकुओं ने इनके पिता को समझौता करने के लिए बुलाया तथा वहाँ धोखे से उन्हें जिन्दा जला दिया। इसके पश्चात् छोटे भाई-बहनों की जिम्मेदारी बाल्यकाल में ही श्री नरेन्द्र सिंह जी को उठानी पड़ी। तब उन्होंने कठिन परिश्रम करके शिक्षा की ओर रूझान होने के कारण न केवल भाई-बहन को पढ़ाया अपितु स्वयं भी पढ़ते रहे। गणित और अंग्रेजी उनके प्रिय विषय रहे। विज्ञान संकाय के विद्यार्थी होने के बावजूद भी सभी विषयों को सरल एवं सहज तरीके से छात्रों को समझाने की अदभुत कला के वे धनी थे। 1984 से 1988 तक वे भीनमाल में अकाल राहत कार्यों में प्रबन्धक के पद पर रहे। इसके बाद 1989 में वे जयपुर आ गए तथा 1989 में इन्होंने 2 बच्चों से नवभारत कोचिंग संस्थान की। सन् 1989 से आज तक हजारों बच्चों इस संस्थान से पढ़कर अपने जीवन के चरम को छू चुके हैं।

स्वर्गीय श्री नरेन्द्र सिंह जी कोठारी ने अपना जीवन शिक्षा का प्रचार-प्रसार करने तथा बच्चों को शिक्षित करने में समर्पित कर दिया। उन्होंने सदैव बच्चों को शिक्षित होने तथा अच्छे संस्कार अपनाने की प्रेरणा दी।

स्वर्गीय श्री नरेन्द्र सिंह जी कोठारी की यादों को शिक्षा जगत् में अक्षुण्ण बनाये रखने के लिए ही नवभारत मेमोरियल फाउन्डेशन की स्थापना की गई है जिसका उद्देश्य शिक्षा के क्षेत्र में जरूरतमंद बच्चों को वित्तीय मदद करना तथा सहायता देना है। इसके अतिरिक्त इस संस्थान का उद्देश्य शिक्षा एवं समाज के विभिन्न नवाचारों के लिए कार्य करना है जिससे योग्य एवं जरूरतमंद विद्यार्थी जीवन की नई ऊचाइयों को पा सकें।



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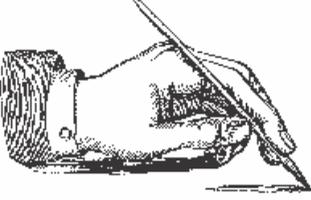
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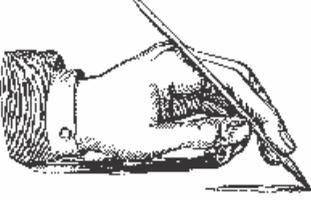
सत्यमेव जयते

कल्याण सिंह
(राज्यपाल राजस्थान)

मुझे यह जानकारी प्रसन्नता हुई कि अन्तर्राष्ट्रीय शोध पत्रिका "*Ascent International Journal For Research Analysis*" का प्रकाशन किया जा रहा है।

प्रकाशन के लिए शुभकामनाएं।

कल्याण सिंह



शुभकामना संदेश



सत्यमेव जयते

वसुन्धरा राजे
(मुख्यमंत्री राजस्थान)

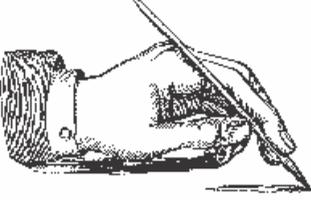
हर्ष का विषय है कि समाज में शिक्षा और शोध को बढ़ावा देने के लिए नवभारत मैमोरियल फाउण्डेशन, एक शोध पत्रिका "Ascent International Journal For Research Analysis" का प्रकाशन करने जा रहा है।

शोध पत्रिकाएं समाज में नवाचारों और रचनात्मकता को प्रोत्साहन देने की दृष्टि से बहुत उपयोगी होती हैं और इनसे अनेक ऐसे नए तथ्यों का ज्ञान होता है जो समाज में वैचारिक क्रान्ति लाने में सक्षम होते हैं। शिक्षाविद् स्वर्गीय श्री नरेन्द्र सिंह कौठारी की स्मृति में स्थापित फाउण्डेशन इस जनरल के माध्यम से युवा पीढ़ी के लिए अनेक विचारणीय मुद्दे और प्रकाशन में लाएगा ऐसी आशा है।

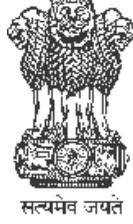
मैं आशा करती हूँ कि नवभारत मैमोरियल फाउण्डेशन अपनी शोध पत्रिका के माध्यम से विद्यार्थियों के साथ-साथ समाज का हित भी करेगा। मैं स्मारिका के सफल प्रकाशन की कामना करती हूँ।

वसुन्धरा राजे

वसुन्धरा राजे



शुभकामना संदेश



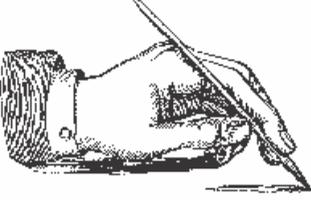
कालीचरण सराफ
(शिक्षा मंत्री)
राजस्थान सरकार

मुझे यह जानकर अत्यन्त प्रसन्नता हो रही है कि शिक्षाविद् स्वर्गीय श्री नरेन्द्र सिंह जी कोठारी के स्मरणार्थ स्थापित नवभारत मेमोरियल फाउण्डेशन के द्वारा त्रैमासिक शोध पत्रिका "Ascent International Journal For Research Analysis" (A Bilingual multidisciplinary International Quarterly Journal) with Online ISSN 2455-5967 का प्रकाशन किया जा रहा है।

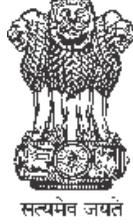
यह शोध पत्रिका समाज में शोध के स्तर को बढ़ावा देने में सहायक सिद्ध होगी तथा समाज में शोध कार्य को प्रोत्साहित करने में नये आयाम स्थापित करेगी, ऐसी मेरी कामना है।

मैं नवभारत मेमोरियल फाउण्डेशन के इस कार्य में संलग्न सभी सहभागियों को अपनी शुभकामनाएँ प्रेषित करता हूँ तथा इस शोध पत्रिका के सफल प्रकाशन के लिए हार्दिक शुभकामनाएँ प्रेषित करता हूँ।

कालीचरण सराफ



शुभकामना संदेश



अरुण चतुर्वेदी
(सामाजिक न्याय एवं अधिकारिता मंत्री)
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From the Editor's Desk

आ नोभद्राः क्रतवो यन्तुविश्वतः
Let noble thoughts come to us from all sides

(*Rigveda, 1.89.1*)

Dear Friends,

Greetings. I would like to welcome all the readers on the occasion of releasing the this issue of **"ASCENT INTERNATIONAL JOURNAL FOR RESEARCH ANALYSIS "(A Bi-lingual Multi Disciplinary Peer Reviewed International Quarterly Journal)"** having ISSN No 2455-5967, Registered & Listed by UGC 63514 and Impact Factor (PIF) 1.675, Indexed in I2OR. Successfulness of this journal is the endeavour of our whole team and our prudent contributors. The meaning of ASCENT is to move from downward to upward and touch the new heights. We wish that all the readers and authors may touch the new heights of their career, who are working for advancement of research, development of career, creativity, innovation and entrepreneurship. I am very much glad to present this issue of **"ASCENT INTERNATIONAL JOURNAL FOR RESEARCH ANALYSIS "(A Bi-lingual Multi Disciplinary Peer Reviewed International Quarterly Journal)"**. I do believe that you would continue your kind cooperation and support. This journal is going to be presented by Navbharat Memorial Foundation, which is established in the sweet memory of Late Shri Narendra Singh Ji Kothari.

Shri Narendra Singh Ji Kothari, who had devoted his life for education. In his whole life he educated thousands of students. He always motivated to his students to become educated and to adopt good moral. In 2016, Navbharat Memorial Foundation is established to hold the sweet memory of Late Shri Narendra Singh Ji Kothari in the field of education. The basic objective of this foundation is to provide assistance to the needy students in the education sector. Other than that, this foundation has aims to work for education and innovation in the society.

At the end, I would like to convey my thankful gratitude to all contributor scholars for their valuable contributions. I hope that by launching this journal, we will be success to promote creativity, innovation and research activities in the society. I wish you all the best for reading this issue of **"ASCENT INTERNATIONAL JOURNAL FOR RESEARCH ANALYSIS "(A Bi-lingual Multi Disciplinary Peer Reviewed International Quarterly Journal)"**. If you have any suggestions, please feel free to send at our email – ijcms2015@gmail.com.

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Associate Editor - AIJRA

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Consumption Connection with Gender and Stream of Education

*Nishikant Bohra

**Smita Kaushik

Abstract

People consume caffeine for emotional, rational and social reasons. Innocence by association is what a caffeinated drink is doing when they say that 'Darr ke aagee Jeet hai.' This simple association with the fear of insecurities associated with peer pressure to look cool and masculine is helped by consuming these caffeinated drinks. We observed that engineering students carry more often a single type of green bottle in their hands during the lunch break. So, we tried to evaluate this observation further by knowing the difference in this consumption pattern of engineering and management students. We wanted to evaluate correlations between the streams of education they are pursuing with their most preferred beverage. The objective of this study was not only to determine the relation between the preferences according to the stream of education but also to determine the reasons for this preference in the students of Jaipur.

Methods

Respondents were 256 students all in the age group of 18-25, comprising of 154 engineering and 102 management students. They were surveyed about their most preferred beverage during the lunch break and reason for this preference through a questionnaire. This is hypothesized that energy drink consumption is associated with the normative and performative functions. It is normative as part of growing up in the group. It may be performative as it may reflect the gender and social identity. The statistics was compiled and evaluated using a SPSS data set analysis with a null and alternate hypothesis stating:

H_0 = There is no difference in the cold drink consumption and education.

H_1 = There is a difference in the cold drink consumption and education.

Results

There is a statistically significant difference in the consumption pattern of engineering and management students. Null hypothesis was rejected, as there was statistically significant difference observed in the beverage consumption and education. Most preferred beverage of engineering students was found to be a caffeinated energy drink with masculinity association. This difference between engineering students and management students was confirmed in 'F' test, significant at < 0.001 by regression ANOVA.

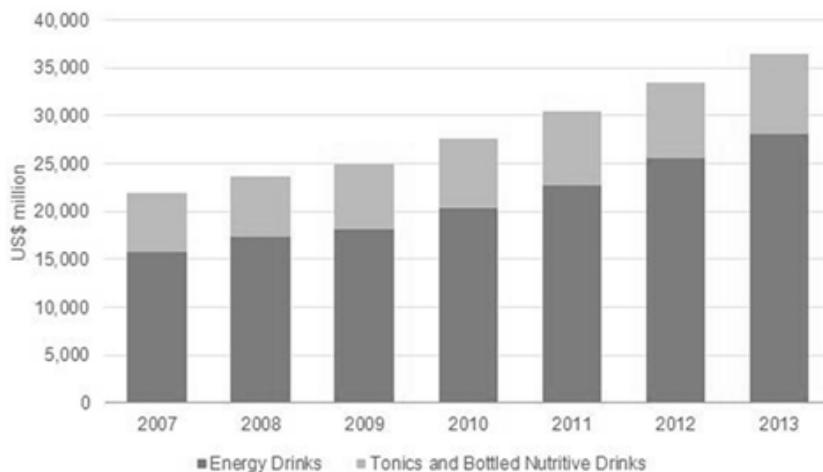
Introduction

Demand around the world for energy-boosting soft drinks is huge and it revolves around the

arguably world's oldest and most widely consumed drug known as Caffeine. The dual power to counter physical fatigue and increase alertness is part of the reason caffeine ranks as the world's most popular mood-altering drug, eclipsing the likes of nicotine and alcohol. World figured out this some 200 years ago that the good feeling they are getting from coffee and tea is due to the same chemical agent. Caffeine is an alkaloid that occurs naturally in the leaves, seeds, and fruit of tea, coffee, cacao, kola trees, and more than 60 other plants. Lao-tzu is said to be the first one to propagate this through tea as an elixir to his disciples.

More the caffeine better the beverage, is the dictum of today. Demand for caffeinated drinks is growing for last 14 years in the world. It used to be a \$4bn industry in 1998 and is now a \$35bn industry in 2012. According to Euromonitor International's most recent health and wellness data, energy drinks sales were US\$25.5 billion in 2012. It was Rs.937 crore market in India in 2012 and is expected to touch Rs. 1080 crore by 2018.

Global Energy Drink and Tonics and Bottle Nutritive Drink Sales (US\$, RSP), 2007-2012



Source : Euromonitor International

Energy drinks typically contain 80 to 141 mg of caffeine per 8 ounces, the equivalent of five ounces of coffee or two 12-ounce cans of caffeinated soft drink such as Mountain Dew, Coca Cola, Pepsi Cola or Dr. Pepper. Red Bull is the undisputed leader in this category and is promoted as a lifestyle product associated with male youth and adventure sports. Red Bull being available at Rs.95 is quite expensive for a value conscious Indian consumer. Indian youth is opting for second best substitute to ingest caffeine in the form of 'Mountain Dew' available in Indian college canteens at a price of Rs. 10. Mountain Dew also associates it with adventure sports with a tag line of 'Darr ke aagee Jeet hai.' One of the other options available to Indian youth is through a brand 'paper boat' available at a price of Rs.25 and it is widely distributed through Reliance-Fresh retail. We know that people belonging to the same social class tend to pick products that are similar. This

similarity is formed early and buying patterns of the students from engineering, medical and management streams differ amongst the stream but are similar within the stream. This similarity is also depicted in the surveys conducted regularly by Dunkin Donuts and Career Builder in U.S. In their 2012 survey involving 4152 workers predicting coffee trends in U.S. workplaces, they predicted professionals who need coffee (caffeine) the most to get through the work day in the following order:

1. Food preparation /Service workers
2. Scientists
3. Sales Representatives
4. Marketing /Public relation professionals
5. Nurses
6. Editors / Writers / Media Workers
7. Business Executives
8. Teacher /Instructors
9. Engineering Technicians / Support
10. IT managers/ Network Administrators

In the same survey 63% of the respondents agreed to consume 2 or more coffee cups per work-day and 28% consume 3 or more cups of coffee. This establishes the correlation of coffee (caffeine) consumption with profession.

Caffeine has long been prized for its ability to increase a person's alertness and energy. According to lore, these properties were noted in the 9th century by an Ethiopian shepherd Kaldi, who found his flock frolicking after eating coffee berries from nearby bushes. In 1819, the German chemist Friedlieb Ferdinand Runge isolated relatively pure caffeine for the first time and called it "*Kaffebase*" (i.e., a base that exists in coffee). In 1821, caffeine was isolated both by French chemist Pierre Jean Robiquet and by another pair of French chemists, Pierre-Joseph Pelletier and Joseph Bienaimé Caventou, as quoted by Swedish chemist Jöns Jacob Berzelius in his yearly journal. Robiquet was one of the first to isolate and describe the properties of pure caffeine while Pelletier was the first to perform an elemental analysis.

Energy drinks derive their energy-boosting properties chiefly from sugar and caffeine. Both of them are addictive in nature. Students during their finals examination might consider gulping down a cup of coffee or powering down a bottle of 'Mountain Dew' to stay awake for studying all night. In the recent years, many 'energy drinks' have evolved in the market, and are gaining popularity with young engineering & management students, who want to have extra energy for long studying hours. While these energy drinks might look tempting especially for those who aren't habitual consumers & tends to enhance their performance for a short duration, there is some health hazards associated with such drinks. Low dosage of caffeine can give a temporary boost to the energy level, but frequent consumption of such caffeinated energy drinks might be accompanied with developing tolerance and one may continue to feel drained & exhausted.

Natural sources to get extra energy, such as a healthy diet and exercise, as well as quality sleep on a regular basis are some of the better ways to maintain enough energy to tackle any finale.

Although the toxic dose of caffeine is very high for a fully grown adult, but they are of opinion that this value can fluctuate depending on how a person's body processes the stimulant. Caffeine gets removed from the body at different rates because of genetic variations, gender, and even whether a person is a smoker or not. For this reason, it's difficult to set a safe limit of daily human consumption of caffeine. "Scientists know a lot about how the popular stimulant triggers alertness in the body at low doses", says Bertil B. Fredholm, emeritus professor of pharmacology at the Karolinska Institute, in Sweden.

"Once the compound gets absorbed into the bloodstream, it moves to the liver, where it gets metabolized. There, cytochrome P450 enzymes yank different methyl groups off caffeine to transform it into the primary metabolites paraxanthine, theophylline, and theobromine". Caffeine and its metabolites subsequently bind to proteins called adenosine receptors located throughout the body. When they bind to two of these receptors—named A1 and A2A—the stimulants block the proteins from interacting with their natural partner, adenosine. Normally, adenosine's interaction with its receptors regulates nerve cell activity as well as the release of neurotransmitters such as dopamine. It also promotes sleepiness. But when caffeine or its metabolites prevent adenosine from doing its job, dopamine and other neurotransmitter levels increase, leading to a surge in nerve activity in the brain and on the heart, resulting in increased heart rate & blood pressure, thereby avoiding sleepiness. But like all other indulgences in life, too much of any good thing can be bad. "Whereas low-dose caffeine effects are wakefulness, a little bit of arousal, and slight euphoria," Fredholm says, "high-dose effects are anxiety, irritation, and general mental discomfort". Thus it is quite evident that caffeine increases alertness and decreases fatigue, causing a better performance in some tasks.

Review of Literature

Human beings are social animals and as Maslow said it; our social needs are fulfilled by the interactions with other people. Products are also capable of fulfilling these social needs. Moreover, relationships with nonsocial objects may develop that mirror interpersonal ties and those who are well integrated in their social networks are less likely to seek additional bonds (whether they be with other people or products) relative to those who are deprived. Given these conclusions, it seems reasonable to suggest that when a social need exists, products may satisfy those needs in a way similar to people. When this need is fulfilled via consumer products, individuals may not seek fulfillment from other people. Threat of social exclusion is more motivating in comparison to the activation of social constructs in general.

Coffee is popular because of caffeine content in it. After water and possibly milk, beverages that typically contain caffeine occupy the top spots in global beverage consumption: tea, coffee and soft drinks. Coffee has surpassed soft drinks in daily market penetration among US adults for the first time in nearly two decades, making it America's most popular beverage after water in 2009.

Trend in specialty coffee remains unabated largely due to disposable income of upper socio-economic classes.

“Emotions,” wrote Aristotle (384–322 B.C.) “Are all those feelings that so change men as to affect their judgments, and that are also attended by pain or pleasure. Such are anger, pity, fear and the like, with their opposites.” Emotions are intense, conscious and often tied to specific circumstances. Positive mood reduces the likelihood of negative cognitive responses. To examine the effects of caffeine on attitude change, scientists employed recent dual process models of persuasion as a guiding framework. Attitudes can be influenced via a number of mechanisms. The Elaboration Likelihood Model is one of the pre-eminent cognitive processing models. The ELM is based on the idea that humans want to develop correct attitudes and beliefs because they are likely to prove more functional.

Biology is more about individual behavior and tells us that people are essentially same. Our individual behavior is nothing but an act of a clever chimpanzee. Sociology explains our collective behavior. Emile Durkheim considered as founder of sociology, had the following observation “People integrated with society are relatively happier and less likely to commit suicide.”

Most caffeine is ingested in the form of coffee (71%), soft drinks including energy drinks (16%), and tea (12%). Approximately 80% of the world's population consumes a caffeine containing product every day. In experimental studies, the most common effects of caffeine are increased alertness, reduced fatigue, and improvements in measures of reaction time, vigilance, and tasks requiring a sustained response. At the ingredient level of coffee, caffeine content may be the same in all but value addition and element of experience makes us pay the price premium. A survey of Italian college students found that 85% of energy drink consumers had mixed these beverages with alcohol within the past month. Combining the stimulant effect of caffeine and the depressant effect of alcohol reduces the symptomatic lethargy associated with drunkenness, leading drinkers to underestimate their levels of intoxication. Energy drink consumption has been linked to a “toxic jock” identity, comprised of a pattern of risk-taking, self-identification as a “jock,” and endorsement of conventionally masculine norms, in college undergraduates of both genders. Weekly or daily energy drink consumption is strongly associated with alcohol dependence.

Gender has become performative then biological in the world. Redefinition, contestation, and assertion of gender identities are enacted wrongly in behavior associated with addictive substance consumptions. Study of alcohol consumption in a pub is able to reveal fluidity of gender construction and hegemonic (dominant view) masculinity they wish to portray. It is not considered normal for a man to be sitting alone in a café than for a woman in west. But it is great if you as a man regularly visit a pub. Prevailing attitude is “you are not a man if you cannot go out and enjoy yourself.” Man deserves to get a kind of reward for a week of hard work by visiting a pub.

Stigma of alcohol consumption in particular appears to be gender based being summed up “women love you when you drink but hate you when you are drunk.” Redefined masculinity seems to exhibit and exist in a pub, where you must gulp gallons of alcoholic beverages and still be able to show control. Women attempting to exhibit this behavior in a pub are exhibiting their performative gender than biological.

Men consider alcohol drinking as 'an act of friendship' and this functioned as a dominant way to communicate with, and support each other. This men dominant behavior can be harmful to health (excessive drinking) but also potential to be helpful socially. Alcohol is an important resource which men (and women) use to (re)construct a range of gendered identities. Masculine norms are socially constructed beliefs, values, and expectations of what it means to be a man and often dictate rules that men are expected to follow in order to demonstrate manliness. Salient masculine norms are winning, sexual prowess, emotional control, risk-taking, dominance, self-reliance, pursuit of status, physical aggression, work priority, controlling women and heterosexual orientation. Products capable of highlighting these norms through group consumption behavior are likely to be mimicked by the herd of these emerging adults of the society. Energy drinks by their association, endorsement and communication portray these gender defining norms to be emulated by others group members.

Need/Importance of The Study

Energy drink consumption is associated with the normative and performative functions. It is normative as part of growing up in the group. It may be performative as it may reflect the gender and social identity. Normative and performative functions of consumption are culture dependent as well, we wanted to evaluate these normative and performative functions association with energy drink consumption of students of Jaipur and contrast it with western studies.

Statement of The Problem

We observed that engineering students carry more often a single type of green bottle in their hands during the lunch break. So, we tried to evaluate this observation further by knowing the difference in these consumption patterns of the students of these streams.

Objectives

We wanted to evaluate correlations between the streams of education students are pursuing with their most preferred beverage. The objective of this study was not only to determine the relation between the preferences according to the stream of education but also to determine the reasons for this preference in the students of Jaipur.

Research Methodology

People consume caffeine for emotional, rational and social reasons. Innocence by association is what a caffeinated drink is doing when they say that 'Darr ke aagee Jeet hai.' This simple association with the fear of insecurities associated with peer pressure to look cool and

masculine is helped by consuming these caffeinated drinks. We observed that engineering students carry a single type of green bottle in their hands during their lunch break. So, we tried to evaluate this observation further by knowing the difference in this consumption pattern of engineering and management students. We wanted to evaluate correlations between the stream they are pursuing and their most preferred cold drink brand. The objective of this study was not only to determine the relation between the preferences according to the stream of education but also to determine the reasons of this preference in the students of Jaipur.

Hypothesis

Respondents were 256 students all in the age group of 18-25, comprising of 154 engineering and 102 management students. They were surveyed about their most preferred beverage during the lunch break and reason for this preference through a questionnaire. This is hypothesized that energy drink consumption is associated with the normative and performative functions. It is normative as part of growing up in the group. It may be performative as it may reflect the gender and social identity. The statistics was compiled and evaluated using a SPSS data set analysis with a null and alternate hypothesis stating:

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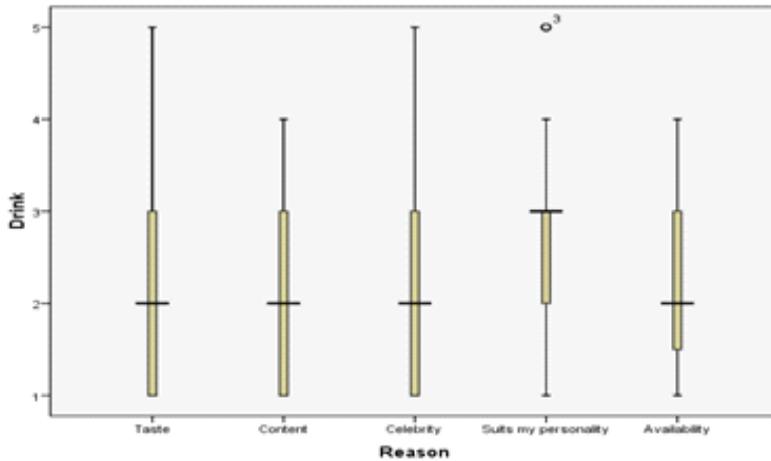
Findings, Results & Discussion

Our data being mostly ordinal it required parametric testing as an appropriate method of evaluating finding and result.

Appropriate Statistical Methods of Testing				
Type of Scale	Sample Problem	Measure of Central Tendency	Measure of Dispersion	Possible Type of Statistical Significance
Interval	Compare actual Vs. Hypothetical value Of attitude score.	Mean	Standard Deviation	t or z-test
Ordinal	Determine the Ordered preference For all brands in class.	Median	Percentile	Sign-test; other non parametric test
Nominal	Identify gender of, brand adopters	Mode	None	Chi square-test

Sources : adopted from S.S. Stevens & Sidney Siegel

Stated reason for choice of beverage is mostly taste.



NPar Test

Binomial Test				
	Category N	Observed Prop.	Test Prop.	Asymp. Sig. (2-tailed)
Education	Group 1 Engineering	154	.60	.50 .001 ^a
	Group 2 Engineering	102	.40	
	Total	256	1.00	

a, Based on Z' Approximation

Two Sample Kolmogorov Smirnov

Test Statistics^a

	Drink
Most Extreme Differences	Absolute .217
	Positive .000
	Negative -.217
Kolmogorov-Smirnov Z	1.702
Asymp. Sig. (2-tailed)	.006

a. Grouping Variable: Education

Nonparametric Correlations

Correlations

			Education	Drink	Reason
Kendall's tau_b	Education	Correlation Coefficient	1.000	-.205**	.179**
		Sig. (2-tailed)	.	.000	.002
		N	256	256	256
Drink		Correlation Coefficient	-.205**	1.000	.073
		Sig. (2-tailed)	.000	.	.169
		N	256	256	256
Reason		Correlation Coefficient	.179**	.073	1.000
		Sig. (2-tailed)	.002	.169	.
		N	256	256	256
Spearman's rho	Education	Correlation Coefficient	1.000	-.224**	.195**
		Sig. (2-tailed)	.	.000	.002
		N	256	256	256
Drink		Correlation Coefficient	-.224**	1.000	.087
		Sig. (2-tailed)	.000	.	.164
		N	256	256	256
Reason		Correlation Coefficient	.195**	.087	1.000
		Sig. (2-tailed)	.002	.164	.
		N	256	256	256

** . Correlation is significant at the 0.01 level (2-tailed).

ANOVA Choice of Drink					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	13.802	1	13.802	10.382	.001
Within Groups	337.694	254	1.330		
Total	351.496	255			

Correlations

			Education	Drink	Reason	Gender
Kendall's tau_b	Education	Correlation Coefficient	1.000	-.205**	.179**	.495**
		Sig. (2-tailed)	.	.000	.002	.000
		N	256	256	256	256
	Drink	Correlation Coefficient	-.205**	1.000	.073	-.110
		Sig. (2-tailed)	.000	.	.169	.055
		N	256	256	256	256
	Reason	Correlation Coefficient	.179**	.073	1.000	.197**
		Sig. (2-tailed)	.002	.169	.	.001
		N	256	256	256	256
	Gender	Correlation Coefficient	.495**	-.110	.197**	1.000
		Sig. (2-tailed)	.000	.055	.001	.
		N	256	256	256	256
Spearman's rho	Education	Correlation Coefficient	1.000	-.224**	.195**	.495**
		Sig. (2-tailed)	.	.000	.002	.000
		N	256	256	256	256
	Drink	Correlation Coefficient	-.224**	1.000	.087	-.120
		Sig. (2-tailed)	.000	.	.164	.055
		N	256	256	256	256
	Reason	Correlation Coefficient	.195**	.087	1.000	.215**
		Sig. (2-tailed)	.002	.164	.	.001
		N	256	256	256	256
	Gender	Correlation Coefficient	.495**	-.120	.215**	1.000
		Sig. (2-tailed)	.000	.055	.001	.
		N	256	256	256	256

** . Correlation is significant at the 0.01 level (2-tailed).

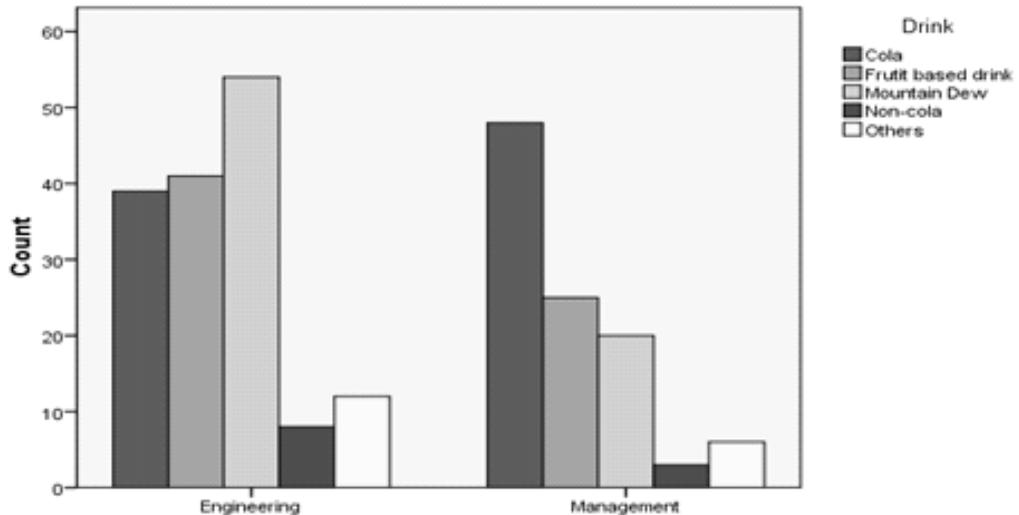
Since, biserial correlation coefficient cannot be calculated directly from SPSS, as it is used when one of the variables is a discrete dichotomy (stream of education).

Pearson Correlations calculation for calculating point-biserial correlation

		Education	Drink
Education	Pearson Correlation	1	-.198**
	Sig. (2-tailed)	.001	
	N	256	256
Drink	Pearson Correlation	-.198**	1
	Sig. (2-tailed)		.001
	N	256	256

** . Correlation is significant at the 0.01 level (2-tailed).

R^2 is an extremely useful measure of substantive importance of an effect. However it is difficult to use R^2 to infer causal relationship. Correlation coefficient is -0.198 , $R^2 = (-0.198)^2 = 0.392$. Hence we can conclude that education accounts for 39.2% of the variability in the choice of the drink. This choice is in favor of Mountain Dew for engineering students.



Symbolism of beverage consumption functions to express societal issues of growth and development, gender and sexuality, and level of social status. Symbolism and social expression is called the synchronic beverage structure. There is a statistically significant difference in the consumption pattern of engineering and management students. Null hypothesis was rejected, as there was statistically significant difference observed in the cold drink consumption and education. This difference between engineering students and management students was confirmed in 'F' test, significant at < 0.001 by regression ANOVA.

Conclusions

Problem behavior theory is able to explain the health compromising behavior as normative social functions for emerging adult life. Gender is now no more biological but a way of doing things. Social class and professions dictate our consumption. We redefine and portray identities associated with addictive substance consumptions. Consumption of tea, coffee, tobacco and smoking tends to be higher in students studying late in night in professional courses. Substance addiction in the students of professional colleges of India is increasing. Frequency of energy drink consumption was positively associated with marijuana use, sexual risk-taking, fighting, seatbelt omission, and taking risks on a dare for the sample as a whole, and associated with smoking, drinking, alcohol problems, and illicit prescription drug use for white students but not for black students. Sometimes this is associated with utility (examination), hedonic and some

time to look masculine or to define gender that is performative than biological. We equate Mountain- Dew consumption with this substance addiction and a way to express their masculinity and still appear in control just like alcohol consumption of the west.

Scope for Further Research

Most adults are capable of handling caffeine intake but children with less body mass and developing brain are likely to have exaggerated effect of caffeine. With caffeine being added to more and more products, impact of advertising of these caffeinated products need to be evaluated with addition of caffeine to be more strictly regulated. The American Academy of Pediatrics recommended in 2011 that children and teenagers steer clear of caffeinated drinks because caffeine interferes with sleep and can increase anxiety along with the heart rate. Alcohol consumption preferences are gender related due to social and biological reasons. More and more people use energy drinks to infuse them in a cocktail. Alcohol consumption preference is considered social as cocktails are sweeter, cuter, and fruitier than a alcoholic drink. Lesser it looks and tastes like hard liquor and more it looks and tastes like party food, friendship, freedom and fun more females are likely to consume it. Female ability to breakdown alcohol is less as for the same body mass they contain only 2/3 dehydrogenase, the enzyme that breaks down alcohol.

Energy drink manufacturers are hiring lobbyist firms to influence policy makers on energy drinks containing caffeine. FDA on the other hand is closely looking to regulate caffeine content in energy drinks. A 2011 review of the literature on caffeine showed that it is nearly impossible to pinpoint consistent disease factors that link large doses of caffeine to arrhythmia in the general population.

Between 2004 and October 2012 in US, 17 people died and more than 100 had chest pains, cardiac arrest and other health problems after consuming 5-Hour Energy, Monster and Rockstar beverages, according to FDA data. The FDA noted that the reports do not mean the drinks necessarily caused those ailments.

Consequences of our inability to control caffeine content in the beverages in the guise of energy drinks will result in many lethal social, legal and health related consequences and our inability to control their association with normative and performative functions within the society.

Keywords:

Caffeine, Engineering and management students, Gender, Masculinity, Normative, Performative

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References

1. Nishikant Bohra, Professor, Regenesys Business School, Johannesburg, South Africa.
2. Smita Kaushik, Assistant Professor, Jagannath University, Jaipur.
3. <http://science.nationalgeographic.com/science/health-and-human-body/human-body/caffeine-buzz.html>

4. Pronsky ZM. In: Food Medication Interactions. 10. Crowe JP, editor. Pottstown; 1997. p. 274.
5. William H Ukers (2011), All about Coffee in Adamsmedia, Avon, Massachusetts
6. Malinauskas B, Aeby VG, Overton RF, Carpenter-Aeby T, Barber-Heidal K. A survey of energy drink consumption patterns among college students. *Nutr J.* 2007;6:35–41.
7. Fredholm, Bertil B., et al. "International Union of Pharmacology. XXV. Nomenclature and classification of adenosine receptors." *Pharmacological reviews* 53.4 (2001): 527-552.
8. Smith A. (2002). Effects of caffeine on human behaviour. *Food Chem. Toxicol.* 40, 1243–1255.
9. Sheldon, K.M., & Gunz, A. (2009). Psychological needs as basic motives, not just experiential requirements. *Journal of Personality*, 77 (October), 1467- 92.
10. Solomon, M.R. (1983). The role of products as social stimuli: A symbolic interactionism perspective. *Journal of Consumer Research*, 10 (December), 319- 29.
11. Shiv, B. & Fedorikhin, A. (1999). Heart and mind in conflict: The interplay of affect and cognition in consumer decision making. *Journal of Consumer Research*, 26 (December), 278-92.
12. Aggarwal, P. (2004). The effects of brand relationship norms on consumer attitudes and behavior. *Journal of Consumer Research*, 31(June), 87-101.
13. Fournier, S. (1998). Consumers and their brands: Developing relationship theory in consumer research. *Journal of Consumer Research*, 24(March), 343-73.
14. Baumeister, R. F, & Leary, M.R., (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117 (May), 497-529.
15. Maner, J.K., DeWall, C.N., Baumeister, R.F., & Schaller, M.(2007). Does social exclusion motivate interpersonal reconnection? Resolving the 'porcupine problem.' *Journal of Personality and Social Psychology*, 92 (Januarys), 42 -55
16. Coffee Culture: Local Experiences, Global Connections by Catherine M Tucker Page:22
17. Mintel Oxygen 2009
18. Martin, P. Y., Laing, J., Martin, R., & Mitchell, M. (2005). The effects of caffeine on arousal and attitude change: Evidence for caffeine increasing the systematic processing of persuasive messages. *Journal of Applied Social Psychology*, 35, 160–182
19. Petty, R. E., Cacioppo, J. T., Strathman, A. J., & Priester, J. R. (1994). To think or not to think: Exploring two routes to persuasion. In S. Shavitt & T. C. Brock (Eds.), *Persuasion: Psychological insights and perspectives* (pp. 113– 147). Boston: Allyn & Bacon.
20. Heckman, M.A., Weil J., Gonzalez de, Mejia, E., Caffeine in Foods : A comprehensive review in consumption functionality, safety, and regulatory matters, *J. Food Science*, 2010, 75,R77-R87.
21. Ogawa N., Veiki H., Clinical importance of caffeine dependence and abuse, *Psychiatry Clinics Neuroscience*. 2007,61, 263-268

22. Smith A (2002), Effects of caffeine on human behavior, *Food Chem. Toxicol.* 40:1243–1255
23. Oteri A, Salvo F, Caputi AP, Calapai G. Intake of energy drinks in association with alcoholic beverages in a cohort of students of the school of Medicine of the University of Messina. *Alcohol Clin Exp Res.* 2007;31:1677–1680.
24. Arria AM, Caldeira KM, Kasperski SJ, Vincent KB, Griffiths RR, O'Grady KE, Energy drink consumption and increased risk for alcohol dependence, *Alcohol Clin Exp Res.* 2011 Feb;35(2):365-75.
25. Coffee: Emerging Health Effects and Disease Prevention by Yi Feng Chu in Wiley (2012)
26. Antonia C. Lyons, Masculinities, Femininities, Behaviour and Health, *Social and Personality Psychology Compass*, Volume 3, Issue 4, pages 394–412, July 2009.
27. Mahalik JR, Locke BD, Ludlow LH, Diemer MA, Scott RPJ, Gottfried M, et al. Development of the Conformity to Masculine Norms Inventory. *Psychology of Men & Masculinity.* 2003;4(1):3–25.
28. Levy et al. (2012), *Marketing management & Marketing Research: Sidney J. Levy (2012): Journal of Marketing Management* 28:1-2, 8-13
29. Donovan JE, Jessor R. Structure of problem behavior in adolescence and young adulthood. *J Consult Clin Psychol.* 1985;53:890–904.
30. Kathleen E. Miller, Energy Drinks, Race, and Problem Behaviors among College Students, *J Adolesc Health.* 2008 November; 43(5): 490–497.
31. http://www.washingtonpost.com/lifestyle/kidspost/caffeine-in-snack-foods-causes-concern/2013/06/07/3b01d174-cf88-11e2-9f1a-1a7cdee20287_story.vhtml
32. Anneli Rufus(2013), Gender Specific Drinking: A thing of the past?: http://www.huffingtonpost.com/anneli-rufus/genderspecific-drinking-a_b_1672174.html
33. Daniel J. Pelchovitz & Jeffrey J. Goldberger, Caffeine and Cardiac Arrhythmias: A Review of the Evidence, *The American Journal of Medicine*, Volume 124, Issue 4, April 2011, Pages 284–289
34. http://www.washingtonpost.com/business/capitalbusiness/monster-energy-red-bull-turn-to-lobbyists-for-help/2013/01/25/c5bf09b0-65a4-11e2-85f5-a8a9228e55e7_story.html

Teaching Strategies for Slow Learners

Dr. Vishakha Chauhan

Abstract

“Late bloomer” is another way of saying “slow learner”

- Ben Fountain.

Slow learners are not non- learners! There are slow learner, Shy learner, and learners who are simply not motivated. Shy learners are not necessarily slow; their problem often lies in speaking out loud and a lack of confidence. Students who are not motivated are simply not interested and need to be engaged in order to participate fully in the class. Finally, slow learners are students who are not able to follow the current pace, i.e. they don't learn as fast as the rest of the class. It simply means that learning a second language is harder for these students.

Every school or college faces a very big problem in dealing with these slow learners. It is a challenging task for the teachers to tackle slow learners and to make them learn the academic subjects. These students do not fall into the category of special education; they do well outside the classroom, and show no evidence of having a medical problem. If the teachers find time to think about these students, they definitely get some solution into their hand. There are evidences in history that many slow learners became doctors, writers, teachers, engineers in their life. By following some methods, any teacher, who is teaching them, not only can improve their learning capability but also can make them successful students.

The problem with slow learners, who cannot remember things, is that they are not given the kind of tools that work for them. These students, who have problem in understanding things, they can be suggested to keep a word book, for example, and they write in it every day. They must be given lists of verbs, charts with verb tenses. It is possible that they need to “see” to learn. If the class is divided into groups or teams, slow learner should be paired with a mate who can guide him/ her. Both the teacher and the slow learner must understand one thing : the problem is not that the student cannot learn, but rather that he learns at a different pace. So teachers should always encourage respect towards these, who simply take longer but they do get it in the end, which means every small achievement should be reinforced by motivating the learner in various ways.

Some extra classes can do wonders for slow learners. Under the pressure of competing with the rest of the class, they lose their morale. But once they are taught in extra sessions, they start seeing things fall into place. It may be necessary to repeat instructions to the slow learners till they feel comfortable with the content. Teachers may need to give them instructions in writing.

They may need to spell it out, repeat and copy it down. But they must be patient with the slow learners. Because these students cannot learn well under pressure or in haste. Teachers need more time to figure things out. There are some teaching strategies for students who need extra attention:

1. Scaffolding: The term “scaffolding” refers to a process in which teachers demonstrate how to solve a problem. Psychologist and instructional designers Jerome Burner first used the term “scaffolding” in this context in the 1960s. The theory is that when students are given the support they need while learning something new. Burner recommends positive interaction and three modes of representation during teaching: actions, images, and language.

2. Graphic Organization: A graphic organizer is a visual display that demonstrates relationships between facts, concepts or ideas. It guides learners' thinking as they fill in and built upon a visual map or diagram. Graphic organizers are some of the most effective visual learning strategies for students and are applied across the curriculum to enhance learning and understanding of subject matters content and to focus within a broad topic, such as a novel or article. Webs, concept maps, mind maps and plots are some of the types of graphic organizers used in visual learning to enhance thinking skills and improve academic performance on written papers, tests and assignments.

3. Differentiated Instruction: In any general classroom, there are students with various learning styles. Some learn best by reading and writing. Others prefer to watch a video, listen to a recording. Differentiated instruction is a way of teaching that matches a variety of learning styles. Carol Ann Tomlinson, an educator who has done some of the most innovative work in this area, says there are four areas where teachers can differentiate instructions:

- Content: Figuring out what a student needs to learn and which resources are helpful for him.
- Process: Activities that helps students make sense of what they learn.
- Projects: A way for students to “show what they know”
- Learning Environment: How he feels in the classroom and how the class works together.

4. Multisensory Instruction: Multisensory techniques are frequently used for students with learning differences. Studies have shown that for students with difficulties in learning to read, a multisensory teaching methods is the most effective teaching method. Multisensory teaching techniques and strategies stimulate learning by engaging students on multiple levels. They encourage students to use some or all their senses to:

- gather information about a task.
- link information to ideas they already know and understand.
- learn problem solving tasks.
- understand relationships between concepts.
- store information for later recall.

Using a multisensory teaching technique means helping a child to learn through more than one sense. Slow learners have difficulties in one or more areas of reading, spelling, writing, listening comprehension and expressive language. Multisensory techniques enable them to use their personal areas of strength to help them learn.

5. Mnemonics: A mnemonic is something which we can use to remember things much easier. As is often the case, it could be a phrase, a short song, or something that is quite easily remembered. Students use special phrases to help them remember information and spellings: for example: For the word ARITHMETIC: A Rat In The House May Eat The Ice Cream.

Teachers know that students walk into the classrooms with a wide range of abilities. But teachers must try to find ways to meet the needs of all students, including those with learning and attention issues.

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References

1. Hughes, J. *The Slow Learner in Your*. Cengage Learning Australia. 1973. Print
2. Jenson, A.R. *Bias in Mental Testing*. Methuen and Co. Ltd, London. 1980. Print
3. Passow, H. *Opening Opportunities for Disadvantaged Learners*. Teacher's College Press. 1972. Print.
4. Reddy and Ramar. *Slow Learners Their Psychology And Instruction*. Discovery Publishing House, New Delhi. 2006. Print.
5. Singh, V.P. *Education of the Slow Learners*. New Delhi, India: Sarup. 2004. Print.

A Study of Role of Working Capital Management in Sambhar Salts Ltd.

*Dr. Anju lata Joshi

Abstract

Working is an intergral part of overall financial management and has a bearing on the objective of maximizing of the owner's wealth. To a financial manager, the sphere of working capital throws a welcome challenge and opportunity .

Salt is commonly used throughout the world and is perhaps the best – know commodity to the entire human race since man started eating salt and it is one of the important articles of human consumption and industries use. The present study attempts to examine of working capital management of salt industry in reference of sambhar salt Ltd.

Keywords : *Rato Analisis , Fund Flow Analisis , Net Working Capital, Cost Volume Profit Analysis, Trend Analysis*

Introduction

A business with an adequate level of working capital has more options available to it, and can make its own choice as to when working capital will be used and how it will be used on the other hand ? if a firm is short of working capital , it may be forced to limit its business operations , extension of credit to customers and the amount that its invests in inventory .

Meaning of Working Capital Management

Working capital management has been looked upon as the driving seat of a financial manger moves and actions in the operating fields of production procurement , marking and services are ultimately interpreted and viewed in financial terms ; hence, the pre- occupation with the financial implication of the management of working capital and its segments .

Working capital management is concerned with obtaining economic fund using them in a profitable manner and controlling them to maintain economy and profitability . Working Capital Management establishes a proper balance among risk ,liquidity and profitability .

Concert of Working Capital

A study of working capital is of a major importance to internal and external analysts because of its close relationship with the current day to day operations of a business. There are two concepts of working capital “Gross Concept” and “Net Concept” Gross concept is firm's investment in current assents “Gross working capital” It is also known as circulating capital or current capital concept working capital .

Net concept working capital is defined as the excess of current assets over current liabilities and provisions. In other words, it is “net current assets or net working capital”.

A positive net working capital will arise when current assets exceed current liabilities. A negative working capital occur when current liabilities are in excess of current assets .The two concepts of working capital gross and net are not exclusive rather they have equal significance from management point of view .

It may be emphasized that both gross and net concepts of working capital are equally important for the efficient management of working capital .

Both the concepts of working capital have their own uses. If the objective is to measure the size and extent to which current assets are being used to optimize Productivity of the concern , gross concept is useful , whereas in evaluating the liquidity position of an undertaking . 'Net concept' becomes pertinent and preferable .

Circulation System of Working Capital

The current asserts and current liability flow round in business like an electric current. However, the working capital plays the same role in the business as the rate of heart beat in the human body , just as the heart gets blood and circulates the same in the body , the working capital funds are generated and then circulated in the business .

There is always a circulation system involved in the conversion of sales into cash .

Cash –Creditors for Goods – Material—Wages—Overhead Expenses—Finished Goods – Sales – Debtors for Goods–Cash....

Types of Working Capital

The working capital can be conveniently classified into permanent or regular working capital and variable can further be sub divided in the seasonal and Special working capital .

1. Fixed, Regular or Parmanent working capital
2. Negative working capital
3. Cash working capital
4. Net working capital
5. Variable seasonal temporary working capital
6. Balance sheet working capital
7. Gross working capital

Working Capital Management of SAMBHAR SALTS LTD

Salt is commonly used throughout the world and is perhaps the best-know commodity to the entire human race since man started eating salt and it is one of the important articles of human consumption and industrial use . Salt is a mineral of universal distribution. Nature seems to have

been generous in the supply of this unique mineral . It is available in plenty in sea, springs, lakes, mines and spread out on swamps in the varied parts of the World .

Hindustan Salts Limited [HST] was incorporated on 12th of April,1958 as a company fully owned by the Government of India to take over the salt sources at sambhar, Did wana and kharaghoda earlier managed by the salt Department, Government of India. Sambhar salts Limited [SST] was incorporated on 30.09.1964 as a subsidiary company of Hindustan Salts Limited by transferring the salt sources at sambhar subsequently, The sambhar lake salt sources were transferred to a newly formed subsidiary, company , sambhar salts limited in terms of V.K.krishnamachari Award. The equity of sambhar salts ltd. In owened 60% Government of India through Hindustan Salts Limited and 40% by government of Rajasthan in terms of V.T.Krishnamachari Award. Sambhar salts Limited has been made a subsidiary company which is having over 90 sq. miles of production area at sambhar and nawa . SSL has recently diversified the business o many courts and considerable infrastructure has been added to produce various varieties of high quality salt. Therefore depending on the order, we can process and send any type and quality a of salt.

Literature Review

1. Joshi and sharma (2002) analyzed the the trend of working capitals and its management of salt industry concerned with SSL. The study was bound to the time period of year 1994-1999. researcher observed and declared that the profitability and liquidity of the company suffered due to the inefficient management of working capital. researcher should suggested to improve the condition of current liabilities and current assets favourable to the company. The current study is an attempt to check out the present position of SSL. in relation to working capital management after a gape of approx. 15 years, Researcher wants to check whether the company is following same pattern towards working capital management or has improve itself with the help of suggestions and recommendations given by Sharma and Joshi in year 2012.ration
2. Agha Hina (2014) found that creditors' turnover ratio, and debtors turnover ratio inventory turnover ratio have a positive significant impact on return on assets and there is no significant impact of current ratio on return on assets.
3. Haresh Barot (2012) expressed in his study that a negative relationship between accounts receivable and corporate profitable and a positive relationship between accounts payable and profitability.He concludes that firms should properly manage their cash, accounts receivables , accounts payables, and inventories in proper way, will ultimately increase profitability of the firm.

Research Methodology

The study is based on secondary data. The required information is collected from various past studies and other sources like magazines , newspaper , reports and websites which are qualified as reliable.

Objective of Study

1. To study about various techniques of Working Capital Management for the profitability, liquidity, solvency of sambhar salt Ltd.
2. To aware readers and public about the various techniques of working capital management.

Techniques of Working Capital Analisyas

“A study of the causes of changes that takes place in the working capital balances from time to time is necessary” . This involves the basic approach to working capital analysis changes in working capital balance , can be measured in rupee amounts and also in percentages by comparing current assets , current liabilities and working capital over a given period .

There are so many techniques to analyse the working capital in an enterprise . Technique of working capital analysis can help to understand the causes of variation . There may be many reasons for which the analysis of working capital management is very essential .

1. Ratio Analisyis

The Ratio analysis is a powerful tool of financial analysis . A ratio is defined as the relationship between two or more things . The relationship of one item to another expressed in a simple mathematical form is known as the ratio . A ratio is used as a benchmark for evaluating the financial position and performance of a firm .

2 Net Working Capital

The difference between current assents and current liabilities . The concept of net working capital enables a firm to determine how much amount is left for operational requirements .

3 Fund-Flow Statement Analysis

This is the most useful statement, which indicates changes in working capital . It is a financial operational statement , which reveals the methods by which a business financed and the used to which it has applied its funds over a period of time . “The funds statement is a statement summarising the significant financial change which have accrued between the beginning and the end of a company's accounting period .The analysis is an effective management tool to study how funds have been procured for the business and how they have been employed.

4 Cost-vollume Profit Analisyis

The object of the price- volume study is an attempt to forecast the elasticity of demand for each of the main products of a company so as to determine size. A break-even analysis is basically an analytical test for the study of the relationship between operating leverage and established relationship between costs and revenues . It is a device for determining the point at which sales will cover the total costs.

5 Working Capital Budget

The working capital budget is an important phase of an overall financial budgeting. The budget discloses all the financial requirements of an enterprise including funds for the fixed assets repayment of long term loans and similar items. The working capital budget also measures permanent and variable working capital requirements and assure that they are duly provided for.

6 Trend Analysis

Trend analysis makes it easy to understand the changes in an item or a group of items over a period of time and to draw conclusions regarding the change in data. This method of analysis indicates the direction in which a concern is going and on this basis forecast for future can be made.

7 Other Techniques

Several other techniques like statistical cash flow analysis, break-even analysis are also some times used for financial analysis.

Conclusion

The research study concluded that when Sambhar Salts Ltd does not have enough working capital to cover its obligation, financial insolvency can result and lead to legal trouble, liquidation of assets and potential bankruptcy. Thus, it is vital to all business to have adequate management of working capital.

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References

1. Barot Haresh (2012), Working Capital Management and Profitability: Evidence from India- An Empirical Study, GFJMR, Vol.5,1-9
2. Mahum Bukhari and Mohammad Shaukat Malik (2014), The Working Capital Management on Corporate Performance: A study of firms in Cement, Chemical and Engineering Sector of Pakistan, Pakistan Journal of Commerce and Social Sciences, 2014, vol.8(1),134-148
3. Hina Agha (2014), Impact of working capital management on Profitability, European Scientific Journal, vol.10(1), 374-381.
4. Biswajit Bose (2013), The impact of working capital management practices on firms profitability, International Journal of Applied Research Studies, Vol.2 (6), 1-16

Direct Tax Policy in India (with Special Reference to Assessment of Companies)

Dr. Arun Mehra

Abstract

India offers a well-structured tax system for its population. Taxes are the largest source of income for the government. This money is deployed for various purposes and projects for the development of the nation.

Taxes are determined by the Central and State Governments along with local authorities like municipal corporations. The government cannot impose any tax unless it is passed as a law.

The entire system is clearly demarcated with specific roles for the central and state government. The Central Government of India levies taxes such as customs duty, income tax, service tax, and central excise duty.

The tax structure in India empowers the state governments to levy income tax on agricultural income, professional tax, value added tax (VAT), state excise duty, land revenue and stamp duty. The local bodies are allowed to collect octroi, property tax, and other taxes on various services like drainage and water supply.

Introduction

Direct taxes are levied on individuals and corporate entities and cannot be transferred to others. These include income tax, wealth tax, and gift tax.

As per the Income Tax (IT) Act, 1961 every assessee whose total income exceeds the maximum exempt limit is liable to pay this tax. The tax structure and rates are annually prescribed by the Union Budget. This tax is imposed during each assessment year, which commences on 1st April and ends on 31st March. The total income is calculated from various heads such as business and profession, house property, salaries, capital gains, and other sources. The assesses are classified as individuals, Hindu Undivided Family (HUF), association of persons (AOP), body of individuals (BOI), company, firm, local authority, and artificial judiciary not falling in any other category.

It is a matter of general belief that taxes on income and wealth are of recent origin but there is enough evidence to show that taxes on income in some form or the other were levied even in primitive and ancient communities. The origin of the word "Tax" is from "Taxation" which means an estimate. These were levied either on the sale and purchase of merchandise or livestock and were collected in a haphazard manner from time to time. Nearly 2000 years ago, there went out a decree from Caesar Augustus that all the world should be taxed. In Greece, Germany and Roman Empires, taxes were also levied sometime on the basis of turnover and sometimes on occupations. For many centuries, revenue from taxes went to the Monarch. In Northern England,

taxes were levied on land and on moveable property such as the Saladin title in 1188. Later on, these were supplemented by introduction of poll taxes, and indirect taxes known as "Ancient Customs" which were duties on wool, leather and hides. These levies and taxes in various forms and on various commodities and professions were imposed to meet the needs of the Governments to meet their military and civil expenditure and not only to ensure safety to the subjects but also to meet the common needs of the citizens like maintenance of roads, administration of justice and such other functions of the State.

In India, the system of direct taxation as it is known today, has been in force in one form or another even from ancient times. There are references both in Manu Smriti and Arthashastra to a variety of tax measures. Manu, the ancient sage and law-giver stated that the king could levy taxes, according to Sastras. The wise sage advised that taxes should be related to the income and expenditure of the subject. He, however, cautioned the king against excessive taxation and stated that both extremes should be avoided namely either complete absence of taxes or exorbitant taxation. According to him, the king should arrange the collection of taxes in such a manner that the subjects did not feel the pinch of paying taxes. He laid down that traders and artisans should pay 1/5th of their profits in silver and gold, while the agriculturists were to pay 1/6th, 1/8th and 1/10th of their produce depending upon their circumstances. The detailed analysis given by Manu on the subject clearly shows the existence of a well-planned taxation system, even in ancient times. Not only this, taxes were also levied on various classes of people like actors, dancers, singers and even dancing girls. Taxes were paid in the shape of gold-coins, cattle, grains, raw-materials and also by rendering personal service.

Discussion

The learned author K.B.Sarkar commends the system of taxation in ancient India in his book "Public Finance in Ancient India", (1978 Edition) as follows:-

"Most of the taxes of Ancient India were highly productive. The admixture of direct taxes with indirect Taxes secured elasticity in the tax system, although more emphasis was laid on direct tax. The tax-structure was a broad based one and covered most people within its fold. The taxes were varied and the large variety of taxes reflected the life of a large and composit population".

However, it is Kautilya's Arthashastra, which deals with the system of taxation in a real elaborate and planned manner. This well known treatise on state crafts written sometime in 300 B.C., when the Mauryan Empire was at its glorious upwards move, is truly amazing, for its deep study of the civilisation of that time and the suggestions given which should guide a king in running the State in a most efficient and fruitful manner. A major portion of Arthashastra is devoted by Kautilya to financial matters including financial administration. According to famous statesman, the Mauryan system, so far as it applied to agriculture, was a sort of state landlordism and the collection of land revenue formed an important source of revenue to the State. The State not only collected a part of the agricultural produce which was normally one sixth but also levied water rates, octroi duties, tolls and customs duties. Taxes were also collected on forest produce as well as from mining of metals etc. Salt tax was an important source of revenue and it was collected at the place of its extraction.

Kautilya described in detail, the trade and commerce carried on with foreign countries and the active interest of the Mauryan Empire to promote such trade. Goods were imported from China, Ceylon and other countries and levy known as a vartanam was collected on all foreign commodities imported in the country. There was another levy called Dvarodaya which was paid by the concerned businessman for the import of foreign goods. In addition, ferry fees of all kinds were levied to augment the tax collection.

Collection of Income-tax was well organised and it constituted a major part of the revenue of the State. A big portion was collected in the form of income-tax from dancers, musicians, actors and dancing girls, etc. This taxation was not progressive but proportional to the fluctuating income. An excess Profits Tax was also collected. General Sales-tax was also levied on sales and the sale and the purchase of buildings was also subject to tax. Even gambling operations were centralised and tax was collected on these operations. A tax called yatravetana was levied on pilgrims. Though revenues were collected from all possible sources, the underlying philosophy was not to exploit or over-tax people but to provide them as well as to the State and the King, immunity from external and internal danger. The revenues collected in this manner were spent on social services such as laying of roads, setting up of educational institutions, setting up of new villages and such other activities beneficial to the community.

The reason why Kautilya gave so much importance to public finance and the taxation system in the Arthashastra is not far to seek. According to him, the power of the government depended upon the strength of its treasury. He states – "From the treasury, comes the power of the government, and the Earth whose ornament is the treasury, is acquired by means of the Treasury and Army". However, he regarded revenue and taxes as the earning of the sovereign for the services which were to be rendered by him to the people and to afford them protection and to maintain law and order. Kautilya emphasised that the King was only a trustee of the land and his duty was to protect it and to make it more and more productive so that land revenue could be collected as a principal source of income for the State. According to him, tax was not a compulsory contribution to be made by the subject to the State but the relationship was based on Dharma and it was the King's sacred duty to protect its citizens in view of the tax collected and if the King failed in his duty, the subject had a right to stop paying taxes, and even to demand refund of the taxes paid.

Kautilya has also described in great detail the system of tax administration in the Mauryan Empire. It is remarkable that the present day tax system is in many ways similar to the system of taxation in vogue about 2300 years ago. According to the Arthashastra, each tax was specific and there was no scope for arbitrariness. Precision determined the schedule of each payment, and its time, manner and quantity being all pre-determined. The land revenue was fixed at 1/6 share of the produce and import and export duties were determined on advalorem basis. The import duties on foreign goods were roughly 20 per cent of their value. Similarly, tolls, road cess, ferry charges and other levies were all fixed. Kautilya's concept of taxation is more or less akin to the modern system of taxation. His over all emphasis was on equity and justice in taxation. The

affluent had to pay higher taxes as compared to the not so fortunate. People who were suffering from diseases or were minor and students were exempted from tax or given suitable remissions. The revenue collectors maintained up-to-date records of collection and exemptions. The total revenue of the State was collected from a large number of sources as enumerated above. There were also other sources like profits from Stand land (Sita) religious taxes (Bali) and taxes paid in cash (Kara). Vanikpath was the income from roads and traffic paid as tolls.

He placed land revenues and taxes on commerce under the head of tax revenues. These were fixed taxes and included half yearly taxes like Bhadra, Padika, and Vasantika. Custom duties and duties on sales, taxes on trade and professions and direct taxes comprised the taxes on commerce. The non-tax revenues consisted of produce of sown lands, profits accruing from the manufacture of oil, sugarcane and beverage by the State, and other transactions carried on by the State. Commodities utilised on marriage occasions, the articles needed for sacrificial ceremonies and special kinds of gifts were exempted from taxation. All kinds of liquor were subject to a toll of 5 percent. Tax evaders and other offenders were fined to the tune of 600 panas.

Kautilya also laid down that during war or emergencies like famine or floods, etc. the taxation system should be made more stringent and the king could also raise war loans. The land revenue could be raised from 1/6th to 1/4th during the emergencies. The people engaged in commerce were to pay big donations to war efforts.

Taking an overall view, it can be said without fear of contradiction that Kautilya's Arthashastra was the first authoritative text on public finance, administration and the fiscal laws in this country. His concept of tax revenue and the on-tax revenue was a unique contribution in the field of tax administration. It was he, who gave the tax revenues its due importance in the running of the State and its far-reaching contribution to the prosperity and stability of the Empire. It is truly an unique treatise. It lays down in precise terms the art of state craft including economic and financial administration.

The Government of India is emphasising, inter alia, enhanced fiscal transparency to improve budgetary management, which the impending passage of the Fiscal Responsibility and Budget Management Act will further reinforce. In this regard, the Government is convinced that rationalising and simplifying direct tax laws and redesigning procedures to bring them at par with practices of other dynamic economies is sine qua non. Accordingly, the Task Force was assigned the following Terms of Reference: (i) Rationalisation and simplification of the direct taxes with a view to minimising exemptions, removing anomalies and improving equity; (ii) Improvement in tax-payer services so as to reduce compliance cost, impart transparency and facilitate voluntary compliance; (iii) Redesigning procedures for strengthening enforcement so as to improve compliance of direct tax laws; and (iv) Any other matter related to the above points. 2.2 The Task Force was intended as the forum to deliberate upon and correct many of the existing anomalies in the Indian direct tax system. Towards fulfilling this mandate, an attempt has been made to outline steps required for initiating and expediting a requisite change in the fiscal paradigm of the country by way of a process transformation on the direct tax side. The Task

Force deliberated on ways to reduce costs of tax administration, examined best tax practices in the world and extensively debated means of empowering Central Board of Direct Taxes (CBDT) to fulfill its function effectively. The approach of the Task Force has been influenced by the recognition that in the recent past, economies have increased their tax revenue-to-GDP ratio not by increasing tax rates but by simplifying tax structures, widening the tax base and improving tax administration. This Report contains the Task Force's considered judgement, melded from views culled from a diverse section of stakeholders. In conjunction with the reduction in the incidence of commodity taxes which are by definition regressive recommended by the Task Force on Indirect Taxes, the tax structure of the Indian fiscal system is sought to be made more progressive and to improve the functioning of markets. 2.2.3 Hitherto, tax policy, including exemptions, has been used in instances where other instruments at the disposal of the government are prima facie more suited to achieve stated objectives. There is a widespread perception that (frequent) changes in the tax code in the last decade or so have (unintentionally) been akin to substituting the erstwhile license raj with an exemptions raj. Confusion in assigning instruments to objectives result in an inefficient allocation of resources and often defeat stated aims. Clearly demarcated distinctions among objectives to be achieved and increasing transparency in the use of expenditure and tax instruments for these objectives can be expected to yield better results. Old-age social security and pensions, for instance, can be better provided through transfers funded by explicit social security taxes (as is done elsewhere). A definitive separation of the two broad classes of instruments will have the secondary effect of reducing ambiguities in justification of expenditures and also impart greater effectiveness to parliamentary oversight of the government's fiscal decisions. 2.

Results

There is a Minimum Alternate Tax (MAT) regime in India. Normally, a company is liable to pay tax on the income computed in accordance with the provisions of the Income-tax Act, 1961 (the Act). However, the profit and loss account of the company is prepared as per the provisions of the Companies Act. Historically, there were a large number of companies who had book profits as per their profit and loss account but were not paying any tax because income computed as per the provisions of the income tax act was either nil, negative or insignificant. In such a case, although the companies were showing book profits and declaring dividends to the shareholders, they were not paying any income tax. These companies are popularly known as Zero Tax companies. MAT was introduced to ensure that no taxpayer with substantial income can avoid having a tax liability through exclusions, deductions or incentives available under the provisions of the Income-tax Act.

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The rates of tax are an important determinant of the compliance behavior of taxpayers and hence revenue collection. These also affect the economic behavior of taxpayers i.e. choice between work and leisure and the choice between consumption and savings. The design of the tax rate schedule – progressivity – also signals the redistributive policy of government. Hence, the need to redesign a rate schedule which is equitable and efficient. The principle of equity requires that a person with a higher income should pay a relatively higher proportion of his income as tax. This could be achieved by providing for a high basic exemption limit and/or high marginal rates of tax. However, a high basic exemption limit has the effect of keeping a large number of taxpayers outside the tax net.

Conclusion

Therefore, it becomes necessary to provide for high marginal rates of tax with an objective of generating revenue. This, however, causes a relatively higher distortion in the economic behavior of taxpayers and therefore, promotes inefficiency. Under the Income tax Act, a taxpayer is allowed a deduction of a certain percentage of his salary income subject to a maximum amount as standard deduction in the computation of his salary income chargeable to income tax. This standard deduction is allowed in respect of expenditure incidental to the employment of the taxpayer.

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References

1. Charles E. McLure, Jr. "Taxation". Britannica. Retrieved 3 March 2015.
2. See for example 26 U.S.C. §7203 in the case of U.S. Federal taxes.
3. ^ Simkovic, Michael (2015). "The Knowledge Tax". University of Chicago Law Review.SSRN 2551567
4. ^ Jump up to:a b c d e f g h i Simkovic, Michael. "The Knowledge Tax". University of Chicago Law Review. SSRN 2551567
5. "Definition of Taxes (Note by the Chairman), 1996" (PDF). Retrieved 22 January 2013.
6. "Social Security Programs Throughout the World on the U.S. Social Security website for links to individual country program descriptions"
7. By contrast, some countries, such as New Zealand, finance the programs through other taxes.
8. See, e.g., India Social Security overview Archived 23 June 2011 at the Wayback Machine.
9. Jump up^ See, e.g., United States Federal Unemployment Tax Act.

Self Help Group of Women In Rural Sector

Meenakshi Mathur

Abstract

A self-help group (SHG) is a village-based financial intermediary committee usually composed of 10–20 local women. A SHG may be registered or unregistered. It typically comprises a group of micro entrepreneurs having homogeneous social and economic backgrounds, all voluntarily coming together to save regular small sums of money, mutually agreeing to contribute to a common fund and to meet their emergency needs on the basis of mutual help. They pool their resources to become financially stable, taking loans from the money collected by that group and by making everybody in that group self-employed. The group members use collective wisdom and peer pressure to ensure proper end-use of credit and timely repayment. This system eliminates the need for collateral and is closely related to that of solidarity lending, widely used by micro finance institutions.[1] To make the bookkeeping simple, flat interest rates are used for most loan calculations.

Introduction

A SHG is a small economically homogeneous affinity group of the rural poor who have volunteered to organize themselves into a

group for eradication of poverty of the members. The members of the group were coming together to save a small amount regularly, which are deposited in a common fund to meet members emergency needs and to provide collateral free loans decided by the group. SHGs have been recognized as a useful tool to help the poor and work as an alternative mechanism to meet the urgent credit needs of poor through thrift. SHG is a media for development of savings habit among the women. It enhances the equality of women, as participants, decision makers and beneficiaries in the democratic, economic, social and cultural spheres of life.

More than 60,000 women spread in 2 Blocks of various Districts belong to the 'Below poverty line' category (ie. their annual income is less than Rs. 24000 (= \$500)). These women are from different caste groups such as Scheduled Caste (SC), Scheduled Tribes (ST), most backward Caste (MBC) backward caste (BC) and minority groups (Muslims). (1,2)

Discussion

Most of them are illiterates/semi-literates. Only 15 percent of this population own economic assets, such as weaving looms, cows and goats, or a petty shop business. If they need money, they cannot go to a bank to get a loan, so often their only choice is to get a loan from a local money-lender, who usually charges outrageous interest rates (sometimes more than 100%!). Often such debts cannot be paid off in time, and the individual or the family gets in deeper poverty, and sometimes leads to suicide. The situation is especially poor for women, because they have often little or no economic status, and especially when their husband is working elsewhere, they have to face severe financial hardship. Occupation-wise they are landless laborers, agricultural laborers, construction workers, weavers and contract weavers and daily wage labor (coolie workers). The job availability in the agricultural sectors is roughly for 3-4 months a year and the rest of the period they travel usually to nearby areas for coolie work. They try to support their families with their little income. (3,4)

Results

These women and men can be organized into Self-Help Groups (SHG). The goal of this program is to promote savings- and credit activities, and to promote micro-enterprise development.

This can lead to a strong and permanent improvement of their socio-economic conditions in a number of ways:

- Initiation of savings and credit activities, and promotion of income generating programs in these self-help groups will bring more economic development and independence to these women and their families. Because of the better welfare of these families, more children will be able to attend school instead of being forced into agricultural child labor.
- For the first time in their life, these disadvantaged rural women and men become organized into groups. The formation of these self-help groups will facilitate discussion of many issues pertaining to their socio-economic, educational and health status. Thus, the formation of this group provides a forum to initiate many participatory activities (including training and awareness camps).
- This process will also lead to increased confidence and social status, especially for women, in their communities. This will encourage these women to participate and contribute in general social and political matters in their respective villages, including women's rights. Examples include the use of these women as HIV peer educators in our HIV programs (Perambalur Education and Prevention Program). (5,6)

Conclusion

The SHGs have made a lasting impact on the lives of the women particularly in the rural areas of India. Their quality of life has improved

a lot, as: 1) they could develop their skills and abilities in various productive activities. 2) There is an increase in their income, savings and consumption. 3) Increased self-reliance and self confidence have improved the ability of women to mobilize various public services for their benefit. 4) They have become bold and can speak freely in front of a big crowd. 5) They can carry out any type of official work without any fear. 6) The social horizons of the members have also widened. They have made many friends and feel that now they are more popular and socially active. 7) The illiterate and semi-literate women have got a sense of satisfaction and wish fulfillment. Now they have become productive and the important members of the family. 8) They got high self esteem which enhances their capacity to work. 9) With improvements in women's economic opportunities and their ability to take collective action, there has been a significant decline in gender based problems such as domestic violence, dowry, polygamy etc. Interestingly, some of them are motivating other women to form SHGs so that they also can reap the benefits.

Thus the SHGs have achieved success in bringing women to the mainstream of decision making.

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Bibliography

1. Chandni Sinha, "Education and Empowerment of Women", Third Concept, Vol.21, May 2007, p.49.
2. Statistical Handbook, Bargarh District
3. Venessa Griffen, (ed.), "Women Development and Empowerment: A Pacific Feminist Perspective", Asian and Pacific- Development Centre, Kualalumpur, pp.117-118.
4. Data collected from Field survey from the sample.
5. Tiyas Biswas, "Women Empowerment Through Micro Finance: A Boon for Development" Web page collection.
6. Prabhat Datta,"India's Democracy New Challenges", Kanishka publishers, New Delhi, 1997, p.1.

The Gupta Empire- A Golden Dynasty

Girdhari Lala Meena

Abstract

The Gupta period marks the important phase in the history of ancient India. The long and efficient rule of the Guptas made a huge impact on the political, social and cultural sphere. Though the Gupta Empire was not widespread as the Maurya Empire, but it was successful in creating an empire that is significant in the history of India. The Gupta period is also known as the “classical age” because of progress in literature and culture. After the downfall of Kushans, Guptas emerged and kept North India politically united for more than a century. The Gupta Empire, which ruled the Indian subcontinent from 320 to 550 AD, ushered in a golden age of Indian civilization. It will forever be remembered as the period during which literature, science, and the arts flourished in India as never before.

Since the fall of the Mauryan Empire in the second century BC, India had remained divided. For 500 years, India was a patchwork of independent kingdoms. During the late third century, the powerful Gupta family gained control of the local kingship of Magadha (modern-day eastern India and Bengal). The Gupta Empire is generally held to have begun in 320 AD, when Chandragupta I (not to be confused with Chandragupta Maurya, who founded the Mauryan Empire), the third king of the dynasty, ascended the throne. He soon began conquering neighboring regions. His son, Samudragupta (often called Samudragupta the Great) founded a new capital city, Pataliputra, and began a conquest of the entire subcontinent. Samudragupta conquered most of India, though in the more distant regions he reinstalled local kings in exchange for their loyalty. Samudragupta was also a great patron of the arts. He was a poet and a musician, and he brought great writers, philosophers, and artists to his court. Unlike the Mauryan kings after Ashoka, who were Buddhists, Samudragupta was a devoted worshipper of the Hindu gods. Nonetheless, he did not reject Buddhism, but invited Buddhists to be part of his court and allowed the religion to spread in his realm.

Introduction

The Guptas enjoyed certain material advantages. The centre of their operations lay in the fertile land of Madhyadesha covering Bihar and Uttar Pradesh. They could exploit the iron ores of central India and south Bihar. Further, they took advantage of their proximity to the areas in north India which carried on silk trade with the Byzantine Empire.

On account of these favourable factors, the Guptas set up their rule over Anuganga (the middle Gangetic basin), Prayag (modern Allahabad), Saket (modern Ayodhya) and Magadha. In course of time this kingdom became an all-India empire.(1,2)

According to many historians, the Gupta dynasty was a Vaishya dynasty.[12][13] Historian Ram Sharan Sharma asserts that the Vaishya Guptas "appeared as a reaction against oppressive rulers".[14] A.S. Altekar, a historian and archaeologist, who has written several books on Gupta coinage,[15] also regarded the caste of the Guptas as Vaishya on the basis of the ancient Indian texts on law, which prescribe the name-ending with Gupta for a member of the Vaishya caste. According to historian Michael C. Brannigan, the rise of the Gupta Empire was one of the most prominent violations of the caste system in ancient India.[13]

Furthermore, it is not yet discovered whether the term Gupta indicated a surname of a specific family or referred to a clan. However Gupta Empire records and Chinese records provided by the later I-Tsing, furnished the names of the first three rulers of the Gupta Dynasty, Maharaja Sri Gupta, Maharaja Sri Ghatotkacha and Ghatotkacha's son, Maharajadhiraja Sri Chandragupta, considered the first Gupta emperor. Recently, a historian, Ashvini Agarwal, on the basis of the matrimonial alliances of the Guptas with the Vakataka, assumed that they belong to the Brahman caste.[16] Another modern historian, S. Chattopadhyaya, has put forth a different theory about the ancestry of the Guptas. According to him, in the Panchobh Copper Plate, some kings bearing the title Guptas and related to the imperial Gupta Dynasty, claimed themselves as Vaishyas. Historian D. R. Regmi, says Imperial Guptas were descendants of Abhira-Guptyas (3,4,5)

Discussion

The Gupta Dynasty :

The Gupta empire was founded by Sri Gupta. He was then succeeded by Ghatotkacha. Not much information is available about their rule of these two Maharajas. Thereafter, following significant rulers from Gupta dynasty ruled during this period.

Chandragupta I (320-330 A.D.)

- Chandragupta was a powerful Gupta ruler who had waged many battles to attain his title of 'Maharajadhiraja' (king of kings).
- He married a Licchavi princess Kumardevi, which began the eminence of the Gupta empire.
- The Mehrauli iron pillar inscription has mention of his extensive conquests.
- He is considered as the founder of the Gupta era (began with his accession).

Samudragupta (330-380 A.D.)

- He is also known as "Indian Napoleon". He was the greatest of the rulers of Gupta dynasty.
- The Allahabad Pillar inscription contains details of his military conquest in stages:- Against rulers of North India, Samudragupta's Dakshinapatha expedition against South India, Another campaign against other rulers of North India.
- It is little ironical that these military achievements are engraved on the same pillar which contains the inscriptions of the peace-loving Ashoka.

- He also performed Ashwamedha sacrifices after his military victories. This is known by the coins issued by him commemorating him as the “restorer of ashwamedha”.
- His greatest achievement was political unification of India as a formidable force.
- Also, a Chinese source tells that, the ruler of Sri Lanka, Meghvarman sought permission of Samudragupta to build a Buddhist temple at Bodh Gaya.
- Samudragupta was called by different names, one of them was 'Kaviraja' because of his ability to compose verses. Certain coins show him with a Veena.
- He patronised poets and scholars like Harisena, and hence played a part in promoting Sanskrit literature (which is a characteristic feature of Gupta dynasty).
- Samudragupta was a follower of Vaishnavism. However, he also patronised the great Buddhist scholar Vasubandhu. (6,7)

Chandragupta II Vikramaditya of Gupta Dynasty (380-415 A.D.)

- He is also known as Vikramaditya.
- Chandragupta II extended the limits of this empire by conquest and matrimonial alliances. His capital city was Pataliputra.
- He married his daughter Prabhavati to a Vakataka prince, who ruled the strategic lands of Deccan. This later was highly useful to him when he proceeded towards his campaign against the Saka rulers of western India.
- Chandragupta II conquered the western Malwa and Gujarat by defeating the Saka rulers who had ruled for about 4 centuries in the region. This earned him the title of 'Sakari' and 'Vikramaditya'.
- As a result the Gupta empire gained access to the Arabian sea and opened trade with the western countries. Ujjain became the commercial capital of the kingdom thereafter.
- In his reign, the Chinese pilgrim Fa-hien visited India. His accounts tell of a flourishing Buddhist religion in Chandragupta II's reign. However, the Gangetic valley was a 'land of Brahmanism'.
- Chandragupta II also patronised art and literature. He has poets like Kalidasa in his court.
- He also issued silver coins, first Gupta ruler to do so.

Kumargupta (415-455 A.D.)

- He succeeded Chandragupta II.
- Kumargupta I was a worshipper of Kartikeya.
- The coins of his time tell that he took titles like: Mahendraditya, Ashwamedha Mahendrah.

- He laid the foundation of **Nalanda University** which later grew to become an international centre of learning.

Skandagupta (455-467 AD)

- He was last great ruler of Gupta dynasty.
- He saved the empire from Hun invasion coming from Central Asia. But these invasions weakened the empire.
- Details about him are mentioned on the Bhitari Pillar inscription, proclaiming him the title of 'Vikramaditya'.

DISCUSSION AND CONCLUSION

The Later Guptas:

After the death of Skandagupta, there were other ruler of the Gupta dynasty like Purugupta, Narasimhagupta, Buddhagupta. They were not able to save the empire from Hun invasions. With the rise of Malwa and continuous Hun invasion, the Gupta dynasty totally disappeared.

The Gupta period is generally regarded as a classic peak of North Indian art for all the major religious groups. Although painting was evidently widespread, the surviving works are almost all religious sculpture. The period saw the emergence of the iconic carved stone deity in Hindu art, as well as the Buddha figure and Jain tirthankara figures, these last often on a very large scale. The two great centres of sculpture were Mathura and Gandhara, the latter the centre of Greco-Buddhist art. Both exported sculpture to other parts of northern India. Unlike the preceding Kushan Empire there was no artistic depiction of the monarchs, even in the very fine Gupta coinage,[48] with the exception of some coins of the Western Satraps, or influenced by them.(8,9)

The most famous remaining monuments in a broadly Gupta style, the caves at Ajanta, Elephanta, and Ellora (respectively Buddhist, Hindu, and mixed including Jain) were in fact produced under later dynasties, but primarily reflect the monumentality and balance of Gupta style. Ajanta contains by far the most significant survivals of painting from this and the surrounding periods, showing a mature form which had probably had a long development, mainly in painting palaces.[49] The Hindu Udayagiri Caves actually record connections with the dynasty and its ministers,[50] and the Dashavatara Temple at Deogarh is a major temple, one of the earliest to survive, with important sculpture(10)

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Bibliography

1. Gupta Dynasty – MSN Encarta. Archived from the original on 31 October 2009.
2. Jump up ^ India – Historical Setting – The Classical Age – Gupta and Harsha. Historymedren.about.com (17 June 2010). Retrieved on 2011-11-21.
3. Jump up ^ N. Jayapalan, History of India, Vol. I, (Atlantic Publishers, 2001), 130.
4. Jump up ^ Ancient India. The Age of the Guptas.wsu.edu
5. ^ Jump up to: a b Raghu Vamsa v 4.60–75
6. Jump up ^ Gupta dynasty (Indian dynasty). Britannica Online Encyclopedia. Retrieved on 2011-11-21.
7. Jump up ^ Mahajan, p. 540
8. Jump up ^ Gupta dynasty: empire in 4th century. Britannica Online Encyclopedia. Retrieved on 2011-11-21.
9. Jump up ^ Trade | The Story of India – Photo Gallery. PBS. Retrieved on 2011-11-21.
10. Jump up ^ Agarwal, Ashvini (1989). Rise and Fall of the Imperial Guptas, Delhi:Motilal Banarsidass, ISBN 81-208-0592-5, pp.264–9

Financial Institutions and Economic Growth

Dr. Sonia Tiwari

Abstract

Financial institutions play an important role in stimulating financial development and thereby the growth of the economy in any country. However the causal effect of these financial institutions can't be generalized as the development of financial institution is quite different in nature and scale in different countries. This paper explores the relationship between financial institutions and economic growth in the Indian economy. We find that insurance institutions do promote the economic growth. We also find that financial development is most potent in delivering extra growth. It is also found that it is growth in the economy that causes development of banking institutions. This paper reviews the economic theory with particular focus on role of financial sector for economic growth.

Keywords: Economic Growth, Financial Institutions, Banks, Insurance, India.

Introduction

Economic growth implies a long-term rise in per capita national output. Such an increase in output in developed countries has been associated with radical changes in production techniques and organization in the institutional setup. In developing countries like India Industrialization is necessary for the rapid economic growth. The financial liberalization efforts taken by various developing economies had crucial impact on their financial institutions. With the passage of time many of these economies have achieved high rates of economic growth for such growth rates financial sector development played an important role in promoting the growth of the economy to remarkable levels. Financial development means the process of creation and improvement in the financial structure which includes the Interaction of financial institutions, financial markets and financial services. Considering this fact, the present study brings whole and have analyzed how such development is related with economic growth. Development of insurance and banking institutions is one of the crucial elements that plays an important role in stimulating financial development and thereby the growth of the economy.

Key Financial Institutions In India

Industrial finance corporation of India [IFCI]

Industrial credit and investment corporation of India [ICICI]

Industrial development bank of India [IDBI]

State financial corporation of India[SFCs]

Unit trust of India [UTI]

life insurance corporation of India [LIC]

Role of Financial institutions

Role as a Financial Intermediary

Role as a Catalytic Agent

Role as a Promoter

Role as a Counselor

Role as a Creator of money

They provide a convenient and effective link between saving and investment. They pool the savings of people with peculiar characteristics and notions about safety, liquidity, return and the safety of the savings. Financial institutions channel the fund mobilized by them to those who required more funds. This is why they known as "gapfillers". They play the role of catalytic agent to bring about economic and social change in a country through dynamism and innovativeness in their operations. Rate of growth of an economy depends upon the speed with which financial institutions respond to the infrastructural demand of the country. They accept public deposits and lending money against it for funding transaction they create further deposits. This role has assumed grater importance in the growth of economy. As a promoter these institutions undertake comprehensive growth potential surveys of the existing industrial structure of the various part of the country which can be established in different regions in near future.

As a friend, philosopher and guide, they consult corporate borrowers regarding selling off assets not needed for the organizational success etc..

Development in Insurance and Banking Institutions in India

The establishment of the Indian financial system evolved as a result of planned economic policy that gave much significance to it. The initiation of this policy led to some important developments in the country that include the establishment of financial institutions crucial for the growth of the country as well as nationalization of important institutions including State Bank of India in 1955, Life Insurance Corporation of India (LICI) in 1956, Insurance companies represent such financial institutions as are concerned with pooling savings of the people and investing them in productive outlets. They pool savings through premiums by providing life cover protection.

And General Insurance Corporation (GIC) in 1972. The Indian financial system experienced a completely regulated regime dominated by public sector banks and state regulated insurance companies till 1990. However the state ownership and control continuously repressed the financial system and seriously harmed it. The introduction of New Economic Policy in 1991 gave special attention to financial reforms on account of deterioration of financial health, autonomy, soundness and resonance of the financial sector. This policy led to the introduction of reforms especially in banking and insurance sector through liberalization, privatization and globalization. As a result, in the banking sector, private and foreign banks were allowed to set up and operate banking business in India along with other major reforms that include deregulation of interest rates, reduction of cash reserve.

Conclusion

This paper reviewed the role as well as the relationship between the financial institutions, which is represented by the banking, and insurance institutions and economic growth. In the study I find that there is long run relationship between financial institutions and economic growth in India. It is also witnessed that there exists a bi-directional causal relationship between development of insurance institutions and economic growth in the short run. This bi-directional relationship is probably due to the role played by the insurance institutions in Indian economy. Insurance companies channelize the savings for longer period of time and make it available for long-term investment in the market that promotes the growth of the economy. With this, the level of development of the economy helps to improve the level of economic activity along with generating demand in the market which pushes the penetration of insurance market that ultimately helps in their institutional development. As the study finds that insurance institutional development also leads economic growth, the government and policy makers should therefore make concrete strategies to enhance insurance institutional development in order to encourage economic growth in India.

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References

1. WWW.ifcilttd.com
2. Reserve Bank of India Bulletin (Supplement), August 1994, p.19.
3. The New Indian Express, February 23, 2000, p.'3.
4. Al-Yousif, Y.K. (2002), financial development and economic growth: Another look at the evidence from developing countries.
5. Review of Financial Economics, 11(2), 131-150.
6. King, R.G., Levine, R. (1993), Finance and growth: Schumpeter might be right. The Quarterly Journal of Economics, 108(3), 717
7. Patrick, H.T. (1966), Financial development and economic growth in underdeveloped countries. Economic Development and Cultural Change, 14(2), 174-189

Rising Trends Towards Herbal Contraceptives

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Abstract

Oral administration of aqueous extract of *Calendula officinalis* flower to male rats at the dose level of 100mg/kg body weight for 60 days did not cause body weight loss but decreased the weight of testis, epididymis, seminal vesicle and ventral prostate in a significant manner. Sperm motility as well as sperm density were reduced highly significantly which resulted in 45% negative fertility. Serum testosterone level showed highly significant reduction. Biochemical parameters like total protein and Sialic acid in testis, epididymis, seminal vesicles and ventral prostate were decreased significantly where as testicular cholesterol concentration was elevated. All the haematological parameters were in normal range when compared with the control group animals.

Keywords: *Calendula officinalis*, Antispermatogetic, Sialic acid, Sperm motility, Sperm density

Introduction

In many developing countries, traditional medicines are widely utilized in the treatment of various ailments on an empirical basis. A variety of plants have been used for the treatment of diabetes and (Upadhyay et al 2004) and male reproduction (Das et al 2004). *Calendula officinalis* belongs to the family Compositae is commonly known as 'marigold'. Extract of dried flower from *Calendula officinalis* were examined for their ability to inhibit the human immunodeficiency virus type - 1 (HIV-1) replication (Kalvatchev et al 1997). It is also traditionally being used for gastric ulcers and menstrual discomforts (Szakiel et al 2005) skin disorders, antiseptic and anti-inflammatory disease (Cordova et al 2002). Contraceptive like properties have been reported in females by local tribes of Rajasthan they use it for birth control.

The contraceptive efficacy of this plant has not been investigated scientifically hence the present investigation has been undertaken to investigate the effect of aqueous extract of *Calendula officinalis*. In this communication a pronged approach involving haematological and biochemical parameters has been used and antispermatogetic activity of *Calendula officinalis* was discussed.

Material and Method

The flowers of *Calendula officinalis* were collected from University Campus identified in Department of Botany (RUBL 20102), shade dried and powdered and (100)gm dry powder was macerated in 200ml of distilled water and stayed for 36 hours at room temperature and filtered to obtain a final crude extract in the form of powder. 24.75% yield was obtained from 100 gms of

flower. This powder was dissolved in distilled water which was administered to the male rats while control group rat received equal amount of distilled water. Adult, healthy male albino rats of wistar strain 16-18 week old were selected from the inbred colony and the animal were maintained according to the guide lines for care and use of animals for scientific research (Indian National Science Academy, 2000) through out the course of investigation.

The rats were divided in two groups having 10 rats in each group.

Group 1- Vehicle treated i.e. 0.5ml/rat/day distilled water for 60 days.

Group 2- 100mg/rat/day *Calendula officinalis* (COFAq) dissolved in 0.5ml of distilled water for 60 days.

Fertility Test

The mating test of control and treated groups were performed on day 55-60 using the method of W.H.O (W.H.O Protocol 1990) the females were separated for normal delivery. On 16th day of pregnancy the implantation site (normal and absorbed foetus) were recorded.

Autopsy

After 24 hours of last dose rats were weight and autopsied under light ether anesthesia the blood was collected from heart in pre-heparinized tubes for hematological studies and serum was also separated from non-heparinized tubes for RIA studies. The animal were autopsied, the reproductive and vital organs (testis, epididymis, seminal vesicle, ventral prostate, liver, adrenal and kidney) were taken out and trimmed free of fat and weight separately on electronic balance.

Sperm Motility and Density

At autopsy, the epididymis was exposed and spermatozoa were taken out by cutting cauda epididymis for sperm motility (Srikanth et al 1999) and sperm density (Zaneveld and Polakoski 1997).

Haematology

Total erythrocyte Count (Schalm et al, 1975), Total leukocyte count (Lynch et al 1969), haematocrit by microhaematocrit method (Schalm et al 1975). The Haemoglobin level was estimated by cynomethanoglobin method (Makarem et al 1974) blood sugar (Astoor and King 1954) and blood urea (Varley 1969) were estimated while serum was assessed for the estimation of testosterone by Radio Immuno assay (commercial kit).

Biochemistry

Frozen testis, epididymis, seminal vesicle and ventral prostate were used for the estimation of protein (Lowry et al 1951), glycogen (Montgomery 1957), cholesterol (Oser 1965) and Sialic acid (Warren 1959).

Statistical Analysis

The mean and standard error of mean (SEM) were calculated from the data obtained by the

experiment and The treated groups were compared to the control using the student's ' t ' test (Ipstein and poly 1970).

Results

Body and organ weight-

Oral administrations of *Calendula officinalis* flower extract (COFAq) did not cause any change in the body weight when compared to their initial body weight weight. However it showed significant reduction in weight of testes, epididymis, seminal vesicles and ventral prostate ($p \leq 0.001$) in comparison to the control group (Table -1)

Sperm dynamics and serum testosterone -

Percentage of sperm motility, sperm density were decreased significantly ($p < 0.01$) where as fertility rat was 45% negative after the administration of *Calendula officinalis* (flower) aqueous extract. Serum testosterone level was reduced significantly when compared with control group .Number of pregnant females; number of implantation sites and number of viable fetuses were also declined in G-11 (Table-2).

Tissue Biochemistry-

Total protein and Sialic acid content of testis, epididymis, seminal vesicles and ventral prostate were decreased significantly following the administration of *Calendula officinalis* (flower) aqueous extract (COFAq) Glycogen level in testis and liver reduced slightly where as cholesterol level was increased slightly (Table-3).

Blood Profiles-

Calendula officinalis showed that total erythrocytes count, total leukocyte count, haemoglobin, haematocrit, blood sugar and blood urea were in normal range (Table-4).

Discussion

Oral administration of *Calendula officinalis* flower extract (COFAq) showed reduction in the weight of testes, epididymis, seminal vesicles and ventral prostate Reduction in weight of testis and other accessory sex organs might be due to low level of androgens (Sharma and Jacob, 2001), which was reflected in decreased serum testosterone level in treated rats.

Sperm motility and density in cauda epididymis and testis were decreased which shows alteration in maturation and production of sperm (Sarkar et al 2000).

Protein content of reproductive organs were significantly was decreased due to low level of androgens (Chinoy and Bhattacharya 1997) which was confirmed in low concentration of serum testosterone.

Decreased level of Sialic acid in testis, epididymis, seminal vesicles and ventral prostate reflected loss of androgens (Gupta et al 2001). Mode of action of *Calendula officinalis* extract was through pituitary gonadal axis, which was confirmed in decreased serum testosterone level. After the administration *Calendula officinalis* extract, increased testicular cholesterol might be due to

arrest of steroidogenesis of testosterone (Gupta et al 2002) so to accumulate in the testis.

From the present study it is concluded that the oral administration of crude ethanolic extract of *Calendula officinalis* may lead to fertility control in male rats due to interfere in the testicular androgens level which arrest the process of spermatogenesis in testis without disturbing general metabolism.

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Bibliography

1. Astoor A. and King E.J., (1954): Simplified Calorimetric Blood Sugar Method Journal of Biological Chemistry 56 XIIV.
2. Chinoy M.R.N. and Bhattacharya S., (1997): Effect of chronic administration of aluminium chloride on reproductive function of testes and accessory sex organs of male mice. Journal of Environmental Toxicology 7, 12-15.
3. Cordova C.A., Netlo C.A., Yunes R.A., (2002): Calendula used for the treatment of skin disorders antiseptic and anti-inflammatory disease. Redox Reproduction 7, 95-102.
4. Das S., Seema P., Kundra C.P. and Pereira M.J., (2004): Reproduction in male rats is vulnerable to treatment with the flavanoid -rich seed extract of *Vitex negundo*. Phytotherapy Research 18, 8-13.
5. Gupta R.S., Yadav R., Dixit V.P. and Dobhal M.P., (2001): Antifertility studies of *Colebro oppositifolia* leaf extract in male rats special reference to cell population dynamics. Fitoterapia 73, 236-245.
6. Gupta R.S, Sharma R., Sharma A., Bhatnagar A., Dhobal M.P, Joshi Y.C. and Sharma M. G. (2002): Effect of *Alstonia scloris* bark extract on testicular function of wistar rats. Asian journal .of Andrology, 4 (3) 175-8.
7. Indian National Science academy (2000): Guidelines for care and use of animals in scientific research reported by Indian national science academy, New Delhi.
8. Ipstein J., Poly F. (1970): Brancroft's Introduction to biostatistics, IInd Ed. (Harper International, New York) Pp. 44
9. Lowry O. H., Rosenberg N. J., Farr A. L. and Randall R. J., (1951): Protein measurement with the folin -phenol reagent. Journal of Biological Chemistry 193, 265-275
10. Lynch J. M., Raphel S. S., Melvir L. D., Spare P.D. and Inwood M. J. .M (1969): In medical laboratory and clinical pathology pub., Sounders Company SohmlTD., Tokyo 626, 647-662.
11. Makrem A. (1974): Haemoglobin, myoglobin and hepatoglobin. In (Henry, Cannon, Winkelmann. Ed) Clinical Chemistry. Principles and techniques Pp. 1111-1214 (Harper and Row, London)

12. WHO: Protocol cg-04. Preparation of alcoholic extract for bioassay and phytochemical studies (APJF/IP, 1001A) Geneva, World Health Organization 1983a.
13. Montgomery R., (1957) Determination of glycogen. Arch Biochemistry and Biophysics 67, 378.
14. Oser B. L., (1965): Hawk's physiological Chemistry. 14th Ed., New York, McGraw Hill, p 246.
15. Sarkar M., Gangopadhyay P., Basak B., Chakrabarti K., Banerjee J., Adhikari P. and Chatterjee A., (2000): The reversible antifertility effect of *Piper beetle* Linn. On swiss albino mice *Contraception* 62, 271-274
16. Sharma N. and Jacob D., (2001): Antifertility investigation and toxicological screening of the petroleum ether extract of the leaves of *Mentha arvensis* in male albino mice. Journal of Ethnopharmacology 75, 5-12.
17. Shrikanth V., Malini T., Arunakaran J., Govindrajulu P., Balasubramanian K., (1999): Effect of ethanol treatment on epididymal secretary product and sperm maturation in albino rats. Journal of Pharmacology and Experimental Therapeutics 288, 509-515.
18. Schalm O.W., Jain N.C., Carrollt E.J (1975): Veterinary haematology 3RD edition Lea and febiger Philadelphia PP 324_335
19. Upadhyay S. Shanbhag K.K. ., Sunita G., and Balachandra Naidu. , (2004): A study of hypoglycemic and antioxidant activity of *Aegle marmelos* in allonan induced diabetic rats . Indian Jounal of physiological phamocology 48, 476-80
20. Varley H (1969): Determination of blood urea by urease nesslerization method. In practical clinical biochemistry 4th edition .White Herres press .Ltd., London P 158-160
21. Warren (1959): The thiobarbituric acid assay acid. Journal of Biological Chemistry 234, 1971.
22. World Health Organization (1990): Special programme of research development and research training in human reproduction. Biennial report (1988-89) World health organization, Geneva.
23. Srikanth V, Malini T, Arunakaran J, Govindarajulu P, Balasubramanian K. Effects of ethanol treatment on epididymal secretary products and sperm maturation in albino rats. J Pharmacol Exp Ther 1999; 288: 509-515.
24. Zaneveld LJD, Polakoski KL. Collection and physical examination of the ejaculate. In: Hafez ESE, Ed., Techniques of Human Andrology. Amsterdam, Holland: north Biomedical Press, 1977. p. 147-156.
25. Krag K. Plant used as contraceptive by the North American Indian :an ethanobotanical study. Botanical museum. Cambridge, MA: Harvared university, 1976: 1177.

Table 1: Effect of aqueous extract of *Calendula officinalis* (COFTAq) on body and reproductive organ weights of adult male rat

Treatment	Body Weight (gm)		Reproductive organs weight (mg/100gm)					vital organs weight (mg/100gm)		
	Initial	Final	Testis	Epididymis	Seminal Vesicle	Vas deference	Ventral prostate	Heart	kidney	liver
Group- I Control	185.30±08.01	204.20±07.20	1021.40±60.20	426.60±21.56	519.60±26.56	151.960±1.51	294.29±01.20	450.98±8.96	70592±1.20	4.9561±180.21
Group- II <i>Calendula officinalis</i> (100 -mg/kg b. wt.) per day for 60 days	180.28±2.03	200.00±5.26	939.67*±62.21	412.5*±26.69	500.560±26.69*	130.560±2.61 *	254.66±02.10*	440.96±7.98*	696.52±1.69*	4.894±176.01*

(Mean± SEM of 10 animals)

Group II compared with Group

I ns = Non-significant

** = P ≤ 0.001 - Highly Significant

Table 2: Effect of *Calendula officinalis* (COFTAq) on the sperm dynamics, fertility test and serum testosterone level male rat

Treatment	No. of males	No. of females	No. of pregnant females	No. of implantation sites	No. of viable fetuses	Sperm motility (Cauda epididymis) %	Sperm density (million/ml)		Fertility Test %	Serum Testosterone ng/dl
							Testes	Cauda epididymis		
Group- I Control	10	20	20/20	10.6±2.6	9.6±1.6	85.328 ±1.25	4.2±0.16	48.20±3.4	100(+)	4.71±0.12
Group- II <i>Calendula officinalis</i> (200- mg/kg b. wt.) per day for 60 days	10	20	11 /20	6.2± 2.3	8.63±1.27	78.526±1.26	3.02 ±0.43	43.10**±0.50	55(-)	1.87**±0.09

(Mean± SEM of 10 animals)

Group II compared with Group

I ns = Non-significant

* = P ≤ 0.01 - Significant

** = P ≤ 0.001 - Highly Significant

Table 3: Effect of *Calendula officinalis* (COFTAq) on the Tissue Biochemistry of adult male rat.

Treatment	Protein mg/100gm				Sialic Acid mg/100gm				Glycogen mg/100gm		Cholesterol mg/100gm	
	Testes	Epididymis	Seminal Vesicle	Ventral Prostate	Testes	Epididymis	Seminal Vesicle	Ventral Prostate	Testes	Liver	Testes	Liver
Group- I Control	245.16± 6.27	210.18± 5.17	195.18± 5.27	181.69± 0.26	5.89± 0.19	4.60± 0.67	5.86± 0.27	5.96± 0.69	3.78± 0.39	7.69± 1.43	7.99± 0.49	11.90± 2.31
Group- II <i>Calendula officinalis</i> (1000- mg/kg b. wt.) per day for 60 days	215.27± 6.19*	201.17±* 7.98	191.17±* 6.01	179.68 ± 1.28*	5.38 ± 0.26*	4.32.0± 0.89*	5.31± 0.67*	5.52 ±1.67 *	3.01 ^{ns} ± 0.52	6.65 ^{ns} ± 2.78	13.66± 2.92ns	8.46 ± 0.76ns

(Mean± SEM of 10 animals)

Group II compared with Group I

ns = Non-significant

* = P ≤ 0.01 - Significant

** = P ≤ 0.001 - Highly Significant

Table 4: Effect of aqueous extract of *Calendula officinalis* (COFTAq) on haematological parameters of adult male rat

Treatment	Total Erythrocyte Count (TEC) million/mm ³	Total Leucocyte Count (TLC) per cu. Mm.	Total Leucocyte Count (TLC) per cu. Mm.	Haemoglobin gm%	Haematocrit % (pcv)	Blood sugar mg/100ml mg/dl	Blood Urea mg/dl mg/100ml
Group- I Control	5.02 ±0.62	8.602.3±406.9	8.603±406.9	14.0 ±0.39	45.23±2.6	96.86±0.23	96.86±0.23
Group- II <i>Calendula officinalis</i> (200-mg/kg b. wt.) per day for 60 days	5.06±0.69 ^{ns}	8.216.00 ^{ns} ±460.01	8.865.02 ^{ns} ±512.3	14.4 ^{ns} ±0.37 ^{ns}	45.26 ^{ns} ±6.8	95.87±0.69ns	39.02 ±3.8 ^{ns}

(Mean± SEM of 10 animals)

Group II compared with Group I

ns = Non-significant

“Exploring Indigenous Traditions in the Plays of Girish Karnad”

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Abstract

Culture defines society. The cultural ethos of every society is unique in its form and essence representing the character of its people, their experiences and beliefs. Myths, legends and folklore are in fact the embodiments of this cultural ethos that represent the underlying values and principles of life, the character and the codes of a society. Indian drama written in English by Indian playwrights makes extensive use of tradition, myths, legends and Folklore. Girish Karnad's plays vividly exemplify this trend. Karnad has significantly gone back to the roots of Indian myth, tradition and culture and has re-created the rich and vibrant picture of Indian Society. He has time and again returned to the eternal roots of his cultural tradition, taking inspiration from mythology and folklore.

The present research paper is an attempt to explore two plays by Karnad respectively, *Naga Mandala* and *Hayavadana*, to examine the representation of historical, mythic, legendary and oral elements in Karnad's writings. It is both arresting and interesting to investigate in current scenario how Karnad takes his inspiration from the rich tradition of India's past and weaves it through the web of his imagination into tales of his own. The study aims to identify the traditional Indian art forms used by Girish Karnad in his plays with a view to relate them to contemporary times.

Key words: Indian drama, myths, legends, oral tradition, folklore.

Full Paper

Girish Karnad is a major force in the field of Indian theatre in English. He has enriched the Indian literary scene with his contribution to art, culture, theatre and drama. The most significant and seminal aspect is Karnad's attempt to retrieve the cultural and mythological rich tradition of the Indian past. His plays offer a return to the roots and attempt to revive and recreate the local myths, legends and oral tradition of history. India has a distinct culture and rich heritage of its own. Karnad deftly captures the multicultural character of our land and weaves beautiful threads through indigenous traditions, culture, myths, and history to bring out the socio-cultural ethos subjugated by the imported culture of Europe.

Karnad has depicted various facets of human life in his plays. Kirtinath Kurtkoti opines about Karnad as a playwright, “His work has the tone and expression of great drama. He has the genius and the power to transform any situation into an aesthetic experience”. (iv) Karnad's writings are identified well in India and his plays achieved a great success on stage. He aims at reconciling

paradoxes and contraries of life. His first play *Yayati* is based on a myth from the *Mahabharata*. The mythical story is a tale of responsibilities, sacrifices and self-realization and focuses on the theme of responsibility. *Hayavadana* problematizes the search for roots and human relationships. *Naga Mandala* by Karnad is a play where myth takes over reality. The use of history, myths, legends, and folk-tales is the major vehicle for weaving different threads of story in the tales of Karnad. It also draws attention to Karnad's contribution to the formation of nation identity through the revival of these important art forms and the way he connects them with contemporary realities of modern life.

Girish Karnad's *Hayavadana* and *Naga-Mandala* source their origin from the folklore tradition of India. *Hayavadana* is based on Thomas Mann's translation of the Sanskrit '*Vital Panchavimshati*' and *Naga-Mandala* is inspired by the snake myths prevalent in south India. Both the stories are autonomous and independent of the person who tells them, although they live by being told and shared. *Naga Mandala* by Girish Karnad is a play where myth takes over reality. The play is based on two oral Kannada tales he had heard from his mentor-friend and well-known poet, translator, and philologist A. K. Ramanujan, to whom Karnad also dedicated the play. Through the interesting blend of history and myth, he talks about socio-cultural issues of the India. Rani is a young bride who is neglected by her indifferent and unfaithful husband, Appanna. Appanna spends most of his time with his concubine and comes home only for lunch. Rani is one of those typical wives who want to win her husband's affection at any cost. In an attempt to do so, she decides to drug her husband with a love root, which she mixes in the curry. That curry is spilled on the nearby anthill and Naga, the King Cobra drinks it. Naga, who can take the form of a human being, is enchanted with her and begins to visit her every night in the form of her husband. This changes Rani's life completely as she starts to experience the good things in life though she never knows that the person with her is not her husband but the Naga.

One of these days, she gets pregnant and breaks the news to Appanna. He immediately accuses her for adultery and says that he has not fathered the child. The issue is referred to the village Panchayat. She is then asked to prove her fidelity by putting her hand in the snake burrow and taking a vow that she has not committed adultery. It is a popular belief that if any person lies holding the snake in their hand, he will be instantly killed by the snake God. She does place her hand in the snake burrow and vows that she has never touched any male other than her husband and the Naga in the burrow. She is declared chaste by the village Panchayat. However, her husband is not ready to accept that she is pregnant with his child and decides to find out the truth by spying on the house at night. Appanna is shocked to see the Naga visiting Rani in his form, spending time with her and then leaving the house. Appanna gets furious with the Naga and indulges in a fight with him. Both of them fight vigorously and at one point of time, the Naga takes the form of the snake and escapes into the burrow. The villagers see the snake escaping into the burrow and kill it. Before dying the snake comes to Rani and reveals the truth to her. However, after this incident Appanna realizes his mistake and he accepts Rani along with the child she is carrying.

In the backdrop of a folktale, which includes flames, snake, avatars, performance of impressive ordeals, cremation of the dead snake, and the back ground chorus, *Naga-Mandala* comes alive with numerous symbols, hidden meanings and explicit and implicit moral lessons. The play started with a curse of dead or non-responsive audience, but we complete reading the play certainly as active and live audience.

Thus, the play takes its inspiration from the popular myth and oral stories centering on the king cobra. *Naga-Mandala* explores man-woman relationship, position and identity of a woman and the impact of social and cultural modes on the feminine psyche. In *Naga-Mandala* the woman character Rani is portrayed as dependent in all three phases of her life, as a daughter, as a wife and as a mother. In Indian society, the woman is said to be complete only after her marriage. Girish Karnad uses a magical folk tale to reveal the complexity of human life. He uses the folk tale in the Indian context to reveal the social and individual relations. The question of chastity being imposed on married women while their husbands have a merry-go-round with other women outside their wedlock, the throbbing of secret love that Naga demonstrates by killing himself on the passionate and warm body of Rani and above all, the result of the sexual communion being a male child, the “son” lighting funeral pyre and so many other potent and hidden meanings, make this play a very complex and subtle study.

The story in the main plot of *Hayavadana* is based on a myth taken from Somadeva's *Katha Sarit Sagara* and Thomas Mann's version of the same story of 'Transposed Heads'. Karnad makes the play an interesting study of man's quest for a complete and wholesome experience of life. He combines the transposed heads plot of Mann with *Hayavadana* story which is completely Karnad's own invention. This is how Karnad makes use of a myth. He takes them only in parts and the rest he supplements with his imagination.

In *Hayavadana*, the mother of the title character was the princess of Karnataka. She was a very beautiful girl. Her father decides that his daughter should choose her husband and invited the princes of every kingdom in the world. She did not like any of them. She looked at the handsome prince sitting on his great white stallion and fainted. She woke up, and said she would only marry that horse. Eventually, she was married to the white stallion. She lived with him for fifteen years. One morning a beautiful Gandharva stood in the place of the horse. This Gandharva had been cursed by the god Kubera to be born as a horse for some act of misbehavior. He, released from curse, asked his wife to accompany him to his heavenly abode. She agreed and became a horse herself by the curse of her husband and ran away happily. The child of their marriage was *Hayavadana* who was left behind. *Hayavadana*'s problem is how to get rid of horse's head. On the advice of Bhagavata he goes to Kali temple of Mount Chitrakoot. He threatens to chop off this head. As in the transposed heads plot, Kali's ambiguous boon creates another problem while solving one. In response to *Hayavadana*'s prayer, “make me complete” the goddess makes him complete horse and not a complete man and in addition to this, he retains his human voice. When the five year old son of Padmini of the transposed heads plot makes him to laugh again the laughter turns into a proper neigh indicating the complete liberation of *Hayavadana*. The horse

has at last become normal. The dilemma of the female character is exposed through Padmini and the flash back of *Hayavadana* is purely dramatical. Karnad has the genius and the power to transform any situation into an aesthetic experience. This is the main theme of the play *Hayavadana*.

Although in our Indian context myths are related to religion, Karnad is only interested in the mythical side of it. He finds a Jungian quality in these myths. Moreover, the elements of myth and history are common to most of the audiences in our country. Many myths have a strong emotional significance and the audiences have set responses towards them and Karnad likes to play on that. Thus, the myth acquires new dimensions in the creative hands of Karnad and the play unfolds rich strands of meaning. These two plays are product of Karnad's recreation of his own imagination. Both plays are love stories. In *Naga-Mandala*, the snake changes into a man where as in *Hayavadana*, the horse changes into a man. Both plays show the relationship of man and woman. The theme also reveals the Upanishad principle that visualizes the human body as a symbol of the organic relationship of the parts to the whole. Sacrifices also form a part of such religious practices as seen in the obliteration of the self physically in *Hayavadana*, the snake ordeal that Rani undergoes in *Naga-Mandala*. Spiritual thought and wisdom inherent in religion are also incorporated into the themes of the plays.

Karnad displays a keen sensibility towards indigenous roots and art forms. For instance, Bhagavata says in *Hayavadana*: "Padmini became a Sati. India is known for its pativratas, wives who dedicated their whole existence to the service of their husbands." Similarly, the role of Appanna and Naga in the play *Naga-Mandala* represent the twin roles in the husband, "as a stranger during the day and as lover at night." In *Naga-Mandala* Kurudeva gives the aphrodisiac root to Rani, giving a new twist to the tale. *Hayavadana* is resonant with multi-layered social messages and also tempts us to see it as a volatile autonomous being. While, *Hayavadana* is situated in the interstices of an invigorating legacy of traditional Indian folk and modern western theatre, *Naga-Mandala* builds on the folkloric tradition implicitly and has intimate connections with the ways mythic systems of belief co-exist with ontological realities.

The energy of folk comes from the fact that although it seems to uphold traditional values. It also has the means of questioning those values, of making them literally stand on their head. In *Naga-Mandala*, the story ends with the question who is Rani's husband, Appanna or Naga? In *Hayavadana*, the story ends with who is the real husband, the one with the husband's head or the one with his body? In *Naga-Mandala*, the god is Naga who saves Rani's life during snake ordeal and in *Hayavadana* the goddess is Kali, who bring them back to life. Religion and rituals not only serve a part of narrative of Karnad's play but also are integral to the dramatic representation of the plays as in *Hayavadana* it started with invocation of Lord Ganesha, the presence of Goddess Kali.

Girish Karnad like any other modern dramatist makes extensive uses of myths in his plays to condemn Socio-Cultural evils, which have deeply eroded the personal life of woman. Karnad wanted to expose the social-injustices perpetrated on innocent, ignorant Indian women.

Innocent women who were subjected to the violence of their sadistic husbands were made to tolerate their husbands because they were afraid of social stigma. Therefore many modern dramatists wanted to abolish these wrong concepts, which afflicted the Indian Society. Karnad's *Naga-Mandala* deals with deeply psychological problems faced by modern Indian women in the present society. In this way, both *Hayavadana* and *Naga-Mandala* are in depth studies of human nature with a serious message to deliver through the presentation of our cultural and historic traditions, myths and folk tales in a powerful way. M. K. Naik has rightly observed in this regard, "...his technical experiment with an indigenous dramatic form... is a triumph which has opened up fresh lines of fruitful exploration for the Indian English Playwrights" (275).

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Works Cited

1. Karnad, Girish. "Author's Introduction". *Three Plays: Naga-Mandala, Hayavadana, Tughlaq*. (Eighth Impression) New Delhi: Oxford University Press, 2002. Print.
2. ---. *Hayavadana*. (Fourteenth Impression) Chennai: OUP, 1998. Print.
3. ---. *Naga-Mandala. Three Plays: Naga-Mandala, Hayavadana, Tughlaq*. (Eighth Impression) New Delhi: Oxford University Press, 2002. Print.
4. Kurtkoti, Kirtinath. Introduction. *Hayavadana*. (Fourteenth Impression) Chennai: Oxford University Press, 1998. Print.
5. Mukherjee, Tutun. Interview with Karnad. "In His Own Voice: A Conversation with Girish Karnad" Ed. *Girish Karnad's Plays: Performance and Critical Perspectives*. Delhi: Pencraft International, 2006. Print.
6. Naik, M. K. *A History of Indian English Literature*. New Delhi: Sahitya Akademi, 2009. Print.

Empowerment through Education and Skill Development: Women in the Partition Tales of the Indian Subcontinent

Priyanka Bhattacharya

Abstract

In prior decades, the issue concerning empowerment of women has become a burning issue across the globe. Inequalities and discrimination against women have also been age-old issues all over the world. Thus, women are facing inequality and always suffer to get her identity, which she deserves. They have always demanded equality with men in matters of education, employment, inheritance, marriage, and politics.

In Indian Subcontinent, women are marginalized from the olden times with the exception of Vedic era when women were given the equal position with man. After that period, women were always viewed as a thing of subjugation and the need for women's empowerment emerged from the subaltern position they have been rendered for a long time. The Indian Subcontinent came into existence from a nation that was partitioned in 1947 resulting three emergent nations: India, Pakistan, and Bangladesh. These entities have shared same socio-cultural norms such as tradition, rituals, and customs concerning women. In the era of Partition, the "community" of women and children suffered the most and the catastrophe that followed besieged the most vulnerable. They were treated like mere toys of exchange, without having their consent, between two states. Women were uprooted twice and victimized thrice: first, by their abduction; second under the recovery program in which, in many cases, they were forcibly recovered against their will; the third and the final most tragic moment came when they were rejected by their original families. When states were celebrating their freedom, women were at the flipside of the coin. They did not get independence in any sense though they were chaotically partitioned in a designed machination by the "deep comradeship of men", did not matter which community the men belonged. Women are still not in a good position in present scenario and somewhere suffering the same fate that was suffered by them during partition. No nation, society or even an individual can progress without a woman lag behind, so there is an urgency of look into this matter to bring about changes in their socio-economic condition. Pundit Jawahar Lal Nehru once said that if we educate a man we educate an individual, however, if we educate a woman we educate a whole family. Women empowered means mother India empowered.

Efforts have been made to bring dignity to the life of women in past centuries. There has been a long tradition of social reforms by our saints and social reformers which include: Raja

Rammohan Roy, Ishwar Chandra Vidyasagar, Mahadev Govind Ranade, and Jyotiba Phule, to name a few, who tried their best to bring changes in the life of women but little had been gained in this effort. During the British Raj, the concern for women education had grown to some extent but the facilities were limited to certain class and cast. Women belonging to lower strata and the underprivileged women were still deprived of education. They remained within the four walls of their household and they have the total dependency on men folk. Muhammad Ali Jinnah in a speech in Aligarh stated that no nation can rise to the height of glory if their women are not side by side with them. He added further that it is a crime against humanity to shut up women within the four walls of the house as prisoners.

The problem of the unavailability of education in women in the backward areas can still be viewed in today's scenario. Being a patriarchal society, women and girls are not allowed to step out of their houses, which lead to lower educational status, low confidence to face the world. When the family faces financial constraints, an uneducated woman can also help her family by developing her skills and empower herself and her community at large. It was observed, if some kind of skill is imparted to the women, it would give them more chances to earn their living. By the help of vocational training program like stitching, embroidery or making food items will enable the rural women and girls to learn and enhance their skills, enhancing their confidence level by making themselves reliant. Due to their lack of economic independence and illiteracy, women have not actively participated in their emancipation, especially in rural areas. Women should be organized and strengthened at the grass root level to end their subordination. The nations should work to enhance the quality of life of women through increased knowledge and skills merely imparting literacy would not be sufficient. The women need vocational training or skills also to uplift their status. They should be able to stand on their feet and be an earning member of the family.

During the time of partition, women were abducted, raped, forcibly married, and even sold. They did not have any exposure to the outer world. Illiteracy prevailed in the women of lower strata. Even educated women did not have any say in any matter in which man folk was participating. In a way, they were not empowered and lacked self-confident. After Partition they remained silent, some were not accepted by their family because they were raped and they had to marry their rapists, some did not marry their rapists and committed suicide. Women could have stopped that brutality, but after partition, when they killed themselves or surrendered to their lot, that thing could have been changed if they were educated or they were given some opportunity to develop their skills in their own families. The picture would have been very different because they had not been dependent on anybody, especially on men folk. Mary Wollstonecraft rightly stated, "Strengthen the female mind by enlarging it, and there will be an end to blind obedience." (Wollstonecraft, p.24)

Women who were lucky to get the formal education during the partition era had found jobs in the educational institutions, some who were able to do skilled work (like stitching, embroidery etc) had made these skills their means of income. Some took advantage of their household training for trading purpose in preparing verities of pickles, *papad*, *badi*, and other culinary articles and even making paper packets and rolling *bidi* to support themselves and their families as well.

In the literature of partition, there are many examples in which women are presented as powerful characters. They are delineated as the financial support or the breadwinner of their family. Writers from India, Pakistan, and Bangladesh as well, pictured women as economically and socially capable in their tales on the partition. In the story "Housing Society", Buta Begum saved her thirteen-year-old girl Basanti Begum, by the help of her mistress Shams Ara Begum, from the clutches of an old Nawab Sikander Quli Khan, who had abducted her. Later in this story, Shams Ara Begum's own son had also tried to get her but somehow Buta Begum again succeeded in saving her child's life. In this story, Buta Begum has been portrayed as strong and empowered women. Though she was illiterate, she filed a case against the offenders. She worked as a maid in collector's house to educate her girl. Subsequently, after partition, it was her educated daughter Basanti Begum, who became a famous painter, had helped, and cared her during her old age. She said to her mother "I'm not that same Basanti Begum whom Nawab Bhure's minions could abduct." (Bhalla, Vol iv, p.64). Both characters represent an immeasurable strength of their will to get hold of their lot as they did not surrender themselves or did not make themselves depended on any man folk. If Buta Begum was not determined and her daughter was not educated, the situation was upside down. Buta Begum through her skill of household management and Basanti Begum through education proved themselves survivors instead of sufferers.

Ashraf Siddique's in his story "Rabeya Apa" sketched a woman who was very well educated and had the courage to marry a revolutionist without her parents' consent. Rabeya Apa was lucky to get educated and this made her take decisions in her own independent ways. She loved Alauddin, a man who was working as a revolutionist during Indi- Pak partition. Her parents did not approve her love and forced her to marry to a high government official. As she was a free-spirited and confident person, she eloped with him on the day of her marriage. She supported her husband and her children by doing a job at the corporation school. After her husband was handicapped due to an assailant's bullet, the whole responsibility comes to her shoulder; she did teaching as well as stitching to support her family, "I worked in a poor private school at a meager salary of forty taka." (Bhalla. Vol.iv, p.167). She sacrificed her husband as well as her elder son for her country but she was not broken. She said, "Rangpur is my holy land. I have to bring colour to its soil. I shall make proper human beings of each child in the school. I shall make each life an unconquerable fort in the hope that these young buds shall one day blossom." (Bhalla, Vol iv, p.167)

Bhoori a character drawn by Sundri Utamchandani in the story "Paparwali" is a very good example of the self-employed and self-reliant woman. Before partition, Bhoori was considered the famous beauty of her mohalla, but after partition poverty had blighted her beautiful face. Although "In place of the old light-hearted Bhoori, a new hard-working, self-reliant Bhoori has been born." (Bhalla, Vol iv, p.380). She made *papad* and sold them door to door to support her husband financially. She had three children to take care of. She left her two girls in school before starting her work. Her boy showed no interest in studies so she took him with her to made him capable of doing her job to survive in the future. She said to a woman "Two rupees are quite ample for us. Anyway, we are not dependent on anybody." (Bhalla, Vol iv, p.377). She nourished no regrets about her meager salary, she was confident that she was not dependent on anybody.

These tales of partition tell us that the women were never weak in the past; they just did not understand their true place within their family and in the outer world. Although during and after partition women were the worst sufferers but partition has brought about some positive and striking impacts on their perspective and attitude towards life and they emerged as survivors. Women who survived during partition became more and more financially empowered and independent as they came to know their real existence within their family and in the outer world. They started actively participating in the decision-making process within their respective families as well as public affairs. In a way, partition opened the door of empowering women and made them realize their inherent strength. It made them realize that each and every woman is the true form of Durga, Laxmi, Saraswati. They started utilizing their power through education and developed their skills in various fields to made themselves strong and face the world bravely. It is needless to say that the process is still going on and yet to be completed.

Cecily Mwaniki rightly states, "A woman is the full circle. Within her is the power to create, nurture and transform" (Mwaniki, p.53). Skill Development and Education have become necessary and compulsory need in today's world. Especially women should be educated and they should have been given chances to enhance their skills in various fields to become self-employed and self-reliant. Every region offers different program content, composed to work specifically for the community that it is serving. In India Handicraft work, embroidery and stitching are flourishing nowadays, in Afghanistan, rug weaving and tailoring are the most popular vocational and business skills training courses; in Nigeria, Rwanda and Congo it is farming, and in Iraq, it is hairdressing and candle making. It would help the innumerable women in the world who get abandoned by their husbands and have no means of proving their marital status. It would truly empower Indian women to exercise their rights.

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Works Cited

1. Arya, Anita. (2000). *Indian Women – Education and Empowerment*. Delhi: Gunjan Publishing House, 2000. Print
2. Bhalla, Alok. *Stories about the Partition of India*. Vol. 1, New Delhi: Manohar Publishers and Distributers, 1994. Print
3. Bhalla, Alok. *Stories About the Partition of India*. Vol. 4, New Delhi: Manohar Publishers and Distributers, 2012. Print.
4. Mwaniki, Cecily. *Empowered for Change to Achieve Total Well-Being: You Have What it Takes*. Author House, 2010. Print.
5. Wollstonecraft, Mary. *A Vindication of the Rights of Woman*. New York: Norton, 1988. Print

Impact of The Companies Act 2013 on Corporate Social Responsibility

Raja Bhoj Sharma

Abstract

In an ideal situation, if a company invests in society activities, it would be rewarded by its stakeholders in many ways. It has been the practice of many corporate houses in India to contribute to the society by building educational institutions, hospitals etc. Recognising the need for inclusion of socially unprivileged sections of the society in India's growth story, the new company law of 2013 has come up with a mandate for giant corporates to shell out at least two per cent of their three years annual average profits towards Corporate Social Responsibility (CSR) activities. The law is perhaps the first of its kind in Indian history recognising the scope of utilizing corporate strengths towards fulfilling country's social objectives. Going by the new norms, the two per cent spending on CSR is not mandatory but reporting about it is mandatory. Proper disclosure of the CSR policy by the corporates, reasons for not meeting the required expenditure and various activities that may be included in the CSR agenda of the companies are on the board in the new CSR provisions. Thousands of companies are expected to fall under the CSR obligations which may lead to estimated CSR spending amounting to thousands of crores of rupees. Looking from another perspective, companies pay huge taxes in one form or the other and the money collected from such taxes by the government should take care of the society objectives. Is it really justified to overburden the corporates to spend additional two percent towards social activities? The present research paper attempts to analyse several such aspects of the new CSR law in the context of modern corporate philosophy as also drawing attention of the government authorities towards practical difficulties in the implementation of the new provisions and the possible solutions to overcome these difficulties.

Keywords: CSR Mandate; Companies Act of 2013; Corporate Social Responsibilities, CSR Initiatives.

Introduction

The Companies Act, 2013 ('2013 Act'), enacted on 29 August 2013 on accord of Hon'ble President's assent, has the potential to be a historic milestone, as it aims to improve corporate governance, simplify regulations, enhance the interests of minority investors and for the first time legislates the role of whistle-blowers. The new law will replace the nearly 60-year-old Companies Act, 1956 ('1956 Act').

The 2013 Act provides an opportunity to catch up and make our corporate regulations more contemporary, as also potentially to make our corporate regulatory framework a model to emulate for other economies with similar characteristics.

The 2013 Act is more of a rule-based legislation containing only 470 sections, which means that the substantial part of the legislation will be in the form of rules. There are over 180 sections in the 2013 Act where rules have been prescribed and the draft rules were released by the MCA in three batches. It is widely expected that the 2013 Act and indeed the rules will provide for phased implementation of the provisions and in line with this, 98 sections of the 2013 Act have been notified and consequently the corresponding section of the 1956 Act cease to be in force.

The 2013 Act has introduced several provisions which would change the way Indian corporate do business and one such provision is spending on Corporate Social Responsibility (CSR) activities.

CSR, which has largely been voluntary contribution, by corporate has now been included in law. Basis the CSR provisions, as laid down under the 2013 Act and the draft CSR rules made available for public comments.”¹

The 1956 Act has been in need of a substantial revamp for quite some time now, to make it more contemporary and relevant to corporate, regulators and other stakeholders in India.

While several unsuccessful attempts have been made in the past to revise the existing 1956 Act, there have been quite a few changes in the administrative portion of the 1956 Act. The most recent attempt to revise the 1956 Act was the Companies Bill, 2009 which was introduced in the Lok Sabah, one of the two Houses of Parliament of India, on 3 August 2009.

This Companies Bill, 2009 was referred to the Parliamentary Standing Committee on Finance, which submitted its report on 31 August 2010 and was withdrawn after the introduction of the Companies Bill, 2011. The Companies Bill, 2011 was also considered by the Parliamentary Standing Committee on Finance which submitted its report on 26 June 2012. Subsequently, the Bill was considered and approved by the Lok Sabah on 18 December 2012 as the Companies Bill, 2012 (the Bill). The Bill was then considered and approved by the Rajya Sabah too on 8 August 2013. It received the President's assent on 29 August 2013 and has now become the Companies Act, 2013.

The changes in the 2013 Act have far-reaching implications that are set to significantly change the manner in which corporate operate in India. In this publication, we have encapsulated the major changes as compared to the 1956 Act and the potential implications of these changes. We have also included, where relevant, the provisions of the draft rules, which have been issued by the Ministry of Corporate Affairs (the MCA) till date for public comments. Such inclusions have been highlighted with an asterix at the end of the sentence (*).“²

Corporate Social Responsibility

The Ministry of Corporate Affairs (MCA) had introduced the Corporate Social Responsibility Voluntary Guidelines in 2009. These guidelines have now been incorporated within the 2013 Act and have obtained legal sanctity. Section 135 of the 2013 Act, seeks to provide that every company having a net worth of 500 crore INR, or more or a turnover of 1000 crore INR or more,

or a net profit of five crore INR or more, during any financial year shall constitute the corporate social responsibility committee of the board This committee needs to comprise of three or more directors, out of which, at least one director should be an independent director. The composition of the committee shall be included in the board's report. The committee shall formulate the policy, including activities specified in Schedule VII, which are as follows:

- 1) Eradicating extreme hunger and poverty.
- 2) Promotion of education.
- 3) Promoting gender equality and empowering women.
- 4) Reducing child mortality and improving maternal health.
- 5) Combating human immunodeficiency virus, acquired immune deficiency syndrome, malaria and other diseases.
- 6) Ensuring environmental sustainability.
- 7) Employment enhancing vocational skills.
- 8) Social business projects.

Contribution to the Prime Minister's National Relief Fund or any other fund set-up by the central government or the state governments for socio-economic development and relief, and funds for the welfare of the scheduled castes and Tribes, other backward classes, minorities and women. Such other matters as may be prescribed.”³

It is not secret that India is a developing nation-state; it has been the experience that the government machinery has often been unable to reach all those who require its assistance. Further, there are limitations on the activities that the government can indulge in. The private sector is viewed by many circles, sadly, as lacking in its participation in activities that go beyond its balance sheets. With a view to increase private spending on socially responsible projects, the government introduced section 135 to the Companies act 2013 which necessitates all companies above who meet a certain threshold to spend at least 2% of their average profits of the preceding three years on corporate social responsibility projects.”⁴

Objectives

Corporate Social Responsibility (CSR), a term widely use for defining the responsibilities of corporate world towards the society & environment. Although the term is not new in this Corporate world but its scope & meaning has undergone major changes from treating it as a mere charity in comparison with the responsibilities/duties of the Corporate towards the outer world.

There are many big entities who have been actively engaged in the CSR activities but unfortunately the number is relatively less. In order to encourage more entities to participate in the process of development of the society via- CSR, the Government of India has actually implemented the concept of CSR in the new Companies Act 2013, On 27th February, 2014, the

Government of India has notified the rules for CSR spending u/s 135 of the New Companies Act 2013 along with Companies (Corporate Social Responsibility Policy) Rules, 2014 effective from 1st April 2014.”⁵

Recently notified Companies (Corporate Social Responsibility Policy) Rules, 2014 has defined the term "Corporate Social Responsibility (CSR)" as follows: "Corporate Social Responsibility (CSR)" means and includes but is not limited to:

- i. Projects or programs relating to activities specified in Schedule VII to the Act; or
- ii. Projects or programs relating to activities undertaken by the board of directors of a company (Board) in pursuance of recommendations of the CSR Committee of the Board as per declared CSR Policy of the company subject to the condition that such policy will cover subjects enumerated in Schedule VII of the Act.

Meaning thereby, conducting all those activities which are either specified under Schedule VII to the Companies Act, 2013 or those which are recommended by the CSR Committee of the Board as per the CSR Policy and are undertaken by the Board of directors of the Company will be covered under the scope of activities of Corporate Social Responsibility.

Ministry of Corporate Affairs vide its Notification dated 27th February, 2014 (*which shall come into force with effect from 1st April, 2014*) has come up with the modified Schedule VII which covers wide range of objectives which can be undertaken by the Companies as a part of their CSR initiatives.”⁶

The objectives involve the following:

- A. Eradicating hunger, poverty and malnutrition, promoting preventive health care and sanitation and making available safe drinking water;
- B. Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly, and the differently abled and livelihood enhancement projects;
- C. Promoting gender equality, empowering women, setting up homes and hostels for women and orphans; setting up old age homes, day care centres and such other facilities for senior citizens and measures for reducing inequalities faced by socially and economically backward groups;
- D. Ensuring environmental sustainability, ecological balance, protection of flora and fauna, animal welfare, agroforestry, conservation of natural resources and maintaining quality of soil, air and water;
- E. Protection of national heritage, art and culture including restoration of buildings and sites of historical importance and works of art, setting up public libraries, promotion and development of traditional arts and handicrafts;
- F. Measures for the benefit of armed forces veterans, war widows and their dependents;

- G. Training to promote rural sports, nationally recognized sports, Paralympics sports and Olympic sports;
- H. Contribution to the Prime Ministers' National Relief Fund or any other fund set up by the Central Government for socio-economic development and relief and welfare of the Scheduled Castes, the Scheduled Tribes, other backward classes, minorities and women;
- I. Contributions or funds provided to technology incubators located within academic institution which are approved by the Central Government;
- J. Rural development projects.

The above mentioned objectives constitute the CSR activities and the companies which are covered under the provisions of Section 135 shall be required to carry out any one or more of the objectives as specified above along with following its CSR Policy.”⁷

Scope

Initially, CSR emphasized the official behavior of individual firms. Later, it expanded to include supplier behavior and the uses to which products were put and how they were disposed of after they lost value.

Methodology

A large body of literature exhorts business to adopt measures non-financial measures of success. While CSR benefits are hard to quantify, Orlitzky, Schmidt and Rynes.”⁸found a correlation between social/environmental performance and financial performance. The business case for CSR”⁹ within a company employs one or more of these arguments CSR is the procedure of assessing an organization's impact on society and evaluating their responsibilities. It begins with an assessment of the following aspects of each business:

- I. Customers
- II. Suppliers
- III. Environment
- IV. Communities
- V. Employees

Triumphant CSR plans take organizations ahead of compliance with legislation and lead them to respect moral values and respect people, communities and the natural environment.

Corporate Social Responsibility is sustainable – involving activities that an organization can uphold without negatively affecting the business goals.

CSR is not only about ecological accountability or having a recycling policy. It is about considering the whole representation of the company, from internal processes to your clients, taking in every step that a business takes during day-to-day operations. Rising economies such as India have also observed a number of companies enthusiastically engaged in CSR activities.

Organizations in India have been quite sensible in taking up CSR initiatives and integrating them in their business processes. It has become progressively projected in the Indian corporate setting because organizations have recognized that besides growing their businesses, it is also important to shape responsible and supportable relationships with the community at large. Companies now have specific departments and teams that develop specific policies, strategies and goals for their CSR programs and set separate budgets to support them. Most of the time, these programs are based on well-defined social beliefs or are carefully aligned with the companies' business domain. ¹⁰

To investigate the landscape of CSR activities in India, we collected data regarding the CSR policies and practices of top 200 public listed companies in India, which are categorized in "A" category by the Bombay Stock Exchange (BSE) of India.

Given that CSR literature suggests that organizations increasingly use CSR activities to position their corporate brand in the eyes of the consumers and other stakeholders through their annual reports (Sweeney and Coughlan 2008) and websites (Maignan and Ralston 2002), I collected data using these public sources.

I made an exhaustive list of all CSR areas in which the companies work and methodologies employed by them for carrying out the same, as reported by them in these public sources. I coded the areas of work for CSR, by these companies into 7 broad categories, these are 'Education', 'Health', 'Community Welfare', 'Entrepreneurship Development', 'Environment', 'Market Place' and 'Rural Development'.

These areas of societal development work is not related to the core business of the companies examined and is pursued by them on voluntary basis as there is no statutory requirement on any of the corporation to pursue in such activities. ¹¹

One of the most applauded aspects of the new Company Law regime is the mandatory social spending requirement. Faced with innumerable economic and social challenges as our country is, our lawmakers could not have ushered in a more revolutionary change through the new law.

The new Companies Act, 2013, has made it mandatory for companies to be socially responsible by introducing the 'corporate social responsibility' (CSR) regime. Section 135 of the new Companies Act, read with the CSR Rules, mandates companies meeting certain criteria to set aside two per cent of their net profits for undertaking and promoting socially beneficial activities and projects in India ¹²

Description

While the intent of the government is noble, it remains to be seen how effective these new regulations will be. There is already significant amount of confusion with respect to the coverage of foreign companies, while the act speaks only of companies registered within India; the rules make specific mention to foreign companies. We expect a clarification on this from the ministry post elections. The rules specify a 5% cap on expenditure on building CSR capabilities, it is

unclear as to what these expenses entail. There is also the elephant in the room that is the applicability of tax deductions on expenses incurred for CSR projects. More often than not, CSR expenditure becomes the bone of contention between the tax payer and the tax department. While the courts have sided with the tax payer in cases where the CSR activities have been for the purpose of welfare of local communities and have brought upon useful change in lives of the local populace, or where the employees and their families have benefited from such initiatives. However it is not clear how the department shall view the deductions claimed by the assesses under the mandatory CSR scheme. Further, it is also not apparent as to how the department shall view expenses incurred in excess of the 2% limit by able and willing assesses. This battle, in our opinion shall be fought over a number of years.

The rules envision scenarios where the allocated amount for CSR may not be fully utilized, however it is not clear whether mere disclosure of the same by the board would absolve the company from the responsibility to spend the unutilized portions or if such monies would accrue to the planned spends from subsequent financial years. There is also the issue of corporate governance, small companies of two directors will see a curious situation where the two directors are not just framing the policy but also implementing it and in their capacity as share holders reviewing the results.”¹³

Conclusion

Considering the increasingly vast and complex business environment, the move of the Ministry of Corporate Affairs is a welcoming step which apart from contributing towards society, plays a major role in various ways which includes attracting and retaining employees in a such a way as to increase morale of the employees along with creating a sense of belonging to the company and contributes towards enhancement of company's own goodwill, positive image along with bringing competitive advantages. Also, as rightly mentioned by United Nations Industrial Development Organization (UNIDO), CSR is generally understood as being the way through which a company achieves a balance of economic, environmental and social imperatives ("Triple-Bottom-Line- Approach"), while at the same time addressing the expectations of shareholders and stakeholders.

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References

1. Vishesh C Chandiok “National Managing Partner “Grant Thornton India LLP.
2. PWC.In (Companies Act, 2013 key highlights and analysis).
3. Team in Advisor India; “Corporate social Responsibility (CSR) provision in Companies Act 2013 “; March, 21 2014.
4. Arkay & Arkay Chartered Accountants 1101, KLJ Tower North, NSP New Delhi 110034.
5. Meha Kapoor ;”Corporate Social Responsibility Mandating Companies to contribute towards society “; April, 9 2014.

6. Henant Goyal & Sandhya Agarwal ; “Corporate Social Responsibility as per new Indian companies Act 2013; March 25, 2014.
7. Nittin Kumar; “Coporate Social Responsibility: An Analysis of impact and challenges in India”; November 5, 2014
8. Orlizky, Marc, Fank L, Schmidt, and Sara L Rynes; “Corporate Social & Financial performance: A Meta Analysis”.
9. Bhattacharya Sen & Korchum; 2011
10. India Briefing July 10, 2012.
11. Renendra Singh & Sharad Agarwal; “Corporate Social Responsibility for Social Impact” ; June 2013; IIM Calcutta & IIM Ranchi.
12. Remesh K. Vaidyanathan & Pooja Thacker; “The New CSR rules: confusion or clarity”; March 18 2014.
13. C S Dhanapal; “Responsibility under the companies Act 2013”; December 3, 2013.

Websites

1. <http://www.grantthornton.in/companies act 2013>.
2. <http://www.investopedia.com>
3. <http://www.en.wikipedia.org>
4. <http://www.india.briefing.com>
5. <http://www.google.co.in/>

Inventory Management in Fertiliser Industry of Rajasthan

Surendra P. Kothari

Abstract

This paper deals with the study of the Inventory Management in fertilizer industry with special reference to Rajasthan, with the supply chain primary activities such as sourcing of natural gas (inbound logistics), manufacturing of ammonia and urea, product storage, dispatch of products (outbound logistics) for distribution and sale. Business in global environment should face opportunities and threats regardless of location and Rajasthan. Firms cannot isolate themselves from ignoring external factors such as economic trends, technology innovations in other countries.

Introduction

A company can design and develop the product in United States, manufacture in Rajasthan in India and sells in Europe. The Companies have changed the methods by which they manage their operations and supply chain activities. The spread and modernization of infrastructures and transport has also changed the trade and the intensified competition has elevated the importance of Inventory Management to new levels. Inventory Management & Outsourcing Economics and institutional Liberalization, Privatization and Globalization (LPG) increased the competitiveness of the corporate. A number of factors changed globalization dramatically since the last decade. As a result the corporate faced increasing competition from global firms.

Literature Review

The drivers of globalization are the reduction of tariffs, improved transportation systems, information and communication technology, and availability of global markets, products and services. These changes have enabled the global competitors to make the products and services available to customers worldwide. These pressures have led to increased emphasis on re engineering internal business processes and improve services to customers and as a means to reduce costs, and better supply chain throughout the planning and operations working in closer collaboration with suppliers. Products and services, changes in technology and globalization have increased the most dynamic Rajasthan markets and greater uncertainty in customer demand. Users can access more goods and services in the Rajasthan. Therefore, to understand the company's competitive position, changes in customer demands and the requirements for the goods and services depends on its ability to respond. Inventory Management tools and technology allows organizations to respond to the environmental changes and policies.

Therefore these are the reasons why Inventory Management has become essential during the

last decade. This intensified competition had driven the business world to look for core competencies and enhanced performance. If a particular organization in some country has the core competence for a certain product or service, it will get the business for that product or service. This is called global outsourcing. Inventory Management According to Lambert and Stock (1993) logistics, a widely accepted term by today's professionals, had in the past a variety of names including physical distribution, Inventory Management and business logistics. The Council of Logistics Management defines logistics as "The process of planning, implementing and controlling the efficient, cost-effective flow and storage of raw materials, in-process inventory, finished goods and related information from the point of origin to the point of consumption for the purpose of conforming to customer requirements"

Methodology

The analysis may be possible by studying the data available in the company. The methodology includes collection of secondary and primary data, sampling design, classification and tabulation of data and diagrammatic and graphical representation of data. Finally the above data is analyzed and reported The secondary data was collected from organization records, management reports, the department of fertilizers and the Fertilizer Association of India and the special project reports to understand the present state of Inventory Management primary activities. The Primary data was collected from the truck drivers of in and around the organization with the help of questionnaire. The questionnaire consists of close ended questions of both multiple – choice questions and checklist questions. The questionnaire has two parts. The first part of the questionnaire was relating to social aspects of truck drivers and the second part consisted of economic aspects of truck drivers and a total of 14 questions relating to age, educational qualification, Experience, Income, House details, Own house details, Rent details, marital status, No of children, Education of children, Spouse's education, Amenities in house, etc (1,2,4,7).

Analysis

According to the above definition logistics consists of the following four flows: Material Flow: Flow of materials from their sources through necessary processes including their storage, retrieval and the delivery of raw materials. Merchandise Flow: Flow of finished goods from the factory to the end user in the distribution channels. Money Flow: Flow of money including advances from organizations to suppliers of raw materials, energy, services, etc. and into organizations from the wholesalers, distributors, customers, etc. Information Flow: Flow of required information from and into the organization through various communication channels in the logistics system. Since, interruptions in any of the above four flows affect an organization's raw materials supply (purchasing), manufacturing (operations) and marketing (distribution) functions. According to Fawcett and Fawcett (1995) there exists a need to integrate these flows through effective management of infrastructure, materials, technology and people. In this thesis, the concern is with the Inventory Management of NFCL. More specifically, it is concerned with the inbound and outbound logistics of the company. Inventory Management Practices. In

Rajasthan approximately two percent of the GDP is spent on logistics (Planning Commission report-2002).

Measures and Logistics

Inventory Management and logistics are still in the embryonic stage in India. The current lull in the economy is forcing many industries to examine their costs, and cut it down in size. Today excellent logistics management has become essential for success of companies. Logistics function includes the total flow of material, from the purchase of raw materials to delivery of completed products to the ultimate users. As such, it includes the activities of sourcing and purchasing, conversion including capacity planning, technology selection, operations management, production scheduling, materials planning, distribution planning and management of industry warehouse operations, inventory management, inbound, internal, and outbound transportation; linkage with customer service, sales, reverse logistics, promotion and marketing activities. Successful Inventory Management is extremely complex because of large number of players with varying interest or objectives are involved. Though the supply chain of each company has its own unique features, the following general principles help in management of supply chains.

- Begin with the customer
- Manage logistic assets
- Organize customer management
- Integrate sales and operations planning
- Leverage manufacturing and sourcing
- Focus on strategic alliances and relationship management
- Develop customer driven performance measures

A significant new trend has been evolving in logistics management in the last decade - one that involves the collaboration of all participants in the supply chain in order to reduce the cost of total logistics system. It has been referred to as "Supply Chain Management", "Logistics Partnership" or "Inter-Corporate Logistics Management". In traditional Logistics "total cost concepts" model, companies worked to manage logistics as an entity and to lower the total logistics costs to the organization(3,5,6)

Detailed Record

The model evolved balancing trade-off among production run lengths, inventory, transportation, and warehousing and customer service. Later an increasing number of companies realized that though the total cost concepts might be useful, it is tainted because it does not consider the efficiency of the entire supply chain. The Inventory Management on the other hand involves the active collaboration of two or more participants in the supply channel (Supplier, manufacturer, distributor, and/or customer) to manage all the logistics resources in the most efficient manner possible. The concept of "quick response" gained broad favor as companies in all parts of supply chain developed an appreciation of its potent benefits. Quick response involves the integration of the supply chain, effectively linking retailers, suppliers (manufacturers/ distributors) and carriers in close communication and integrated decision making. Key elements of quick response include:

- Point-of-usage data capture
- Hem - level management
- Rapid Communication
- Partnerships
- Discipline and commitment

Effective quick - response systems' benefits include lowering inventories by as much as 40 percent, improving in-stock availability significantly, cutting transaction and administrative costs in to

half, reducing replenishment lead to a third or less of their former levels, identifying slow-selling items sooner, and reducing operating costs for all players in the supply chain. Inventory Management strategy involves determination of what performance criteria the logistics system must maintain - more specifically, the service levels and cost objectives the logistics system must meet. As cost and service normally involve a trade-off, a company must consciously consider that trade-off and determine the desired supply chain performance. This process involves consideration of the company's strategic objectives, its specific marketing strategy and customer service requirements and its competitors' cost service position (8,9,10). Supply chain planning involves the development and management of all logistics resources in order to attain the desired cost-service performance consideration, it might include number and location of warehouses, type of warehouses, mode and carrier selection, inventory position, inventory levels, order entry technologies, information system etc.

Opportunities for differentiation - based on operational, logistics, or customer services excellence are more likely to be exploited. Inventory Management tends to have a more visible and more important role in the Company. Investments in the supply chain function or infrastructure are more likely to be approved. Just - in - time (JIT) Logistics: It is useful to classify JIT programs into two categories, JIT production and JIT logistics. These programs typically focus on the reduction of set up funds for key operations, the reduction of lot size, and the enhancement of quality - all leading to lower work - in - progress inventories. JIT logistics programs, on the other hand, apply JIT principles to the management of raw materials, inventories and beyond supplies. For JIT logistics plans to work, four 'Pillars' must be in place. They are:

- Stable production schedules
- Efficient Communication
- Co-coordinated transportation
- Quality control These four principles are critical to the integrated management of suppliers.

The 1990s have been called the "decade of customer service". All industry sectors are placing a premium on quality, including quality customer service. Serving customers as they want to be served and "making company easy to do business with" is competitive objective for the next millennium. At the same time the meaning of effective customer service is changing, and companies must meet an increasingly higher standard. Customer Service Pyramid is an effective framework for formulating a customer service strategy in a fluid marketing environment. Logistics as a Process According to Prof. Bernard La Lode of Ohio State University (1998) logistics is not a focused functional activity but one that enables the integration of activities across functions. An effective way to promote this expanded role for logistics is to position logistics as a process, not as an activity or function. These are three important sub-processes as part of the logistic process.

They are:

- Integrated Production and distribution strategy development
- The replenishment process
- The order management process A well-designed forecasting system can contribute significantly to logistic performance.

Many consumer products companies are trying to operate with 25 to 60 percent forecast error (on the stock-keeping unit level) in their one month- out forecasts. This error range wreaks havoc with inventory levels and customer service performance. "Best Practice" companies, on the other hand, consistently are able to achieve 15 to 20 percent forecast error rates. Companies that perform poorly in their forecasting typically commit two or more of the "Six of forecasting" given below:

- Letting finances drive forecasts
- Having no forecast "owner"
- Having insufficient analytical support
- Using a single forecasting approach for every thing
- Having no sales and operations planning meeting
- Failing to track forecast error.

Many companies are discovering that distribution resource planning (DRP) systems can reduce costs, improve customer service, and better their inventory management. DRP systems provide a full view into the warehouse network by first examining demand at the end of the channel and accumulating requirements back through the warehouse network. This approach allows for full visibility of needs and better management of inventories. DRP involves both inventory management and distribution planning. A module of distribution requirement planning (DRP) extends the concepts of materials requirements planning in to a multi-echelon-warehouse inventory environment. The results are time-phased replenishment schedules for moving inventories across the warehousing network. DRP offers an accurate simulation of distribution operations with extended planning visibility, allowing logistics departments to manage all resources better.

Survey Basis

The last decade of this century has seen many significant changes. The important ones are: the end of cold war, breaking up of the former USSR, formation of trade blocks (EU, ASEAN, NAFTA, etc.), emergence of World Trade Organization, and globalization of World Economy. Feasibility of global sourcing and marketing of quality products and services at competitive prices in the world Rajasthan have called for serious re-look into the logistics functions in such industries as steel, cement, fertilizer, chemicals, petroleum, etc., where 8 logistics cost forms a significant component of the cost of goods sold. Gyulaet. al. (1994) And Scully and Fawcett (1993) gives

details on global manufacturing. Based on a survey of Loon Major European companies, Kearney (1995) observes that logistics function is becoming more demanding and complex as the business environment itself is becoming complex and demanding (18,19).

The critical factors responsible for demanding logistics management are: (1) Escalating customer expectations and demand, (2) Cycle time compression, (3) Global sourcing, (4) Global Rajasthan, (5) Corporate restructuring, (6) Supply chain partnership, (7) Productivity pressures and (8) Environment awareness. Though supply chains have existence since the beginning of civilization, this name and associated approach to looking at the issue is new. The focus so far in the area has been to look at different aspects of the supply chain such as procurement, storage, production, distribution etc, separately and there are different specialists for each. An integrated view of the links as parts of a supply chain is of quite recent origin. Therefore, when one changes the focus from different functional areas to the supply chain concept, some fundamental issues arise that need to be addressed(11,12)

The entities of the chain or the departments of the supply chain become dominant and try to form sub-goals and achieve them at the expense of the total supply chain goal. Different entities in the supply chain have different strength. This leads to a condition that the chain is only as strong as the weakest link.(20,21)

The extra money spent in making some areas of the supply chain very strong is wasted because this extra strength does not in practice contribute to the operation of the total supply chain significantly. In a chain if two adjacent rings are not connected the chain is not one but two. The same is the case with the case of a supply chain where strong connections between adjacent links are vital for its existence and functioning. These are called supply chain disconnects. The presence of a loop or a cross-link in the supply chain creates multiple paths to choose from one end of the chain to another.

At each such loop or cross-link the conditions under which each path should be taken should be spelt out clearly. Looping and cross linking of supply chains create many information flow problems, information about the same thing coming from different links might not be at agreement. It has been found that in most supply chains there are people to study and look at the individual departments, because of the organizational structure followed, but almost no one looks at the 9 supply chain as such in total. It is the performance of this complete chain that ultimately matters. Need for the study: The specific need for the study of Inventory Management in Fertilizer industry with special reference to NFCL is to study the various primary activities of Inventory Management like inbound logistics, operations, outbound logistics and sales and services as the agriculture is one of the strongholds of the Indian economy and accounts for 14.6 per cent of the country's gross domestic product (GDP) in 2009-10, and 10.23 per cent (provisional) of the total exports. Furthermore, the sector provides employment to 55 per cent of the work force The Government of India from time to time has taken considerable steps for the development of Agriculture Sector. Fertilizer in the agricultural process is an important vicinity of concern. Fertilizer industry in India has succeeded in meeting the demand of all chemical

fertilizers in the recent years. The Indian Fertilizer Industry is one of the allied sectors of the agricultural sphere. India has emerged as the third largest producer of nitrogenous fertilizers. The adoption of back to back Five Year plans has paved the way for self sufficiency in the production of food grains. In fact production has gone up to an extent that there is scope for the export of food grains. This surplus has been facilitated by the use of chemical fertilizers. The large scale use of chemical fertilizers has been instrumental in bringing about the green revolution in India. The NFCL produces and a wide range of fertilizers.

Urea (widely used) nitrogenous fertilizer is manufactured at the Kakinada Plant as well as Rajasthan. And the pool urea is imported at the Kakinada and the Vizag Ports. The farming community in Andhra depends to a large extent on the urea produced by Nagarjuna Fertilizers and Chemicals Limited (NFCL). NFCL presently Markets around 0.6 million tons of imported urea and 1.2 million tons of manufactured urea. NFCL is major urea provider for the Rajasthan

This is the main reason to choose this company for my study. 10 Objectives of the study The objectives of this study are 1. To study the supply chain of the Nagarjuna Fertilizers and Chemicals Limited 2. To understand the performance of various sectors and to compare the performance of NFCL with other private companies 3. To understand and analyze the various inputs (inbound logistics) of NFCL and to study how effective and efficient they are using in the INVENTORY MANAGEMENT of NFCL 4. To study and analyze the various outbound logistics of NFCL 5. To study and analyze the problems of the Truck Drivers as they are the key factors of logistics and the supply chain management. 6. To develop models for integrated supply chain planning for Nagarjuna Fertilizers and Chemicals Limited. 7. To make suggestions for improvement (13,14,15).

Conclusion

The present study focused on the primary activities of Inventory Management in Fertilizer industry with special reference to Rajasthan. In order to find out and analyze the bottlenecks in Inventory Management of NFCL and Fertilizer industry the secondary data of inbound and outbound logistics for 10Years (2001 - 2011) was collected from organization records, management annual reports, the department of fertilizers and the Fertilizer Association of India and the special project reports. The Primary data was collected from the truck drivers of in and around the organization with the help of questionnaire. The sample is selected based on random sampling. The Survey conducted in the city of Kakinada and its surrounding villages through questionnaires to 200 drivers (16,17).

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References

1. "Production and Operations Management: Manufacturing and Services", R.B. Chase, N.J. Aquiline and F.R. Jacobs, Eighth Edition, 1998, pp 582-583

2. ^ "Operations and Supply Chain Management: The Core", Third Edition, F. Robert Jacobs and Richard B. Chase, p 346
3. ^ Maynard's Industrial Engineering Handbook, Fifth Edition, Kjell B. Landin (ed.), McGraw-Hill 2001, p G.8
4. ^ "Factory Physics for Managers", E.S. Pound, J.H. Bell, and M.L. Spearman, McGraw-Hill 2014, p 47
5. ^ "New Era of Project Delivery - Project as Production System", R.G. Shiny and T.R. Zabelle, Journal of Project Production Management, Vol 1, pp Nov 2016, pp 13-24, <https://www.researchgate.net/publications/312602707>
6. ^ "SKUs and UPCs: do your products have a unique identity?". www.tradegecko.com. Retrieved 2015-11-23.
7. ^ <http://www.specialinvestor.com/terms/1072.html>
8. ^ "Construction: one type of Project Production System", Proceedings of 13th Annual Conference of the International Group for Lean Construction. Sydney, Australia, 19-21 Jul 2005. pp 29-35
9. ^ "Strategic Positioning of Inventory to match demand in a capital projects supply chain", K. D. Walsh, J. C. Hershauer, I.D. Tommelein and T. A. Walsh, Journal of Construction Engineering and Management, Nov-Dec 2014, p 818
10. ^ "New Era of Project Delivery – Project as Production System", R. G. Shenoy and T. R. Zabelle, Journal of Project Production Management, Vol 1, pp Nov 2016, pp 13-24 https://www.researchgate.net/publication/312602707_New_Era_of_Project_Delivery_-_Project_as_Production_System
11. ^ Inventory and Logistics Operations, CIPS Study Materials, Profex Publishing, 2012
12. ^ aspenONE Supply & Distribution for Refining & Marketing
13. ^ <http://www.bsu.edu/web/scfrazier2/jit/mainpage.htm>
14. ^ Relevance Lost, Johnson and Kaplan, Harvard Business School Press, 1987, p126
15. ^ Internal Revenue Code, § 472: Last-in, first-out inventories, accessed 23 December 2016
16. ^ R. S. SAXENA (1 December 2009). INVENTORY MANAGEMENT: Controlling in a Fluctuating Demand Environment. Global India Publications. pp. 24-. ISBN 978-93-8022-821-1. Retrieved 7 April 2012.
17. ^ Armony, Mor. "The Impact of Duplicate Orders on Demand Estimation and Capacity Investment".
18. ^ Lee, Perlitz (2012). Retail Services. Australia: McGraw Hill. p. 440. ISBN 9781743070741.
19. ^ "Who moved my Parmigiano?". italiannotebook.com.
20. ^ Coulter, Jonathan; Shepherd, Andrew W. (1995). "Inventory Credit – An approach to developing agricultural markets". fao.org. Rome.
21. ^ CTA and EAGC. "Structured grain trading systems in Africa" (PDF). CTA. Retrieved 27 February 2014.

Recruitment and Selection for Temp Staffing at Reality Events and Motion Pictures

Swati Chaturvedi

Abstract

The nature of employment is evolving at a very fast pace. The change is provided impetus by the social and economic globalization process. New flexible employment strategies are changing the experiences of work for many. This report uses a qualitative approach to understand the phenomenon of temporary staffing using semi structured interviews to gain an insight into not only the lived experience of temporary agency workers, but the Client Company and temporary agencies with which they interact through.

Keywords : Recruitment, Event Management, Selection, Temporary Staffing

Introduction

Temporary staffing, one of the leading HR trends today, is expected to increase its penetration significantly, given the current uncertain economic conditions. Companies and captive units are likely to increasingly depend on staffing agencies to lease them with the required manpower in time. Temporary recruitment takes place when a temporary work agency finds and retains staff, while other companies in need of short-term workers enter a contract with the agency to send temporary staff on assignment.

The event industry is one of the world's largest employers and contributes major positive economic impact (Theocharis, 2008). The event is all about people-people coming together to create, operate, and participate in an experience (Silvers, 2004). It is an activity that gathers the target group in time and room, a meeting where a message is communicated and happening is created (Eckerstein, 2002). The term event is used for describing different activities designed for different purposes. These activities can be art, sports, tourism and social activities, and can also be activities organized by giant organizers more professional and more formal (Argan, 2007). According to Getz and Goldblatt, events are 'a unique moment in time' and 'aside from everyday occurrences' (Berridge, 2007). Public or private, commercial or charitable, celebratory or commemorative-events bring people together to share an experience and produce a measurable outcome (Silvers, 2004). Civic events, conventions, expositions, fairs and festivals, hallmark events, hospitality, incentive travel, meetings and conferences, retail events, reunions, social life-cycle events, sport events, and tourism are the examples of subfields of events (Goldblatt, 2005). Every event has an organization behind it; managing activities, organizing funding, administering staff and voluntary personnel, undertaking marketing and public relations, organizing security, printing leaflets and tickets, hiring performers, arranging decorations,

sorting out parking and many other activities (Tassiopoulos, 2005). The way in which an organization deals with events is known as event management. It may include the organization's objectives for managing events, assigned roles and responsibilities, ownership of tools and processes, critical success factors, standards, and event-handling procedures. The linkages between the various departments within the organization required handling events and the flow of this information between them is the focus of event management. (Bheet. al., 2004). Event management and event marketing have emerged over the past decade as a vibrant sector of the tourism and leisure industries. The number, diversity and popularity of events have also grown throughout this period. As the number of events increase, there is a growing realization about the continuing need to develop event management professionals who are able to create, organize, and manage events (Arcodia and Reid, 2005).

Staffing Process in Event Management Companies

Staffing in an event management company is as diverse as the event itself. Adequate staffing depends on the number of guests anticipated to attend the event, and are employed to handle the multiple tasks that under-gird a successful event. Staffing encompasses individuals such as servers, coat checkers, drivers, special needs assistants, valet parking attendants, customer information agents, and ticket-takers. Staffing may also attend to the details of directing the influx of guests, the positioning of booths and vendors, attending nurseries, assisting guest speakers, delivering supplies during the event, and containing litter. Additional staff may be needed to set up tables, arrange chairs for seating, and on occasion, assist the decorating committee.

Many services are contracted for the event, such as caterers, chair and table rentals, florists, ticketing agents, and the event venue or location itself commonly provides personnel to handle their respective services. These may be included within the scope of contracted services, or be offered at an additional cost. Savings can be realized with the designation of volunteers from company ranks, membership rosters, or interested individuals willing to perform these functions, provided direction is available to coordinate individuals to carry out assigned tasks. Often, it is to the benefit of event organizers to contract professionals offering such services, who likely provide adequate insurance and training to guarantee these functions are performed to event sponsors' expectations.

Research Methodology

Title of the Project:

Study of Recruitment and Selection for Temp Staffing: A Case Study at Reality Events and Motion Pictures

Objectives

Understanding the process of recruitment and selection process in event management companies.

Knowing the process of recruitment in REALITY EVENTS AND MOTION PICTURES

Knowing the sources used for temp staffing at various levels and various jobs in an event management company.

Scope of Study

The research found application in the company as the core business of the company is event management which requires temporary staffing on a regular basis.

The study does not look into financial aspects of recruitment cost analysis

The study was done only to know the various sources of recruitment for an event management company.

Research Design

The research design adopted by researcher is descriptive (encompasses case study, naturalistic observation and survey). In this study the research method adopted was case study as this approach is useful to investigate contemporary phenomenon within real life context, especially when the phenomenon and the context are not clearly evident (Silvestre and Dalcol, 2010; Yin, 2003) research by case study is more suited to how and why questions which can be explanatory in nature.

Sampling Design

To select a sample for this study, researcher chose to use judgmental sampling which is a probability sampling method which allows selecting the case that seems most suitable to answer the research question. Data for this study was collected from both primary and secondary data sources. The main technique employed was personal semi-structured interview and observation.

Data Collection

Primary data: three group interviews were conducted with the directors of the company and other valuable information was collected through unstructured conversations with other employees of the firm and through direct observation of the hiring process.

Secondary data was collected from the books, journals, and websites and literature of the company.

Difficulties faced and limitations of the Study

· The client organization refused to permit the researcher to talk to their temp staff or agreed to the same, only in their presence. They appeared apprehensive about the kind of information their staff would reveal.

- The client organizations representatives wanted to go through the questionnaire, before letting their temp staffs interact with the researcher.
- The present study is constrained to the extent that it examines just the recruitment process of the temp staff.
- Lack of generalisability to wider populations

Human Resource Management in Event Management

In order to implement any kind of successful event, human resource planning and management acts as a high priority. Events have a timeline extending from planning to the actual event and the time after the event. As an event date approaches, the need for human resources needed increases and reaches its peak during the implementation. This varied process in event production sets a number of potential challenges (Allen et al. 2008, 233). Challenges can be in acquiring paid staff given the short-term nature of employment. The short-term and hasty production might also cause challenges in staff training and maintaining staff well-being. The closer the event date comes, the more of the work load is usually done by volunteers. The human nature factor cannot be left unnoticed by the management in any types of events.

When planning human resources for events, the key point is to study the event's vision and mission, objectives and strategy (Mehndiratta, 2008). Human resource planning for events should take into consideration issues such as; the processes and means of work. Especially in case of growing events HRM has a high value. The need for an increased number of staff, both paid and volunteers, needs to be assessed thoroughly. One of the key issues to avoid for event organization is to avoid high turn-over of staff.

An event human resource strategy contains a number of tasks that an organization needs to implement in order to reach a desirable end result. Allen et al. (2008) introduces several actions to consider for an event's human resource strategy and objectives. Staffing is the main strategic approach for an event when approaching HRM. Important factors that managers have to take into account are; the number of staff needed (paid and volunteers), the skill requirements for the staff, experience that staff members need to have and availability of time necessary. In addition, when recruiting volunteer staff, the positions and numbers of supervising staff have to be conceived.

In order to achieve an operational number of volunteer and paid staff, recorded information from past events should be exploited. Information such as; location, possible changes of event site or the number of venues should be considered. If the organizer does not possess relevant information from the event's own viewpoint, information about similar events should be studied.

When staffing is considered, more detailed job analyses should be executed. In order to reach reliable results, the manager should define tasks and responsibilities based on the staff's abilities and special skills.

Recruitment of employees is vital for an organization so that it chooses the right people for the right job. Meticulousness in the previous phases enables best outcomes from recruitment. The extent of recruiting volunteer and paid employees may vary in different cases. In cases of the recruitment of volunteers there are fewer specifications in employee requirements of employee when compared to the recruitment of paid staff.

Data Analysis

Reality Events and motion pictures was started with the plan and produce the most creative high-end weddings, corporate events, conference & exhibitions, private parties, entertainment bookings and more. It is a Jaipur based company but has its wings spread all over Rajasthan. It was started in 2014. It has produced events of all sizes and personal care and planning to the minutest detail is their forte.

Data has been collected from 1 production assistant and 1 senior recruitment consultant and 1 Managing Director of REALITY EVENTS AND MOTION PICTURES PRIVATE LIMITED.

Findings

Starting point for the interviews and selecting the interviewees resulted from the researcher's own experiences and interviewees responsibility areas. All of the interviewees acted in different roles. Nevertheless their tasks and activities were towards common goals. Due to the fact that each of the interviewees, added information base to their answers and enabled them to compare executed changes compared to year 2014, all of the interviewees took part in the planning phase of human resources. Atul was not part of the planning during 2015. Nevertheless, he was included in feedback meetings.

Analysis

The response of the interviewees can be summarized under the following heads:

1. Sharing responsibilities of the production as early as possible

This was in order to achieve untroubled responsibilities among the production team and to make organizational structure even more clear. Nevertheless, due to the fact that the actual event and its on-site production concentrated on such a short period of time, it was not possible to hire employees in too early phases for multiple tasks. Usha mentioned obscurity that is a common phenomenon in event production industry. An Important tool used for this was documentation of employee's responsibilities so that same mistakes are not made twice. Nevertheless, when dividing responsibilities into several sections there was a risk of overlapping tasks. That could cause situations where more than one person is concentrating on the same issues or it might even cause development of tasks that are not anyone's responsibility.

2. Handling day-to-day challenges on the event site

Unplanned factors such as, reconstruction of various parts of the infrastructure or delayed performance by subcontractor caused immediate setbacks in his tasks. That inevitably led to longer and harder working days. Regardless of planned factors the nature of the outdoor event production causes unpredictable situations.

3. Detailed production schedule.

It was pointed out that when something unpredictable happened there should have been more options on how to carry on or a plan b. The idea for internal information sharing is planned well but was not executed as well as it should have been.

4. Efficient internal communication

Lots of effort is usually put in to that and it was felt that if the information inside the production team members had been more precise they could have saved a lot of time.

5. Development needs for the future

The biggest challenge for an event management firm was the fact that the size and demand of the events vitiate with time. That makes the planning process extremely challenging and different every year. If multiple parts concerning production change it causes the situation, where last year's experiences cannot be fully exploited. In the same context the importance of record keeping and documentation of tasks and information cannot be overstressed.

Conclusion

- Due to the nature of work of event management, developing a perfectly functional and adaptable human resource plan is not fully achievable. Even though the information and experiences are shared, each year brings new challenges and different surroundings
- Organizational structure of the employees has undergone great changes during the festival's history yet being challenged over again every year.
- Outcomes of the interviews were more or less in-line and offered a broad aspect of event management.
- Each of the interviewees stated that a more accurate and detailed infrastructure production plan is needed.
- Communicative and detailed real time information sharing was pointed out as a required development.
- In order to achieve a more efficient and manageable production plan for the infrastructure, information sharing also with subcontractors should also be improved.
- Another aspect relating to information sharing that was mentioned to be improved was infrastructure production staff meeting on a daily basis on the festival site.

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References

1. Allen, J., O'Toole, W., Harris, R., McDonnell, I. (2008) *Festival & Special Event Management "fourth edition"*. John Wiley & Sons Australia Ltd, Milton
2. Alpander, Guvenc G. Human Management Resources Planning. New York: AMACOM, 1982.
3. Bennett-Alexander, Dawn D., and Laura P. Hartman. Employment Law. 5th Ed. Boston: McGraw-Hill Irwin, 2007.
4. Berrett-Koehler Publishers, Inc. San Francisco

5. Bohlander, George and Scott Snell. *Managing Human Resources*. 15th Ed. Mason, OH: Thomson South-Western, 2009.
6. Brody, R. (2005) *Effectively Managing Human Service Organizations "Third Edition"* Sage Publications Inc. Thousand Oaks
7. Byars, Lloyd L., and Leslie W. Rue. *Human Resource Management*. 9th Ed. New York: McGraw-Hill Irwin, 2008.
8. Cameron, K. (2008) *Positive leadership, Strategies for extraordinary performance*
9. Caruth, Donald L. *Compensation Management for Banks*. Boston: Bankers Publishing Company, 1986.
10. Cascio, Wayne F. *Managing Human Resources: Productivity, Quality of Work Life, Profits*. 7th Ed. New York: McGraw-Hill Irwin, 2006.
11. Choudhury, S. *Event Management* Accessed on 7 November 2012 www.syedchoudhury.co.uk
12. Juli, T. (2011) *Leadership Principles for Project Success*
13. Kogan Page Limited
14. Mehndiratta, V (2008) *Event Management*, Abhishek Publications Referred on to 6 November 2012. <http://jamk.fi/kirjasto.ebrary/books>
15. Prentice Hall PTR
16. suvilahti.fi (2012). The website of the Suvilahti power plant. Accessed on 2 November 2012.
17. Walker, James W. *Human Resource Planning*. New York: McGraw-Hill Irwin, 1980.
18. Walsh, James. *Rightful Termination*. Santa Monica, CA: Merritt Publishing, 1994.
19. www.flowfestival.com
20. Young, T., L. (2006) *Successful Project Management "second edition"*

An Insight into Criminalisation of Politics in India

Dr. Abhishek Baplawat

Abstract

"It is a fact in present politics that the bigger a 'Goonda' is, the greater is considered to be his usefulness and value during the course of elections"

At present we very often come across the reality of criminalization of politics. The meaning of the term is not new to educated people and newspaper readers. For academic purposes a definition is to be given here. When politics or political power is used by self interest, seeking persons for pecuniary gains or various other advantages such as to get special position in administration or to rise to the higher stage of administration which is normally not feasible.

According to Association for Democratic Reforms (ADR), 162 of 543 MPs elected in the 2009 elections had criminal charges against them. This means that 30% of our MPs had cases pending against them in courts of law. In March 2014, the Supreme Court passed a landmark judgement asking for speedy trials of charge sheeted politicians in government. Although the Constitution had provisions for disqualification of convicted politicians, cases would lie pending for long years with politicians still in power. This protected especially those charged with serious crimes such as murder and rape. Here is a timeline of how the judgment came about

A preliminary analysis of the candidate data compiled by the Association for Democratic Reforms (ADR) for the Lok Sabha and Assembly elections gives an idea of the degree to which criminalisation has seeped into Indian politics. This article examines the self-sworn affidavits submitted to the Election Commission of India by over 10,700 candidates who contested the Lok Sabha 2004 and 2009 elections and also takes a preliminary look at the number of criminal candidates that are contesting for the current Lok Sabha election. The analysis done by ADR from these affidavits has been further used and analysed to understand the patterns of criminalisation in our political system. With the 16th Lok Sabha election in progress, it becomes pertinent to reflect on these figures and their implications for the democratic processes in the country.

From ADR's compilation of data on 5,380 candidates contested the Lok Sabha election 2014, 17 per cent have declared criminal charges in the affidavits submitted to the Election Commission; 10 per cent have declared serious criminal charges such as murder and rape charges. Aam Aadmi Party (AAP) candidate S.P. Udayakumar, Kanyakumari constituency, Tamil Nadu, faces the highest number of criminal cases – 382 including 19 charges related to Attempt to Murder (IPC section 307) and 16 charges related to sedition (IPC section 124A). He is closely followed by M.

Pushparayan, also an AAP candidate, Thoothukudi constituency, Tamil Nadu, with 380 criminal cases.

Criminalisation of politics means to use politics or political power for nefarious gains. To gain something not legal or normal has been called crime. Here the word crime is used in politics in special sense. For example an officer in administration wants to be promoted to higher post. But this is not his due. He uses politics or political power to achieve this. The person succeeds. But the matter does not stop here. The person who helped to get undue privilege will again use this person for the achievement of his purposes which are, in normal course, not due. This is the policy of give-and-take and this happens behind the curtain.

In the present Politics Criminals enter in to it to become politicians and then patronize other criminals. The dire consequence of this unholy alliance between criminals and politicians is that at every level from bottom, Panch at panchayat level to chief minister or ministers at State and Central level, criminals are being elected and appointed to the positions of power.

The Reasons of The Criminalization of The Politics

1. The criminals enter into the politics to gain influence and ensure that cases against they are dropped or not proceeded with. They are able to make it big in the political arena because of their financial clout. Political parties tap criminals for funds and in return provide them with political patronage and protection.
2. The components of criminalisation of politics are Muscle Powers, gangsters and Money Power. The Elections of every level whether Parliament, State Legislature, Municipal or Panchayati Raj are very expensive and it is widely accepted fact that huge election expenditure is the root cause of criminalisation of politics.
3. In every election all parties without exception put up candidates with a criminal background. Even though some of us whine about the decision taken by the parties, the general trend is that these candidates are elected to office. By acting in such a manner we fail to realize that the greatest power that democracy arms the people is to vote incompetent people out of power.

Independence has taken place through a two-stage process. The first stage was the corrupting of the institutions and the second stage was the institutionalization of corruption. As we look at the corruption scene today, we find that we have reached this stage because the corrupting of the institutions in turn has finally led to the institutionalization of corruption. The failure to deal with corruption has bred contempt for the law. When there is contempt for the law and this is combined with the criminalization of politics, corruption flourishes. India is ranked 66 out of 85 in the Corruption Perception Index 1998 by the German non-government organization Transparency International based in Berlin. This means that 65 countries were perceived to be less corrupt than India and 19 were perceived to be more corrupt.

4. Criminalization is a fact of Indian electoral politics today. The voters, political parties and the law and order machinery of the state are all equally responsible for this. There is very little faith in India in the efficacy of the democratic process in actually delivering good governance. This extends to accepting criminalization of politics as a fact of life. Toothless laws against convicted criminals standing for elections further encourage this process. Under current law, only people who have been convicted at least on two counts be debarred from becoming candidates. This leaves the field open for charge sheeted criminals, many of whom are habitual offenders or history-sheeters. It is mystifying indeed why a person should be convicted on two counts to be disqualified from fighting elections. The real problem lies in the definitions. Thus, unless a person has been convicted, he is not a criminal. Mere charge-sheets and pending cases do not suffice as bars to being nominated to fight an election. So the law has to be changed accordingly.

Various Provisions Under Indian Law

Criminalization in Indian politics is closely related to the legislators, though other subsidiary causes are there. Therefore some provisions have been enshrined in the constitution to prevent legislators having criminal background from taking entry into the legislatures. Both in Article 102(1)(e) and 191(1)(e) it is mentioned that “if he is so disqualified by or under any law made by parliament. Chapter IX A of IPC deals with offences relating to elections. It comprises of nine sections. It defines and provides punishment for offences, such as bribery, undue influence and personation at elections etc. Sec. 171 G provides the punishment of fine for false statement in connection with elections and for illegal payment in connection with an election. Sec 171 H provides the punishment of fine upto Rs. 500. According to Sec 171 E, if there is failure to keep election accounts, the offender shall be punished with fine not exceeding Rs. 500. Thus, in India Penal Code, provisions have been made to check election evils but nominal punishments have been provided and interest is not taken in prosecution of election offenders. On the other hand, these provisions have failed to check criminalization of politics because of a faulty provision i.e. ss.8 (4) of the People’s Representation Act, 1951.

The People’s Representation Act, 1951 has prescribed many important steps to check criminalization in Indian politics. Sub-section (3) of Section 8 of this Act provides that a person convicted of an offence, mentioned in sub section (1)(2) of the same Act, shall be disqualified from the date of such conviction and shall continue to be disqualified for a further period of six years since his release. However, sub-section (4) of section 8 provides that “Notwithstanding anything in Sec.8, sub-section (1), sub-section (2) or sub-section (3) a disqualification under either subsection shall not, in the case of a person who on the date of the conviction is a member of Parliament or the Legislature of a State, take effect until three months have elapsed from that date or, if within that period an appeal or application for revision is brought in respect of the conviction or the sentence, until that appeal or application is disposed of by the court”. Thus, this sub- section provided the corrupt and tainted politician ample scope to continue in active

politics both inside and outside of the legislatures. This revamped a pernicious effect on political sphere and increased criminalization in politics.

Judicial Approach to Check Criminalization In Indian Politics

Before raising question about the validity of sub-section 4 of section 8 of Representation People's Act 1951 the judiciary has been continuously striving to prevent criminality and unethical activities practiced by legislators interpreting various laws of the country mentioned in sub-section 1 and 2 of Representation People's Act 1951. But, the situation had become worse. On 28th August 1997, the Election Commissioner G.V.G. Krishnamurti startled the nation by revealing an abnormal statistics, showing politicization of criminals. Thus lok sabha passed a resolution of 31st August 1997 saying inter alia that, "more especially, all political parties shall undertake all such steps as will attain the objective of ridding of our polity of criminalization or its influence". But it remained a pious resolution. On May 2, 2002, the Supreme Court gave a historic ruling following public interest litigation by an NGO. In the light of ruling of the Supreme Court, the Election Commission issued directive requiring the candidates seeking elections, to file affidavit indicating their criminal records, educational qualifications and assets and liabilities. This was implemented during the Lok Sabha election held in April - May 2004, but oddly enough, it has not been possible to prevent persons with criminal records from entering Lok Sabha (*Minch, 2013*).

After many efforts, the boldness of judiciary on punishing corrupt politicians and bureaucrats in the hawala racket is perceived to be ushering a new and healthy bloom in Indian democracy. Justice Kuldip Singh's judgment was significance in which the former petroleum minister, Capt. Satish Sharma was prosecuted against allotting petrol pumps and gas agencies to his near and dears under the discretionary quota.

In the mean time judiciary has been facing much trouble so far the provisions of R P Act 1951 to keep clean the legislatures. In *Sarat Chandra V Khagendra Nath*¹³, the appellant's nomination paper for election to the Assam Legislative Assembly was rejected by the Returning Officer on the ground of disqualification under S. 7(b) of the Representation of the People Act, 1951, in that he had been convicted and sentenced to three years' rigorous imprisonment under s. 4(b) of the Explosive Substances Act (VI of 1908) and five years had not expired after his release. The appellant had applied to the Election Commission for removing the said disqualification but it had refused to do so. The appellant's sentence was, however, remitted by the Government of Assam under s 401 of the Code of Criminal Procedure and the period for which he was actually in jail was less than two years. The Election Tribunal held that the nomination paper had been improperly rejected and set aside the election but the High Court taking a contrary view, dismissed the election petition. Held, that the High Court was right in holding that the appellant was disqualified under S. 7(b) of the Representation of the People Act and that his nomination paper had been rightly rejected. That section speaks of a conviction and sentence by a Court and an order of remission of the sentence under S. 401 of the Code of Criminal Procedure, unlike the

grant of a free pardon, cannot wipe out either the conviction or the sentence. Such order is an executive order that merely affects the execution of the sentence and does not stand on the same footing as an order of Court, either in appeal or in revision, reducing the sentence passed by the Trial Court.

For actual disqualification, what is necessary is the actual sentence by the court. It is not within the power of the appellate court to suspend the sentence; it can only suspend the execution of the sentence pending the appeal. The suspension of the execution of the sentence (imprisonment of not less than two year) does not remove the disqualification, when a lower court convicts an accused and sentences decided in *B.R. Kapur vs. State of Tamil Nadu* 14. Brief facts of this case were that election to the legislative assembly in the state of Tamil Nadu was held in 2001. AIDMK secured a landslide majority and consequently choose their leader J.Jayalalitha as the Chief Ministerial candidate. She however, had been denied permission to contest the elections. The election commission rejected her nomination papers on account of her disqualification under the provisions of Representation of People's Act, 1951. Her convictions were under appeal and the high Court, on an application, suspended the sentence of imprisonment, ordering her bail. Being, elected as the leader of majority party in the assembly now Governor appointed her as the Chief Minister. The Supreme Court set aside the decision of High Court and held that „a person who is convicted for a criminal offence and is sentenced to imprisonment for a period of not less than 2 years cannot be appointed as the Chief Minister of a state under Article 164(1) read with (4) and cannot continue to function as such. Hence the appointment of Jayalalitha as the Chief Minister of Tamil Nadu was not legal and valid and that she cannot continue to function as the same . In *Raj Deb V Gangadhar Mohapatra* 15, a candidate professed that he was Chalant Vishnu and representative of Lord Jagannath himself and if any one who did not vote for him would be sinner against the Lord and the Hindu religion. It was held that this kind of propaganda would amount to an offence under S. 171 F (punishment for s.171c) read with S 171C (undue influence at an election).

However, there has been controversy with regard to the beginning of disqualification on the ground of conviction. A person convicted for an offence is disqualified for being a candidate in an election. S. 8 of the R.P. Act sets different standards for different offences. According to S. 8(3) a person convicted of any offence and sentenced to imprisonment for not less than two years (other than the offences referred to in S. 8(1) and (2)) shall be disqualified from the date of such conviction and shall continue to be disqualified for a further period of six years since his release.

The court also considered the question of the effect of acquittal by the appellate court on disqualification. It may be recalled that the Supreme Court in *Vidyacharan Shukla V Purushottam Lal* 16 had taken a strange view. V.C. Shukla was convicted and sentenced to imprisonment exceeding two years by the Sessions Court on the date of filing nomination but the returning officer unlawfully accepted his nomination paper. He also won the election although conviction and sentence both were effective. The defeated candidate filed an election petition

and by the time when it came before the High Court, the M P High Court allowed the criminal appeal of Shukla setting aside the conviction and sentence. While deciding the election petition in favour of the returned candidate, the court referred to Mannilal V Parmail (The Court also overruled Mannilal V Parmai Lal¹⁷ and held that the acquittal had the effect of retrospectively wiping out the disqualification as completely and effectively as if it had never existed. However, Vidyacharan Shukla which had the effect of validating the unlawful action of the returning officer and encouraging criminalization of politics was overruled by Prabhakaran. The Supreme Court observed:

Whether a candidate is qualified or not qualified or disqualified for being chosen to fill the seat has to be determined by reference to the date for the scrutiny of nomination. The returning officer cannot postpone his decision nor make it conditional upon what may happen subsequent to that date. It is submitted that the view taken in the instant case is correct and would be helpful in checking the criminalization of politics.

In *K. Prabhakaran V P. Jayarajah*¹⁸, the Court considered a different issue based on purposive interpretation of Sec 8(3) of R.P. Act 1951. It considered the question whether for attracting disqualification under S. 8(3) the sentence of imprisonment for not less than two years must be in respect of a single offence or the aggregate period of two years of imprisonment for different offences. The respondent was found guilty of offences and sentenced to undergo imprisonment. For any offence, he was not awarded imprisonment for a period exceeding two years but the sentences were directed to run consecutively and in this way the total period of imprisonment came to two years and five months. On appeal, the session court directed the execution of the sentence of imprisonment to be suspended and the respondent be released on bail during the hearing of the bail. During this period, he filed his nomination paper for contesting election from a legislative assembly seat. During the scrutiny, the appellant objected on the ground that the respondent was convicted and sentenced to imprisonment for a period exceeding two years. The objection was overruled and nomination was accepted by returning officer on the ground that although respondent was convicted of many offences but he was not sentenced to for any offence for a period not less than two years (i.e. for every case he has been sentenced below two years). The High Court also took the similar view but the Supreme Court by majority took the different view. Chief justice R.C.Lohati speaking for the majority held that the use of the adjective “any” with “offence” did not mean that the sentence of imprisonment for not less than two years must be in respect of a single offence. The court emphasized that the purpose of enacting S. 8(3) was to prevent criminalization of politics. By adopting purposive interpretation of S. 8(3), the Court ruled that its applicability would be decided on the basis of the total term of imprisonment for which the person has been sentenced.

Sec. 8(4) of the RP Act accords benefit to a sitting Member of Parliament or legislative assembly if convicted for criminal offence. According to it, in respect of such member, no disqualification shall take effect until three months have elapsed from the date of conviction or if within that

period appeal or application for revision is brought in respect of conviction or sentence until that appeal or application is disposed of by the court. The controversial issue is whether the benefit of this provision continues even after the dissolution of the house. There have been instances where the members taking advantage of this provision contested the subsequent election in spite of the fact that the court during the tenure of the house. The Supreme Court considered this unethical aspect also in Prabhakaran case. The court considered the structural position of S. 8(4) and justifications for its retention. It held that "Subsection 4 would cease to apply no sooner the house is dissolved or the person has ceased to be a member of that house." Thus, it is another effort of the Court to strictly check the criminalization of politics in which showing the irritation of court towards the tainted politician chief Justice R.C. Lohati on behalf the court speaking for the majority observed, those who break the law should not make the law. Generally speaking the purpose sought to be achieved by enacting disqualification on conviction for certain offences is to prevent persons with criminal background from entering into politics and the house a powerful wing of governance. Persons with criminal background do pollute the process of election as they do not have many holds barred and have no reservation from indulging into criminality to win success at an election.

Lily Thomas and Lok Prahari Vs. Union Of India, 2013.20

However, two public interest Litigations were filed by Lily Thomas and an NGO Lok Prahari in 2005 questioning the validity of section 8(4) of Representation of People's Act, since it provides special safeguard to the sitting MPs and MLAs who have been convicted of an offence and whether section 8(4) of the Representation of People's Act is Ultra Vires to the constitution.

The Hon'ble Court after going through the arguments put forward by both the parties held that once a sitting member becomes disqualified by or under any law made by parliament under article 102(1)(e) and 191(1)(e) of the constitution, his seat will become vacant immediately by virtue of article 101(3)(a) and 190(3)(a) of the constitution. It further held that the parliament cannot make a provision as in section 8(4) of the Act to defer the date of disqualification on which the disqualification of a sitting member will have effect.

Further, the court relied on the constitutional Bench's decision in Election Commission of India Vs. Saka Venkata Rao 21, wherein it was held that there has to be same set of disqualification for election as well as for continuing as member. Thus, parliament does not have power to make different laws for a person to be disqualified for being chosen as a member and for a person to be disqualified to continue as member as it made by creating section 8(4) of the Act.

For aforesaid two reasons the Hon'ble Supreme Court held that parliament has exceeded its power conferred by the constitution enacting sub-section 4 of section 8 of the Act and accordingly it is ultra vires the constitution.

However, the Hon'ble court further held that this judgment of the court will be prospective in nature. Sitting members who have already been convicted under section 8(1),(2) and (3) of the

Act and have filed appeals or revisions in higher courts before the pronouncement of this judgment, would not come under the purview of this declaration since it will be against the principles of natural justice.

Analysis of The Judgment

There is no doubt that such verdict will help in reducing the scourge of criminalization of politics but it also leaves open a number of loopholes for dubious politicians. Given the present state of judicial system, conviction by a trial court is often set aside by a higher court on appeal. If a member is disqualified in some case and gets an acquittal later by a higher court, there will be no scope for redressal. Hence, it can lead to filing of fraudulent cases particularly when election would be round the corner.

This judgment will impact law makers who are facing charges but have not been convicted. And going by the conviction rate of Indian courts, they have little to worry about in the near future. Immediate disqualification of convicted elected representatives may lead to politically susceptible government. Not long ago, a government lost power at the Centre by just one vote.

However, the real significance of this ruling would be that it will act as a deterrent for political parties which have been giving tickets to tainted candidates. This verdict would also bring in equality between an ordinary individual and elected member who so far enjoyed an additional layer of protection from disqualification under section 8(4) of the Act. Under these circumstances in the current state, this landmark ruling is like a judicial revolution rather than being mere tokenism.

Again, recently on 10th March 2014 Supreme Court provided another remarkable decision on a PIL filed by „Public Interest Foundation“ directing the subordinate courts to dispose of the cases U/s 8(1)(2)(3) within one year from the date of charge sheet filed by the investigating agency. If any case requires more than this period, subordinate court must bring the matter before concerned High Court. And if it feels the cause is reasonable, it may give a suitable time limit to declare the judgment of the case. Hence, it is realized that judiciary is trying its best to check the criminalization in Indian politics.

Measures to Control The Criminalization in Politics

The Election Commission must take adequate measures to break the nexus between the criminals and the politicians. The forms prescribed by the Election Commission for candidates disclosing their convictions, cases pending in courts and so on in their nomination papers is a step in the right direction if it applied properly. Too much should not be expected, however, from these disclosures. They would only inform people of the candidate's history and qualifications, but not prohibit them from casting their votes, regardless, in favour of a criminal. For the past several general elections there has existed a gulf between the Election Commission and the voter. Common people hardly come to know the rules made by the commission. Bridging this gap is essential not only for rooting out undesirable elements from politics but also for the

survival of our democratic polity. This is an incremental process, the rate of success of which is directly proportional to the increase in literacy rate in India. The electorate have made certain wrong choices in the past, but in the future national interest should guide them in making intelligent choices.

The role of Supreme Court also becomes very important here. The Apex Court as custodian of constitution should take all necessary steps to strengthen democracy in the country. The legislature and executive have been complaining about the Supreme Court's intervention on their domain, but it becomes imperative in such kind of unwanted situation. The Supreme Court of India upheld a PIL which made it mandatory for everyone seeking public office to disclose their criminal, financial and educational history. It was a way to ensure that the voters knew the important details about their "honourable" leaders, and steamed them were indeed.

Section 8 of the Representation of the People Act, 1951, states that politicians and electoral candidates convicted for a crime shall be disqualified from the date of conviction till six years after their release. However, subsection 4 of Section 8 says that if the convicted person is already an MP or MLA, he or she will not be disqualified until three months from the date of conviction. Therefore, if an appeal is filed within these three months, the hearing could be delayed for years. The politician would thus be in power till the court disposes off the case.

In 2005, lawyer Lily Thomas and former IAS officer S. N. Shukla filed a public interest litigation asking the court to set aside Section 8 (4) of the Representation of the People Act because it allowed sitting MPs and MLAs to continue to be elected representatives even when convicted in a court of law. The petition appealed that this special protection was unconstitutional and hence should be struck down. This means that any convicted MP or MLA would be immediately disqualified and the seat made vacant.

The Supreme Court ordered that upon conviction, charge sheeted MPs and MLAs would be disqualified with immediate effect from holding membership of the House without being given three months to appeal. However, the Court exempted those who had already filed appeals in various High Courts or the Supreme Court. With the striking down of Section 8 (4), Rajya Sabha member Rasheed Masood and Lok Sabha member Lalu Prasad Yadav were disqualified from their seats after their conviction by a trial court.

The Central Government tried to nullify this Supreme Court judgement by passing a bill to amend the relevant sections of the Representation of the People Act, 1951. Since the monsoon session of Parliament ended without the bill being taken up, the Cabinet approved an ordinance to implement the same. The ordinance was subsequently withdrawn by the government after criticism from within the ruling party itself.

In a response to a public interest litigation filed by Public Interest Foundation, the Supreme Court asked the Law Commission of India to submit a report on the framing of false charges and submission of false affidavits. The Law Commission recommended the disqualification of politicians from contesting elections charged with an offence punishable by imprisonment of

five years or more. It also said that for cases against sitting MPs and MLAs, trials must be expedited through day-to-day hearings and completed within one year.

The Supreme Court partially accepted the recommendations of the Law Commission and passed an order directing that trials against sitting MPs and MLAs must be concluded within a year of charges being framed and that they should be conducted on a day-to-day basis. The Court also said that if a lower court is unable to complete the trial within a year, it will have to submit an explanation in writing and seek an extension from the Chief Justice of the concerned High Court.

The 2014 Supreme Court order offers a ray of hope because if politicians with criminal records are elected in the forthcoming general elections, they could be disqualified as early as May 2015 if convicted.

The Right to Information Act 2005 is a historical Act that makes Government officials liable for punishment if they fail to respond to people within a stipulated timeframe. Many public servants are leading luxurious lifestyles, beyond the legal sources of their income. Many public servants are filing false affidavits about their annual income, wealth details to Election Commission of India / Vigilance Commission / other authorities, as the case may be. These authorities are not properly verifying these affidavits. Many scams, scandals are coming to light day in & day out, politicians are accusing each other of involvement in scams. Whereas, the said authorities are keeping mum, as if those affidavits filed by tainted public servants are true. The tainted public servants are not even providing full, right information to public as per RTI Act, lest the truth come out.

In this context The Supreme Court held that the right to information and the right to know antecedents, including the criminal past, or assets of candidates is a fundamental right under Article 19(1) (a) of the Constitution and that the information is fundamental for survival of democracy.

Conclusion

There is clearly no love lost between the Supreme Court and politicians. In today's time where scams like 2G Spectrum scam, coal Scam, commonwealth Game scam and the railway scam have hurt the current government immensely. It is the same scenario with opposition parties, which in their ruling state are culprits of the same kind of scandals and corruption. The very essence of democracy that politicians of yesteryears, like Gandhi, Nehru and Patel stood for to serve the country's people and provide them clean, healthy and corrupt free governance has long been relegated to the trashcan. There are two kinds of corruption; one when people don't observe the laws and the other when they are corrupt by the law. People's expectation of the legislators has changed. They prefer a power broker to an honest politician. Leaders do not come out of blue. In fact, it is said that people get the government they deserve. Thus by 2012 India has ranked 94th out of 176 countries in Transparency International's Corruption Perceptions Index. Thus people are at both ends like constructing as well as destroying the nation. If they prefer power broker they will simply axe their own legs. A small number of good people may have a little chance to

save this country from devastation. When democracy becomes corrupt the best gravitates to the bottom, the worst floats to the top and the vile is replaced by viler. Time is running out and unless something is done to stem the rot, the entire system will collapse. So people's participation to prevent tainted and corrupt politician out of political system is also highly essential. So the people should wake up at once and force the political parties to mend their ways. In this regard the judiciary has been a platform of confidence for people. The judiciary has to be more watchful by taking some more steps for present days to decriminalize the system.

In a democratic country, all the powers lie in the hands of the voters that is the general public. An awakening among the general mass can only show the right place to such criminal politicians.

It is not appropriate to blame the politicians alone. It is the public that is responsible to a great extent in making the politicians corrupt, criminals, unethical and goons. If the people use their right to vote in favour of a gentleman and honest leaders, and devote sometime to make him winner, an example can be set and corrupt and goons would have to think twice to fight election but it is not the case. The situation is entirely different. Whosoever can spend more money in an election, whosoever can use more muscle power in an election, has more chances of victory.

In such a situation, why a politician would not like to earn more to remain in power or to win next election. The tolerance limit of Indian public is indeed very high.

The reality is this that still we could not be able to design a mechanism in a real sense to stop the criminals from entering in politics and from escaping the Conviction. The vibrant examples are Tamilnadu Chief Minister Jayalita who recently got bail from the charges of corruption by the Apex Court, A. Raja and Kanimojhi have already been granted bail in 2G Scam too. But a ray of hope has seem by the conviction of mohammed shabbuddin in 2004 Siwan Double Murder case. We hope still many more criminal will be strictly prosecuted and successfully convicted in near future.

It is not to conclude that all the politicians are criminal, corrupt and unethical. The hope lies with only such honest, dedicated and devoted politicians who have sacrificed a lot for the welfare of this nation. It is high time that we enforce a code of conduct to the stem the rot and this exercise must begin right now. A transparency in the working is very urgently needed. Responsible opposition and the media can play very important roles in exposing the unethical and immoral corrupt politicians. The people are also becoming aware that unless they use their right to vote in favour of a better leader, the future of the nation is in dark, and they themselves have to suffer because of their own wrong judgments. Let us hope the people of the country will use their vote in the coming elections in favour of dedicated, sincere and honest leaders for the good of themselves and for the welfare of this great nation.

In this context some suggestions may be given as follows:

(a) The Section 8(4) of Representation of People's Act 1951 defies the ideas of equality enshrined in article 14 of the constitution. While the Representation of People's Act, 1951

debars candidates convicted of serious offences from contesting elections for six years after their release from prison, Section 8(4) of the same Act makes an exception for sitting legislators. This grants an unfair advantage by allowing convicted legislators to contest elections, while at the same time, denying the rights to those who are convicted but do not hold office. Thus, in keeping with the spirit of equality in the Indian constitution, and to check the perverse trend of increasing criminalization of politics, this section must be repealed.

(b) There should be appointment of Public Prosecutors, Additional Public Prosecutors, Assistant Public Prosecutors and other legal luminaries for court matters through fair and open competition having no political colour. Their work efficiency should be assessed yearly and if requires, their job may be revised on the basis of this yearly assessment. They shall not be engaged in any paid employment during the term of the office. So, their efficiency and integrity may be increased.

(c) Expeditious trial through special courts with fast track mode to dispose these cases within 90 days may be established. For this; the rule of adjournment must be strictly followed. The high court or the Supreme Court should have power to transfer cases from one fast track court to another. Special provision may be made to protect the witnesses of these cases. Again, the investigating agencies should be activated and sensitized to speedily comply with the courts requirements.

(d) There should be workshop, training, and sensitization programme for judges, advocates and other clerical staffs to enhance the efficiency of the court work. Especially, the advocates are to be sensitized not to be soft towards hardcore, tainted, corrupt politician cum criminal during the trial. These evil elements don't have accountability towards the society. Even, it is seen that criminal clients have attempted to kill the members of their engaged advocates and looted their houses on being unsuccessful in their cases. The enormous problem of the nexus between criminals and politicians cannot be ignored any longer. The submission of affidavit may have some deterrent effect, but seems as it will also result is a futile exercise as in India; votes are being cast on the basis of caste, creed and region. The poor illiterate people of this country still vote to their caste man or to the man of fellow religion ship, or to the fellow who belongs to the region. Moral values and ethics have long been vanished from the political arena of our country, but we cannot have such an indifferent attitude. We shall have to find a solution to eradicate the menace for which we are ourselves also responsible to a great extent.

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Reference

- 1 Report of Association for Democratic Reforms (ADR)
- 2 thehinducentre.com
- 3 Minch, Mallikarjun I, (2013), „Criminalization of Politics and Indian Administration, Spectrum: A Journal of Multidisciplinary Research Vol. 2 Issue 10, October 2013.
- 4 Sarat Chandra Vs. Khagendra Nath , AIR 1961 SC 334.
- 5 B.R. Kapur Vs. Vs. State of Tamil Nadu AIR 2001 SC 3435.
- 6 Raj Deb vs. Gangadhar Mohapatra AIR 1964 Orissa.1.
- 7 Vidyacharan Shukla vs. Purushottam Lal (1981), 2 SCC 84.
- 8 Mannilal Vs. Parmai Lal, (1970) 2 SCC 462.
- 9 K. Prabhakaran Vs. Jayarajah, AIR 2005 Sc 688.
- 10 Lily Thomas vs. Union of India, MANU, SC, 0687, para 6.
- 11 PIL filed by Lily Thomas, Lawyer of supreme Court
- 12 *Lily Thomas v. Union of India*, (2013) 7 SCC 653

Right to Development and Environment Protection in India: Law: Policy and Practice

*Dr. Mahendra Tiwari

**Tarun Batra

Abstract

"What's the use of a fine house if you haven't got a tolerable planet to put it on?"

- Henry David Thoreau, *Familiar Letters*

I Right to Development: Significance in India

SUSTAINABLE DEVELOPMENT identifies that environmentally destructive economic progress does not produce long-term societal progress. The Vienna Declaration and Programme of Action states in Article 10 that "The World Conference on Human Rights reaffirms the right to development, as established in the Declaration on the Right to Development, as a *universal and inalienable right* and an integral part of fundamental human rights".

In *Indian Council for Enviro-Legal Action v. Union of India* the court held that it had the power to intervene to protect the constitutionally guaranteed right to life by ordering the closure of the plants and by directing the government to determine and recover the cost of remedial measures from the owners of the plants. The court also suggested the strengthening of environmental protection machinery. In effecting the polluter pays principle, the Court looked to the European Community's methods regarding polluting entities, in particular the European Community Treaty.

In *Narmada Bachao Andolan v. Union of India* the Court basically gave the push for the displacement of indigenous and tribal populations which were in the path of the damming. This paper will examine this emerging theory of environment protection which has received a lot of academic attention and has started being recognized within the national spheres.

II Principle of Sustainable Development

The Rio Declaration on Environment and Development, also famous as Rio Declaration, identifies the right to development as one of its 27 principles. Principle 3 of the Declaration states that "The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations". Industrialization and technological revolution added fuel to flames as demand for natural resources increased. The varying times and the tempo of change motivated companies to make the most of natural resources and co-human beings as well. Nevertheless, as this mind-set of companies began to take a toll on the environment, employees and society at large, they came under public scrutiny. Government, media, social and environmental activists, shareholders and many other parties

raised their voices against the companies that persuaded hazardous and unethical practices. In this context, in 1987, the term sustainable development was coined, embracing the three dimensions of sustainability – environmental protection, economic growth and social equity. The central thought behind sustainable development is that the current development must not compromise the ability of future generations to develop. Some of the basic principles of 'Sustainable Development' as described in Brundtland report are as follows: -

- a) Inter-Generational Equity.
- b) The Precautionary Principle.
- c) Polluter Pays Principle

III Indian Constitution: Milieu of Forty Second Amendment

Thus, somewhere between respect of the past and excitement of the present the path of safety was found through the forty-second amendment to the Indian Constitution in 1976 introducing the principles of environment protection in an open style into the Constitution dealt under diverse articles. In *Indian Council for Enviro-Legal Action v. Union of India*, the Supreme Court has applied the right to wholesome environment as part of the Right to Life enshrined in Article 21. Thus Right to Life visualized in the Article means something more than survival of animal existence. It includes right of healthy living. The Andhra Pradesh High Court in *MP Rambabu v. Divisional Forest Officer*, has correctly observed- "In terms of Article 21 of the Constitution, a person has a right to a decent life, good environment and maintenance of ecology."

IV Establishment of Environment Groups & PIL

Around the globe, people have shown affirmative reaction and activism for protection of the environment and complete support is given by the judiciary. People cautious of their rights to a healthy and pollution free environment have formed groups and seek directions from the courts to protect the environment and it has been done so by way of Public Interest Litigation like on implementation of the Wild Life (Protection) Act 1972. The groups active in environmental protection have often pressurized the executive to take decisions on certain development projects only after making proper environment-impact assessment. Chipko Movement and Appiko Movement in Karnataka for saving the trees from misuse are examples of ideas taken by public-spirited persons.

V Environmental Sustainability: Position at National Level

The genuine doctrinal origin of modern environmental law can be traced in common law principles of Torts. Indian Penal Code has a chapter on offences affecting the public health, safety, convenience. Criminal Procedure Code provides provision for public nuisance relating to environmental pollution. Factories Act was amended and some provisions were incorporated keeping in view several chemical industries dealing in hazardous and toxic substances. Under Wild Life (Protection Act), 1972 every State has to constitute a Wild Life Advisory Board. The Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of

Pollution) Act, 1981 came into existence with the objectives to provide for the prevention and control of water and air pollution. The umbrella legislation for environment protection has always been Environment (Protection) Act, 1986. The principle of no-fault liability enforced under the National Environment Tribunal Act of 1995 extends the compensation limits prescribed under the Public Insurance Liability Act 1991. The Act deals with, inter alia, compensation related to accidents concerning toxic substances. The National Environment Appellate Authority Act, 1997 enabled the Union Government to establish the National Environment Appellate Authority. The Authority is empowered to hear appeals against orders granting environmental clearance in designated areas where industrial activity is restricted under the Environment Act. The Tribunal has an exclusive jurisdiction over the claims of compensation in these circumstances.

VI Environmental Sustainability: Position at International Level

For the implementation of the concept of Ecologically Sustainable Development five important documents were articulated proposing the programme of action which is signed at the UNCED. Agenda 21 adopted at the 1992 Rio Conference on Environment and Development, is entirely devoted to protecting and promoting human health condition, while the Rio Declaration proclaims that human beings are entitled to a healthy and productive life in harmony with nature. Under the UN Climate Change Conference roadmap recognizes that “deep cuts in global emissions” are required there is an urgent need to reduce greenhouse gases from deforestation. The Copenhagen Conference ended with an agreement by countries to cap the global temperature rise by committing to significant emission reductions and to raise finance to kick start action in the developing world to deal with climate change. The final accord, however failed to achieve anything considerable..

VII Five Year Plans: Impact in India

The matter of establishing accord between environment and economic development started becoming fraction of Indian thoughts, when it was emphasized in the fifth five year plan that the pursuit of development goals is less likely to cause a reduction in the quality of life, if a link and balance between developments, planning and environment management is maintained. Major thrust of the seventh five year plan was to highlight sustainable development in which an attempt was made to reconcile the needs of development with the environmental concerns. That is why the seventh plan highlighted that the nation's planning for economic growth and social well-being in each sector must always take note of the need to protect environmental resources and where possible must work to secure improvement in environmental quality.

VIII Sustainable Development: Evolution in India

What has been India's position on environmental protection? In 1972, the then Prime Minister of India, Mrs. Indira Gandhi emphasized, at the UN Conference on Human Environment at Stockholm, that the removal of poverty is an integral part of the goal of an environmental

strategy for the world. Various acts have been passed down the years, too innumerable to be put down here. The Ministry of Environment and Forests has been established with pious objectives. Through the years, the ministry has passed innumerable laws to help them in their task of environmental protection. Miserably, all the regulations and acts have not done adequate to protect the environment. Most leaders of industry, too, have been lacking in a social ethics. They have misused our country's resources and polluted our earth, water and air. Community lethargy has not helped either. We, as citizens of this country have not made our voices heard. The opening up of our economy and globalization has put a bigger pressure on our resources, further vitiating our weak eco-system. It is also to be remembered that most of the environmental cases have come before the court through public interest litigation either under Article 32 or under 226 of the constitution. Indian Judiciary is playing a remarkable role in maintaining sustainable development and curbing the uncontrolled increase of industrialization. The judiciary has contributed to environmental protection in India in two means. It has introduced *procedural innovations* to provide much wider access to justice. And it has, by a *constructive and extensive interpretation of the 'right to life'* enshrined in Article 21 of the Constitution, included within its ambit a 'right to a healthy environment'. As pointed out above, the Indian constitution does not provide a distinct fundamental 'right to environment'. Environment finds mention only in the Directive Principles and Fundamental Duties. Nevertheless, the Indian judiciary, starting from the 1980s, has adopted an increasingly environment-friendly posture and has imparted an interpretative link between a clean environment and the 'right to life'. The judiciary, in different cases has held that the basic requirement of a decent quality of life is to live in a healthy environment. The right to environment was given judicial recognition in the Dehradun Lime Quarries Case (*Rural Litigation and Entitlements Kendra v. State of Uttar Pradesh, 1987*) and reaffirmed in the Sriram Gas Leak Case (*MC Mehta v. Union of India, 1987*).

The earliest case on which the apex court had applied the doctrine of 'Sustainable Development' was *Vellore Citizen Welfare Forum v. Union of India*. The Supreme Court held that industries are vital for the country's development, but having regard to pollution caused by them, principle of Sustainable Development has to be adopted as the balancing concept. Precautionary Principle and Polluter Pays Principle has been accepted as a part of the law of the country. In *Subhash Kumar v. State of Bihar* the Supreme Court held that right to life is a fundamental right under Art. 21 of the Constitution and it includes the right to enjoyment of pollution free water and air for full enjoyment of life. If anything endangers or impairs that quality of life in derogation of laws a citizen has recourse to Art.32 of the Constitution for removing the pollution of water or air which may be detrimental to life. In *M. C. Mehta v. Union of India & Ors.* the Supreme Court established a new concept of managerial liability – 'absolute and non-delegable' – for disasters arising from the storage of or use of hazardous materials from their factories. The enterprise must ensure that no harm results to anyone irrespective of the fact that it was negligent or not.

IX Conclusions & Suggestions

Since the 1980s sustainability has been used more in the sense of human sustainability on planet Earth and this has resulted in the most widely quoted definition of sustainability and sustainability development, that of the Brundtland Commission of the United Nations on March 20, 1987. Increasingly, environmental misconduct is treated as a crime.

Paul Bigelow Sears said, "How far must suffering and misery go before we see that even in the day of vast cities and powerful machines, the good earth is our mother and that if we destroy her, we destroy ourselves." There are two major ways of managing human impact on ecosystem services. One approach is environmental management; this approach is based largely on information gained from earth science, environmental science, and conservation biology. Another approach is management of consumption of resources, which is based largely on information gained from economics. At the 2005 World Summit it was noted that this requires the reconciliation of environmental, social and economic demands - the three pillars of sustainability. The present ecological era began at the end of the 1960s, after post-World War II reconstruction led to unprecedented global economic development. Sustainable economic development is important for economic growth, because it does not take into consideration the pleasure of present generation alone but it also takes into consideration the requirements of future generation. Environmental problems stem from two main categories of human activities. We know that the stock of natural resources, like fossil fuels are limited. The growth of countries will be endangered if the limited resources are completely exhausted. It also results in pollution. Sustainable development stresses to adopt a strategy of economic growth, which is environment friendly.

The author humbly submits that a strategy for environmental protection in India could be adopted on the following lines:

- (i) Population control- because less people will put less pressure on natural resources;
- (ii) Maximum use of renewable sources in energy, agriculture and industry
- (iii) Mobilization of public opinion to educate and update the people about the environmental protection and sustainable development.

Generally, polluters should pay for the cost of pollution control measures, such as the construction and operation of anti-pollution installations, investment in anti-pollution equipment and new processes, so that a necessary environmental quality objective is achieved. Other means of ensuring the polluter pays principle are through taxes and charges. Experience and scientific expertise demonstrate that prevention must be the Best Rule for the environment, for both ecological and economic reasons.

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Biotransformation- A Revolutionary Approach Towards Chemical Modification by Microbes

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Abstract

Biotransformation is the chemical modification (or modifications) made by an organism on a chemical compound. If this modification ends in mineral compounds like CO_2 , NH_4^+ , or H_2O , the biotransformation is called mineralisation.

Biotransformation means chemical alteration of chemicals such as nutrients, amino acids, toxins, and drugs in the body. It is also needed to render non polar compounds polar so that they are not reabsorbed in renal tubules and are excreted. Biotransformation of xenobiotics can dominate toxicokinetics and the metabolites may reach higher concentrations in organisms than their parent compounds

Introduction

Biocatalysis scope of study involving microbial transformation is increasing significantly from limited interest into highly active area in chemistry today including preparation of pharmaceutical products. Biotransformation can be clarified as the specific modification of a definite compound to a distinct product with structural similarity, by the use of biological catalysts including microorganisms like fungi [4]. The biological catalyst can be described as an enzyme, or a whole, inactivated microorganism that contains an enzyme or several enzymes produced in it. Bioconversion is another term related to microbial transformation for this study in particular. There is only slight difference between a biotransformation and a bioconversion. A bioconversion utilizes the catalytic activity of living organisms and hence can involve several chemical reaction steps. A living microorganism will be continuously producing enzymes and hence bioconversions often involve enzymes which are quite unstable for used substrates. The properties of biotransformations and bioconversions are very similar and in many cases the terms are cited as interchangeable (1)

Scope of Biotransformation

Although there are hundreds of bio-transformations known, only a selected few of them are useful for the synthesis of commercially important products. The significance of bioconversion reactions becomes obvious when the production of a particular compound is either difficult or costly by chemical methods. Further, bio-transformations are generally preferred to chemical reactions because of substrate specificity, stereo specificity and mixed reaction conditions (pH, temperature, and pressure).

Microbial transformations are of considerable economic importance in the manufacture of alkaloids, antibiotics, vitamins, amino acids, fermented beverages and fermented foods. They also catalyze simple and chemically well-defined reactions like conversion of acrylonitrile to acrylamide. This has matured to an industrial process where the production is carried out at 10,000 tons per year. In addition, microorganisms are employed in many studies of synthetic, structural, stereochemical and kinetic problems in organic chemistry to functionalize non-activated carbon atoms including (i) to introduce centers of chirality into optically inactive substrates, and (ii) to carry out optical resolutions of racemic mixtures (2)

Biotransformation for Degradation of Pollutants

Biotransformation is the basis of life. Microbes have been widely applied for steroid biotransformation to prepare specific derivatives, the production of which is difficult by traditional synthetic methods. Biotransformation is also good to handle the environmental problems like degradation of xenobiotics and petroleum hydrocarbons as they are real world problem. Therefore, based on the present review, it may be concluded that microbial biotransformation is a boon for the current world with its wide range of applications (3,4)

Example of Biotransformation in Vitro

Microbial biotransformation of four amino- and hydroxyanthraquinones catalyzed by *Beauveria bassiana* ATCC 7159 has been studied. Incubation of 1,2-diaminoanthraquinone (1) with *B. bassiana* ATCC 7159 afforded 1-amino-2-(4-O-methyl-2 β -N-D

-glucopyranosylamino)anthraquinone (5) in a hitherto unprecedented biotransformation involving N-glycosylation of an amine. Biotransformation of 1-aminoanthraquinone (2) yielded 1-amino-2-(4-O-methyl-2 β -O-D-glucopyranosyloxy)anthraquinone (6) as a result of microbial hydroxylation of C-2 followed by 4-O-methyl-glucosylation of the newly introduced hydroxyl group. 1,8-Dihydroxyanthraquinone (3) and 1,2-dihydroxyanthraquinone (4) afforded 8-hydroxy-1-(4-O-methyl-1 β -O-D-glucopyranosyloxy)anthraquinone (7) and 1-hydroxy-2-(4-O-methyl-2 β -O-D-glucopyranosyloxy)anthraquinone (8), respectively, resulting from 4-O-methyl-glucosylation of the existing hydroxyl groups of the substrates. The efficiency of these conversions suggests that microbial biotransformation reactions offer an attractive alternative to chemical 4-O-methyl-glucosylation of amino- and hydroxyanthraquinones.

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Bibliography

1. Ashauer, R; Hintermeister, A; O'Connor, I; Elumelu, M; et al. (2012). "Significance of Xenobiotic Metabolism for Bioaccumulation Kinetics of Organic Chemicals in *Gammarus pulex*". *Environ. Sci. Technol.* 46: 3498–3508. doi:10.1021/es204611h.
2. ^Jump up to: a b Diaz E (editor). (2008). *Microbial Biodegradation: Genomics and Molecular Biology* (1st ed.). Caister Academic Press. ISBN 978-1-904455-17-2.

3. Jump up ^ Martins VAP; et al. (2008). "Genomic Insights into Oil Biodegradation in Marine Systems". *Microbial Biodegradation: Genomics and Molecular Biology*. Caister Academic Press. ISBN 978-1-904455-17-2.
4. Jump up ^ Meyer A and Panke S (2008). "Genomics in Metabolic Engineering and Biocatalytic Applications of the Pollutant Degradation Machinery". *Microbial Biodegradation: Genomics and Molecular Biology*. Caister Academic Press. ISBN 978-1-904455-17-2.

Past Tribals Dyeing Knowledge is Important for The Current Generation

Dr. Tripti Yadav

Abstract

Synthetic chemical dyes are suspected to be harmful causing allergic, carcinogenic and other detriments to human beings. Dyeing yarn or garments is a job exclusively of women and involves various stages that sometimes may take a year to get the desired result. Herbal dyes are also used for coloring crafts and tattooing. For some dyes a mordant is used. The methods of dye extraction and processing yarn and garments are discussed below as were utilized by tribals sorted by color produced.

An Introduction to Dyes

Dyes are colorants having several applications in textiles, crafts, cosmetics, and tattoos. Humans have developed inclinations toward certain colors considered to be lively and attractive. In ancient times plant dyes were used for coloring animal hides and tattooing skin. These were important during religious festivals and wars as well as for painting cave dwelling walls. (1,2)

History of Dyeing

Color is believed to give magical powers, protect them from evil spirits and to help achieve victory in war (Siva 2003). The earliest written record (ca 2600 BC) of dyes is in China. During the Indus Valley civilization (ca 2500 BC) findings of colored garments and traces of madder (*Rubia cordifolia* L.) in the ruins at Mohenjodaro and Harappa are evidence of dye use at that time. In Egypt, mummies have been found wrapped in dyed clothes. The Christian holy book (Bible) has mention of use of many natural dyes including saffron (3). Henna was known to be used even before 2500 BC. By the 4th century AD, dyes sources such as woad, madder, well, Brazilwood, indigo and a dark-purple were known. Brazil was named after the red dye made from Brazilwood (4,5).

Natural Dyes are Ecofriendly

Synthetic chemical dyes are suspected to be harmful causing allergic, carcinogenic and other detriments to human beings. By contrast, natural dyes are thought to be environmentally friendly and beneficial. For example, indigo gives a cooling sensation, while turmeric (*Curcuma longa* L.), the brightest of naturally occurring yellow dyes, is a powerful antiseptic, thought to revitalize the skin (6,7).

Dyeing of Yarn and Garments

Dyeing yarn or garments is a job exclusively of women and involves various stages that

sometimes may take a year to get the desired result. Herbal dyes are also used for coloring crafts and tattooing. For some dyes a mordant is used. The prevalent methods of dye extraction and processing yarn and garments are discussed below sorted by color produced.

Indigo Dye

Blue/Indigo dyes *Strobilanthes cusia* (Nees) Kuntze leaves are extracted and used for an indigo dye. Leaves are pounded in a long (wooden mortar) with lengpum (wooden mallet), the paste is transferred to a container (dish or basket) and allowed to ferment for a week. The paste is then mixed properly, dried in shade, and then stored for future use (8).

Dried paste is powdered, mixed with an adequate quantity of water and pholo (alkaline solution prepared from charcoal of bamboo or wood), and the mixture is kept undisturbed for three nights. The intensity of the color is tested by putting a finger into the solution and if the dye firmly adheres to the skin, then the solution is said to be ready for dyeing. A solution may need to remain for some more days if it does not pass this test. Yarn or garments are dipped into the solution gradually from one end. After five days, the yarn or garments are taken out and excess dye is rinsed with water. Yarn or garments are dried in the sun and again soaked in the dye solution.

Yellow Dyes

Morinda angustifolia Roxb. root is a major source of yellow dye. Roots are cut into pieces and dried in sunlight. The material is then pounded and stored for future use. During dyeing, a layer of pounded root of thengmerok (*Wendlandia puberula* DC.) is placed at the bottom of the container followed by the yarn to be dyed, another layer of thengmerok and finally, an adequate quantity of tarlong powder. An adequate quantity of water is added and the yarn is boiled for a few hours, and then sun dried for some time. The yarn is boiled three times each time with fresh dye powder after which the desired color intensity is said to be produced. The thengmerok powder is added to prevent yarn from contacting the container bottom as it is said to cause yarn brittleness. Yarn dyed with tarlong is used for weaving various types of garments. Curcuma longa rhizomes constitute an important source of yellow dye. Rhizomes are sliced into thin pieces and transferred into a container with an adequate quantity of water. Yarn is immersed into it and boiled for a few hours until a yellow color of the required shade is obtained. Yarn is allowed to cool and then dried under shade (9,10).

Black Dyes

Aporosa octandra (Buch.-Ham. ex D. Don) Vickery is used as a mordant when dyeing yarn with minerals. Black colored minerals are pounded into fine powder and mixed with water. Leaves of tamsir (*A. octandra*) are placed at the bottom of the container and above this yarn is placed. Another layer of tamsir leaves are placed above the yarn and the mineral solution is added until it submerges the upper tamsir layer.

The yarn are then boiled until threefourths of the solution has evaporated. It is then allowed to cool down over night. Usually boiling is repeated thrice and each time fresh mineral solution is

added; this is reported to produce black color of the desired shade. Yarn is then sun dried before it can be used for weaving garments. The bottom layer of tamsir leaves prevent yarn from coming in direct contact with the container which is reported to make the yarn brittle. The upper layer of leaves controls or reduces the rate of evaporation so that the dye solution gets maximum time to react with yarn.

Conclusion

Unfortunately, the wealth of traditional knowledge pertaining to herbal dyes and dyeing is fast moving towards oblivion due to the availability of cheap chemically dyed yarn in the market and lack of interest among the young generation. Further studies are required to understand the history of dye use and oral traditions. Studies could also revitalize natural dye use by creating awareness and commercialization of certain natural dyes through systematic approaches and planning. This could enhance the rural economy and also preserve traditional knowledge and culture.

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References

1. "Dyeing". The Free Dictionary By Farlex. Retrieved 2012-05-25.
2. "Dye". Merriam-Webster. Retrieved 2012-05-25.
3. Balter, M. (2009). "Clothes Make the (Hu) Man". *Science*. 325 (5946): 1329. doi:10.1126/science.325_1329a.PMID 19745126.
4. Kvavadze, E; Bar-Yosef, O; Belfer-Cohen, A; Boaretto, E; Jakeli, N; Matskevich, Z; Meshveliani, T (2009). "30,000-year-old wild flax fibers". *Science*. 325 (5946): 1359.doi:10.1126/science.1175404.PMID 19745144.Supporting Material
5. Barber (1991), pp. 223-225.
6. Goodwin, Jill. *A Dyer's Manual*, Pelham, 1982. ISBN 0-7207-1327-7 p. 11.
7. ^ Jump up to:a b Bhardwaj, H.C. & Jain, K.K., "Indian Dyes and Industry During 18th-19th Century", *Indian Journal of History of Science* 17 (11): 70-81, New Delhi: Indian National Science Academy.
8. Hans-Samuel Bien, Josef Stawitz, Klaus Wunderlich "Anthraquinone Dyes and Intermediates" in *Ullmann's Encyclopedia of Industrial Chemistry* 2005 Will,.,ey-VCH, Weinheim: 2005.doi:10.1002/14356007.a02355.
9. Goodwin (1982), p.65
10. Farer Thread

Swine Flu Alert in Rajasthan -2017

Kumari Manisha

Abstract

Swine flu has claimed seven lives this year and according to experts it has spread due to favourable climatic conditions.

According to additional director (rural health) Dr Aditya Atreya seven people have died in the state including a pregnant woman. The deaths were one each from Ajmer, Nagaur, Jodhpur, Pali, Barmer, Kota and Baran districts.

General Review

“The weather is suitable for the H1N1 virus to thrive as humidity has been between 28% and 36%. People who have died were elderly with weak immunity, suffering from various diseases and pregnant women,” said Dr Atreya. One person had tested positive in January this year and he died, while in February six people have tested positive and two died. In March, so far 25 have tested positive and have four died, he informed (1,2).

Swine flu (H1N1 influenza virus) is a respiratory disease caused by a strain of influenza virus that usually only infects pigs. The virus can be transmitted to humans.

Dr Atreya advised that children, elderly persons and pregnant women should take special care as they are vulnerable to the virus. “If they suffer from cold and cough for more than three days, then should immediately contact a physician, who will accordingly advise further tests,” he added.

In News

In 2016, 2,122 samples were taken between January and December and 197 had tested positive for swine flu, out of which 43 people had died.

Health minister Kali Charan Saraf said that there is no need to panic, as swine flu medicines are available at all government institutions in sufficient quantity. “Isolation wards are there at medical colleges and district hospitals and even at community health centres. Testing for H1N1 is available at all government institutions and is done free of cost. Testing kits are also available at the government health facilities,” said Saraf.

A 40-year-old woman succumbed to the deadly swine flu virus in Kota last week with which the number of deaths in Rajasthan due to the disease has risen to 23 this year.

However, what has the state health department worried is that these cases continue to occur, despite the sweltering heat, in which the virus is believed to become dormant or less active at the

least. The department has now sent samples to the National Institute of Virology (NIV), Pune and hoping to find the answers (3,4).

"We do not exactly know the reason why the virus is still active in the hot climate. Last week, we have sent samples for laboratory testing to NIV, Pune. We will be able to comment once the report comes," Dr Aditya Atreya, incharge, Integrated Disease Surveillance Programme (IDSP) said. So far this year, 228 patients in Rajasthan have been confirmed afflicted by the virus. Of the these 114 patients were tested positive in the state capital Jaipur alone.

The health department had sent a total of 810 samples for laboratory testing and found 228 found confirmed H1N1 virus positive.

According to the official figures, six deaths were reported in Jaipur; three in Kota, two each in Ajmer, Bikaner, Jodhpur, Pali and Baran.

One death each was reported in Nagaur, Sikar, Jaisalmer and Barmer.

Meanwhile, in Bikaner, two more patients, including a 42 -year-old male and a 23-year-old female were reported positive on Sunday.

Bikaner chief medical and health officer, Dr Devendra Chaudhary said that eight patients have been found swine flu positive this year.

H1N1 Outbreak

The H1N1 virus outbreak had previously occurred India during the 2009 flu pandemic. The virus killed 981 people in 2009 and 1,763 in 2010. The mortality decreased in 2011 to 75. It claimed 405 lives in 2012 and 699 lives in 2013. In 2014, a total of 218 people died from the H1N1 flu, India recorded 837 laboratory confirmed cases in the year. [5]

Every year, there was a rise in number of cases and deaths during winter as temperature affects virus. During 2014–15 winter, there was a spurt in cases at the end 2014. In 2015, the outbreak became widespread through India. On 12 February 2015, Rajasthan declared an epidemic (5,6)

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References

1. International Committee on nomy of Viruses. "The Universal Virus Database, version 4: Influenza A". Archived from the original on January 13, 2010.
2. ^ Jump up to: a b c d e f "Swine influenza". The Merck Veterinary Manual. 2008. ISBN 1-4421-6742-4. Retrieved April 30, 2009.
3. ^ Jump up to: a b Gibbs, Adrian J.; Armstrong, John S.; Downie, Jean C. (2009-01-01). "From where did the 2009 'swine-origin' influenza A virus (H1N1) emerge?". *Virology Journal*. 6: 207. doi:10.1186/1743-422X-6-207. ISSN 1743-422X. PMC 2787513 Freely accessible. PMID 19930669.

4. ^ Jump up to: a b PTI (March 19, 2015). "Swine flu toll inches towards 1,900". The Hindu. Retrieved March 20, 2015.
5. ^ Jump up to: a b c d e f g Kothalawala H, Toussaint MJ, Gruys E (June 2006). "An overview of swine influenza". *Vet Q.* 28 (2): 46–53. doi:10.1080/01652176.2006.9695207. PMID 16841566.
6. ^ Jump up to: a b c Thacker, Eileen; Janke, Bruce (2008-02-15). "Swine Influenza Virus: Zoonotic Potential and Vaccination Strategies for the Control of Avian and Swine Influenzas". *Journal of Infectious Diseases.* 197 (Supplement 1): S19–S24. doi:10.1086/524988. ISSN 0022-1899. PMID 18269323

Cancer – General Guidelines

Pooja Shree Somani

Abstract

Cancer is a disease which occurs when changes in a group of normal cells within the body lead to uncontrolled growth causing a lump called a tumour; this is true of all cancers except leukaemia (cancer of the blood). If left untreated, tumours can grow and spread into the surrounding normal tissue, or to other parts of the body via the bloodstream and lymphatic systems, and can affect the digestive, nervous and circulatory systems.

Introduction

1. Tumours (lumps) can be benign or malignant.
2. Benign tumours are not cancerous and rarely threaten life.
3. They tend to grow quite slowly, do not spread to other parts of the body and are usually made up of cells quite similar to normal / healthy cells.
4. They will only cause a problem if they grow very large, becoming uncomfortable or press on other organs -for example a brain tumour inside the Skull (1,2)
5. Malignant tumours are faster growing than benign tumours and have the ability to spread and destroy neighbouring tissue. Cells of malignant tumours can break off from the main (primary) tumour and spread to other parts of the body through a process known as metastasis. Upon invading healthy tissue at the new site they continue to divide and grow. These secondary sites are known as metastases and the condition is referred to as metastatic cancer (3,4)

Genetics of Cancer

Only a small number of the approximately 35,000 genes in the human genome have been associated with cancer. (See the Genomics unit.) Alterations in the same gene often are associated with different forms of cancer. These malfunctioning genes can be broadly classified into three groups. The first group, called proto-oncogenes, produces protein products that normally enhance cell division or inhibit normal cell death. The mutated forms of these genes are called oncogenes.

The second group, called tumor suppressors, makes proteins that normally prevent cell division or cause cell death. The third group contains DNA repair genes, which help prevent mutations

that lead to cancer. Proto-oncogenes and tumor suppressor genes work much like the accelerator and brakes of a car, respectively. The normal speed of a car can be maintained by controlled use of both the accelerator and the brake. Similarly, controlled cell growth is maintained by regulation of proto-oncogenes, which accelerate growth, and tumor suppressor genes, which slow cell growth. Mutations that produce oncogenes accelerate growth while those that affect tumor suppressors prevent the normal inhibition of growth. In either case, uncontrolled cell growth occurs (5,6)

Cancer Prevention

India is the one of the few developing countries that has formulated a National Cancer Control Programme. The programme envisages control of tobacco related cancers; early diagnosis and treatment of uterine cervical cancer; and distribution of therapy services, pain relief and palliative care through augmentation of health infrastructure. Suggested surrogate outcome measures include change in tobacco use, 'Knowledge, Attitude, Practice'(KAP) pattern, compliance to screening programmes, changes in referral practices and shift in stage distribution (7,8)

Current Status

Recent times have seen an increase in the incidence of cancer. This is mainly attributed to urbanization, industrialization, lifestyle changes, population growth and increased life span (in turn leading to an increase in the elderly population). In India, the life expectancy at birth has steadily risen from 45 years in 1971 to 62 years in 1991, indicating a shift in the demographic profile. It is estimated that life expectancy of the Indian population will increase to 70 years by 2021–25. This has caused a paradigm shift in the disease pattern from communicable diseases to non-communicable diseases like cancer, diabetes and hypertension. Among men, lung, esophagus, stomach, oral and pharyngeal cancers are more prevalent, while in women; cancers of cervix and breast are most common, followed by those of stomach and esophagus (9)

Cancer Control in India

India is one of the first few developing countries where a Nation-wide Cancer Control Program was launched. Government of India took its first initiative in 1971. The National Cancer Control Program for India was formulated in 1984 with four major goals

1. Primary prevention of tobacco related cancers.
2. Early detection of the cancers of easily accessible sites
3. Augmentation of treatment facilities
4. Establishment of an equitable pain control and palliative care network throughout the country.

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References

1. U.S. Preventive Services Task Force. Screening for Oral Cancer: Recommendation Statement. Rockville, MD: Agency for Healthcare Research and Quality; 2004. AHRQ Pub No. 05-0564-A.
3. World Health Organization. International Classification of Diseases for Oncology. 3rd ed. Geneva: World Health Organization; 2000.
4. van der Waal R, van der Waal I. Oral non-squamous malignant tumors; diagnosis and treatment. *Med Oral Patol Oral Cir Bucal*. 2007;12(7):e486-91. [PubMed]
5. Brocklehurst P, Kujan O, Glenny AM, Oliver R, Sloan P, Ogden G, et al. Screening programmes for the early detection and prevention of oral cancer. *Cochrane Database Syst Rev*. 2010;(11):CD004150. [PubMed]
6. Warnakulasuriya S, Johnson NW, van der Waal I. Nomenclature and classification of potentially malignant disorders of the oral mucosa. *J Oral Pathol Med*. 2007;36(10):575-80. [PubMed]
7. Kademani D. Oral cancer. *Mayo Clin Proc*. 2007;82(7):882-87.
8. Petti S. Pooled estimate of world leukoplakia prevalence: a systematic review. *Oral Oncol*. 2003;39(8):770-80. [PubMed]
9. Napier SS, Speight PM. Natural history of potentially malignant oral lesions and conditions: an overview of the literature. *J Oral Pathol Med*. 2008;37(1):1-10. [PubMed]
10. Scully C, Bagan J. Oral squamous cell carcinoma overview. *Oral Oncol*. 2009;45(4-5):301-08. [PubMed]

Equipments Utilized By A General Dental Professional

Astha Dubey

Abstract

In the present investigation tools utilized by dentists have been studied in detail. The significance of tools and equipments in dentistry is important for diagnosis, and treatments of orthodontic problems. Each tool has been specified with its function and its use is essential for functioning.

Standard instruments are the instruments used to examine, restore and extract teeth and manipulate tissues.

From protective gear to specialized equipment, there are many tools available to the dentist trade. While some tools are specific to certain branches of dentistry, there are a few basic instruments that are used in just about all dental practices.

A mouth mirror is a hand-held tool that allows the dentist to see inside the patient's mouth, at a variety of angles. The tool is designed to provide indirect vision, as well as reflect light and magnify the interior of the mouth. Today's mouth mirrors can be single-sided or double-sided, and some are even disposable.

Introduction

Tools utilization in dentistry

Dental instruments are tools that dental professionals use to provide dental treatment. They include tools to examine, manipulate, treat, restore and remove teeth and surrounding oral structures (1).

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Several different kinds of hand-held probes are used by the dentist. The one that is used most often in a regular examination is the sickle or contra-angled probe. This probe allows the dentist

to detect pits and fissures, calculus, issues with bridges and crowns, and caries. A periodontal probe measures the depth of periodontal pockets, while a briault probe detects caries on mesial and distal surfaces.

College tweezers are another basic piece of equipment used in dentistry. These allow the dentist to place and retrieve small objects into and from the mouth. Some of them have a locking mechanism to prevent the object from being dropped. A metal ruler is often used to measure the length of endodontic K files(3).

In addition to the tools used in a basic dental exam, other tools are used for other purposes. Most dentists and their hygienists use masks, protective gloves, safety glasses, and face shields during dental procedures to protect them from debris, bacteria, and chemicals.

Most dentists also have radiograph equipment in their offices, to allow them to x-ray their patients' teeth. In addition to the actual x-ray machine, radiograph film is also needed to complete the procedure. Radiograph film comes in several sizes and shapes, depending upon the area of the mouth to be x-rayed.

Since dental work often results in excess saliva and moisture, most dentists use specific instruments designed to control moisture. The most commonly used is the disposable saliva ejector, which uses a low volume of suction to remove saliva from the mouth during procedures. A variety of cotton wool rolls and pellets are also available to absorb saliva, blood, and excess dental material (4).

For painful dental procedures, the dentist will need tools, like syringes and disposable needles, that provide anaesthesia. In procedures where a dentist is isolating one tooth or one specific part of the mouth, a rubber dam is used to allow the dentist to see better, as well as protect the patient's airway.

When it comes to filling cavities, repairing chips, or any other process that requires smoothing, dental burs are used to smooth and polish. They are also used to remove tooth tissue before restorations or other work. Burs come in several sizes and shapes, depending upon where and how they are going to be used. Most of us are familiar with the dental handpiece, or dentist drill, which can rotate a bur at high speeds (5,6).

Aims and Objectives of the present study are:

1. Investigation of any dental clinic
2. Enlistment of tools / equipments utilized by the dentist for patients
3. Enumeration of the significance of each dentistry tool.

Materials and Methods

Usage of some important tools is given as under:

A Mouth Mirror Or Dentist's Mirror is an instrument used in dentistry. The head of the mirror is usually round, and the most common sizes used are the No. 4 Ø (18 mm) and No. 5 (Ø 20 mm).[1]

A No. 2 is sometimes used when a smaller mirror is needed, such as when working on back teeth with adental dam in place. The mouth mirror has a wide range of uses. Three of its most important functions are allowing indirect vision by the dentist, reflecting light onto desired surfaces, and retraction of soft tissues. There exists 2 different norms of the thread that are not compatible to each other. The US norm have a taper thread and is mostly used in the United States, Canada, Spain and South Korea.[2]

Indirect vision is needed in certain locations of the mouth where visibility is difficult or impossible. The posterior (or lingual) surfaces of the anteriormaxillary teeth is a notable area where mouth mirrors are often used. Other areas of the mouth can be viewed more readily with the mouth mirror, even though it would be possible to see them if the dentist or dental hygienist adjusted their body into a poor position. Without the mouth mirror, poor body positioning would occur daily and lead to chronic postural problems, especially of the back and neck (7,8).

There are other areas of the mouth where lighting is difficult, even with overhead dentists' lights. In these instances, the mouth mirror is used to reflect light onto those surfaces. This is especially useful if the mirror is simultaneously being used for indirect vision of an obscure area.

Additionally, the mouth mirror is used to retract tissues, such as the tongue or cheeks, to gain better visualization of the teeth.

Dentist's mirrors are also commonly used by engineers to allow vision in tight spaces and around corners in equipment. They are a common tool inoptics and laser labs as well.

A Periodontal Probe

is an instrument in dentistry commonly used in the dental armamentarium. It is usually long, thin, and blunted at the end. The primary purpose of a periodontal probe is to measure pocket depths around a tooth in order to establish the state of health of the periodontium. There are markings inscribed onto the head of the instrument for accuracy and readability.

A Dental Syringe

is a used by dentists for the injection of an anesthetic. It consists of a breech-loading syringe fitted with a sealed cartridge containing anesthetic solution.

The ancillary tool (generally part of a dental engine) used to supply water, compressed air or mist (formed by combination of water and compressed air) to the oral cavity for the purpose of irrigation (cleaning debris away from the area the dentist is working on), is also referred to as a dental syringe or a dental irrigation nozzle. A 3-way syringe / nozzle has separate internal channels supplying air, water or a mist created by combining the pressurized air with the waterflow. The syringe tip can be separated from the main body and replaced when necessary (9,10).

A Dental Drill or Dentist's Drill

is a small, high-speed drill used during dental procedures, usually to remove decay and shape tooth structure prior to the insertion of a filling or crown. A dental drill may also be used in the

cleaning and shaping of root canals during endodontic treatment, or to remove old or temporary fillings or crowns prior to the insertion of new or permanent restorations. The term "dental drill" is considered the more colloquial form of the term "dental handpiece," although it can also be construed as to include the power source for one or more handpieces, a "dental engine." "Handpiece" and "engine" are more generic and euphemistic terms for generic dental tools.

Modern dental drills can rotate at up to 400,000 rpm,[1] and generally use hard metal alloy bits known as burs. Dental burs come in a great variety of shapes designed for specific applications. They are often made of steel with a tungsten carbide coating, or of tungsten carbide entirely. The burr may also have a diamond coating (11,12)

A Dental Torque Wrench

or restorative torque wrench is a torque wrench used to precisely apply a specific torque to a fastener bolt for fixation of an abutment, dentures or prosthetics[1] on a dental implant

A Dental Explorer Or Sickle Probe

is an instrument in dentistry commonly used in the dental armamentarium. A sharp point at the end of the explorer is used to enhance tactile sensation.

In the past it was usual for dentists to use the explorer to probe teeth for the presence of cavities. Some dental professionals have questioned this practice in the first decade of the twenty-first century.[1][2] Since tooth enamel is demineralized in the early stages of tooth decay, the use of an explorer could open a cavity in the enamel where none existed previously. Instead, they argue that fluoride and oral hygiene should be used to remineralize the enamel and prevent it from decaying further. This debate still continues because sometimes decay can be difficult to diagnose without tactile verification. Additionally, radiographs and other products designed to identify decay (such as measuring fluorescence from a laser) help the dental professional make a final diagnosis of tooth decay (13,14)

A Lentulo Spiral

is a dental instrument used to properly distribute root canal sealer and cement evenly throughout the root canal system, as when performing endodontic therapy or a post and core cementation.

The instrument has an atypical left-handed screw threading (like the screw in the left pedal of a bicycle) so that the application of sealer or cement will flow down the tip of the spiral when the slow-speed is in forward mode.

A common criticism of the Lentulo spiral is that the long term failures resulting from marginally poorer cement/sealer distribution are less problematic than the possibility of the spiral breaking inside the root canal. Proper use, maintenance, and disposal of old instruments should minimize breakage however.

Results and Discussion

Orthodontia, also known as orthodontics and dentofacial orthopedics, is a specialty field of dentistry. An orthodontist is a specialist who has undergone special training in a dental school or college after they have graduated in dentistry. It was established by the efforts of pioneering orthodontists such as Edward Angle and Norman William Kingsley. The specialty deals primarily with the diagnosis, prevention and correction of malpositioned teeth and the jaws.

Structure of Tooth

The tooth has two anatomical parts. The crown of a tooth is that part of the tooth which is covered with enamel and this is the part usually visible in the mouth.

The root is the part embedded in the jaw. It anchors the tooth in its bony socket and is normally not visible (15).

Enamel The hard outer layer of the crown. Enamel is the hardest substance in the body.

Dentine Not as hard as enamel, forms the bulk of the tooth and can be sensitive if the protection of the enamel is lost.

Pulp Soft tissue containing the blood and nerve supply to the tooth. The pulp extends from the crown to the tip of the root.

Cementum The layer of bone-like tissue covering the root. It is not as hard as enamel.

Structures Around The Tooth

Periodontal ligament: Made up of thousands of fibres which fasten the cementum to the bony socket. These fibres anchor the tooth to the jaw bone and act as shock absorbers for the tooth which is subjected to heavy forces during chewing.

Oral Mucosa: This is the term used to describe the moist tissue that lines the mouth.

Gingivae (gums): Soft tissue that immediately surrounds the teeth and bone. It protects the bone and the roots of the teeth and provides an easily lubricated surface.

Bone: Provides a socket to surround and support the roots of the teeth.

Nerves and blood supply: Each tooth and periodontal ligament has a nerve supply and the teeth are sensitive to a wide variety of stimuli. The blood supply is necessary to maintain the vitality of the tooth.

Maintenance of dental tools and equipments

Effective maintenance of equipment in a dental surgery or laboratory is essential to the smooth functioning of both. Without strict adherence to scrupulous maintenance procedures, practitioners run the risk of equipment breakdown and even complete failure, causing inconvenience to both staff and patients.

Dental instruments and equipment represent a significant financial investment, and most practitioners cannot afford the expense of costly repairs and replacements. Dental instruments,

and especially handpieces, are intricately designed with sensitive inner workings, which are difficult and time consuming to replace, but are also easily damaged by age and frequent use. Faulty equipment has the potential to cause injury both physically and biologically, so your patient's health is very much at risk if strict maintenance protocols are not adhered to. It goes without saying, that prevention is better than cure with regards to surgery equipment.

To facilitate efficient instrument maintenance, practitioners should carefully consider any new equipment that they purchase and assess the item's quality. From June 1998, it was ruled that all medical devices must have a "CE" mark to show that the item has been manufactured to high standards, and that it complies with health and safety standards. This legislation was brought in with the express purpose of protecting the public and the user from inferior products that could fail. Care should be taken to insure that new instruments are compatible with equipment already in place and that it is fit-for-purpose, remembering that the cheapest product is not necessarily the best option.

A manufacturer's instructions are sacrosanct when it comes to the maintenance of new and existing dental equipment. Failure to follow their recommendations will invalidate the warranty, which in turn may require maintenance and repairs to be carried out by registered technicians. Furthermore, all members of staff have a "duty of care" under the Health and Safety at Work Act 1974, preventing them from performing any action, which may put others or themselves at risk. This includes attempting inappropriate maintenance on dental equipment, which should be carried out by a fully-trained and qualified specialist. Therefore, it is vital that rigorous maintenance regimes are set up and adhered to, this being the responsibility of the practice owner or practice manager in charge.

Hand Instruments

Many hand instruments need no care other than effective cleaning. However, some of the main problems that dental practitioners come up against in the surgery are caused by blunt items, these being part of a group of instruments requiring more specific maintenance other than simply cleaning. Many of the instruments a practitioner uses must be sharp for optimum performance. Probes, excavators, carvers, chisels, cervical trimmers and hand scales are all needed for precise work, and due to cleaning and sterilisation they can quickly become blunt and ineffective.

Sharp hand instruments promote precision, decrease operator fatigue, and reduce the time it takes to complete a procedure. Regular sharpening is very important, although care must be taken to avoid fracturing a brittle and weak instrument, which could cause damage to the patient's mouth.

Handpieces and other rotary or air driven instruments

Handpieces are costly, complicated instruments that demand careful maintenance and care. Contracts should be set up and approved by certified technicians as neither the practitioner nor their colleagues should service these hand pieces other than everyday cleaning, lubrication and sterilisation.

Suction Equipment

To keep suction equipment working effectively, filters must be cleaned regularly with a disinfectant solution running through the tubings. To avoid the build up of mucous, suction tubing should also have water aspirated through it after every patient.

Electrical Equipment

The variety and complexity of electrical dental equipment is constantly growing and evolving. Considerable inconvenience to the dental team can be avoided by careful maintenance of the dental unit – the most important piece of electrical equipment in surgery. Again, this and other electrical equipment should be cared for by specialist technicians. This is particularly important for radiography equipment, which should have its chemicals changed regularly.

Good maintenance of medical devices in the dental environment goes hand-in-hand with sound surgery protocols. This will ensure high standards of service for patients. Proper training is a must in order to ensure that dental professionals are aware of the correct working of equipment. They must also be alert to malfunction so that repairs can be carried out immediately.

schülke, providers of infection control product and training solutions, is dedicated to increasing industry awareness of correct product maintenance and decontamination.

New Dental Implants

Dental implants are an option for tooth loss due to an accident or infection or as an alternative to bridges and dentures. The implants are tooth root substitutes that are surgically anchored in place in the jawbone and act to stabilize the artificial teeth to which they are attached. Suitable candidates for dental implants need to have an adequate bone level and density, must not be prone to infection, and must be willing to maintain good oral hygiene practices(13).

Dentures

Dentures are removable false teeth made of acrylic (plastic), nylon or metal. They fit snugly over the gums to replace missing teeth and eliminate potential problems caused by gaps.

Gaps left by missing teeth can cause problems with eating and speech, and teeth either side of the gap may grow into the space at an angle. Sometimes, all the teeth need to be removed and replaced.

You may therefore need either:

- complete dentures (a full set) – which replace all your upper or lower teeth, or
- partial dentures – which replace just one tooth or a few missing teeth

Dentures can help to prevent problems with eating and speech and, if you need complete dentures, they can also improve the appearance of your smile and give you confidence

Improve fit of dentures. For first-time denture wearers, oral surgery can be done to correct any irregularities of the jaws prior to creating the dentures to ensure a better fit. Oral surgery can

also help long-term denture wearers. Supporting bone often deteriorates over time, resulting in dentures that no longer fit properly. In severe cases, an oral surgeon can add a bone graft to areas where little bone remains.

Complete dentures

A full denture will be fitted if all your upper or lower teeth need to be removed or you're having an old complete denture replaced.

The denture will usually be fitted as soon as your teeth are removed, which means you won't be without teeth. The denture will fit snugly over your gums and jawbone.

However, if you have dentures fitted immediately after the removal of several teeth, the gums and bone will alter in shape fairly quickly and the dentures will probably need relining or remaking after a few months.

Occasionally, your gums may need to be left to heal and alter in shape for several months before dentures can be fitted.

You can either see a dentist or a qualified clinical dental technician to have your dentures made and fitted. The difference between a dentist and a clinical dental technician (in terms of producing dentures) is outlined below.

- A dentist – will take measurements and impressions (moulds) of your mouth, and then order your full or partial dentures from a dental technician (14).
- A clinical dental technician – will provide a full set of dentures directly without you having to see your dentist (although you should still have regular dental check-ups with your dentist).

A trial denture will be created from the impressions taken of your mouth. The dentist or clinical dental technician will try this in your mouth to assess the fit and for you to assess the appearance. The shape and colour may be adjusted before the final denture is produced.

Conclusion

Tooth Saving Tips

Patients today have more options than ever before to treat their teeth. Understanding your choices and their impact on your future dental health and lifestyle is important. Read on to learn why nothing is as good as your natural tooth and get simple tips for saving your teeth!

Saving a natural tooth through endodontic treatment should always be the first choice for the best health and cosmetic results. There are many advantages to saving your natural tooth:

- Efficient chewing
- Normal biting force, so you can continue to eat your favorite foods
- Maintains a natural appearance
- Limits the need for more costly, ongoing dental work

Tips for Saving Your Teeth

1. If you are given a choice between root canal treatment or tooth extraction, always choose root canal treatment. Dentistry has yet to produce a denture, bridge or implant that looks, feels and functions as well as a natural tooth.
2. Most endodontists offer tremendous flexibility in accommodating emergency cases including weekends in some cases so your pain can be relieved quickly.
3. If your dentist recommends tooth extraction, ask whether root canal treatment is an option.
4. If your dentist says that an endodontic procedure is not an option, ask why, and request a referral to an endodontist. Endodontists are dentists who specialize in saving teeth, and have at least two years of advanced training in root canal procedures. They are experts at diagnosing and relieving tooth pain, and use advanced equipment to treat patients quickly and comfortably. Your dentist probably has partnerships with endodontists in your area already.

What to Avoid

- Never choose extraction because you think it will be cheaper! When a natural tooth is extracted, it must be replaced with an artificial tooth to prevent other teeth from shifting, and to prevent future dental problems. The cost of a denture, bridge or implant, plus the extraction, often is higher than the cost of an endodontic procedure that would save the tooth for years to come. Most dental insurance plans cover endodontic treatment.
- Never choose extraction because you think root canal treatment will be painful! Modern techniques and effective anesthesia make root canal treatment virtually painless. In fact, discomfort after the procedure is generally greater with a tooth extraction. Patients who have experienced root canal treatment are six times more likely to describe it as "painless" than patients who have not had a root canal.
- Never choose extraction because you think it will be quicker! Endodontic treatments generally require one to two visits lasting less than an hour each. An extraction requires one visit, but the denture, bridge or implant will require several additional visits with your dentist.

Indian Orthodontic Society

- The Indian Orthodontic Society held its first annual conference in 1967 in New Delhi. The Journal of the Indian Orthodontic Society was started by H. D. Merchant, its first Editor. He was also the founding President of the Society. Naishadh Parikh was the founding Secretary and Treasurer. The other founding members were A.B. Modi, Keki Mistry, Mohandas Bhat, Prem Prakash and the late H.S. Shaikh.
- The Society established the Indian Board of Orthodontics in 1999, the first such board in the field of dentistry in India and the third in the world.[1] The Board was established to examine members with five years of experience after they have completed

MDS[clarification needed] in clinical excellence in the practice of Orthodontics. The Indian Orthodontic Society also became part of World Federation of Orthodontics at its inception in 1995

It is estimated that nearly 5% of the UK or USA population present with dentofacial deformities that are not amenable to orthodontic treatment requiring orthognathic surgery as a part of their definitive treatment.[2][3][4] Orthognathic surgery can be used to correct;

- Gross jaw discrepancies (anteroposterior, vertical, or transverse discrepancies)[5]
- Facial skeletal discrepancies associated with documented sleep apnea, airway defects, and soft tissue discrepancies
- Facial skeletal discrepancies associated with documented temporomandibular joint pathology.

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Bibliography

1. "AVDC Home". Avdc.org. 29 November 2009. Retrieved 18 April 2010.
2. "Classification of Dental Instruments". Arkansas Tech University. Retrieved 2017-01-12.
3. "Common Instruments Used in Dental Examination" (PDF).
4. "Dental excavators". www.drchetan.com. Retrieved 2017-01-12.
5. "EVDC web site". Evdc.info. Retrieved 18 April 2010.
6. "Glossary of Dental Clinical and Administrative Terms". American Dental Association. Retrieved 1 February 2014.
7. "History". Pennsylvania School of Dental Medicine. Retrieved 13 January 2016.
8. "Kaeser Compressor Applications". Compressed Air Systems. Retrieved 2017-01-12.
9. ^ Jump up to:a b "Stone age man used dentist drill". BBC News. 6 April 2006. Retrieved 24 May 2010.
10. ^ Jump up to:a b Gelbier, Stanley. 125 Years of Developments in Dentistry. British Dental Journal (2005); 199, 470–473. Page accessed 11 December 2007. The 1879 register is referred to as the "Dental Register".
11. ^ Jump up to:a b The story of dentistry: Dental History Timeline Archived 9 March 2012 at theWayback Machine., hosted on the British Dental Association website. Page accessed 2 March 2010.
12. Barras, Colin (29 February 2016). "How our ancestors drilled rotten teeth". BBC. Retrieved 1 March 2016.
13. History of Dental Surgery in Edinburgh (PDF), hosted on the Royal College of Surgeons of Edinburgh website. Page accessed 11 December 2007.
14. <https://www.purdue.edu/preprofessional/documents/Dentist.pdf>
15. J Menzies Campbell (8 February 1955). "Banning Clerks, Colliers and other Charlatans". The Glasgow Herald. p. 3. Retrieved 5 April 2017.

Androgyny, Interpersonal Need as Significant Personality of Youth

Dr. Poonam Panghal

Abstract

The great challenge of transforming India can be achieved through youth which has got the power of ideas positivity, ambition and ability. Now transforming new India young people are changing their personality moving towards androgynous personality traits. Stereotype masculine and feminine and androgynous personality is more flexible adjusting to the personal familiar social and cultural demand and professional responsibility. On interpersonal needs indicate a good balance personality relationship in the way youth express their interpersonal need with one another.

This paper was drawn in changing personality of youth in transforming India. Data were collected from a sample of 240 young participants (boys & girls) with the use of questionnaires were selected through random sampling from Jaipur city in the age group of 18 to 24 years from which 120 from professional educational background and 120 from non-professional educational background. subjects were drawn from Engineering college (B.E.), Masters of Computers Application and Home Science college for professional educational background. For non professional educational background, subjects were from Bachelor and Master of Arts, Science and Commerce. The sample consisted of equal number of boys and girls, equally divided in the age group of 18-20 and 21-24 years.

Androgyny scale (Pareek and Ray 2002), and Interpersonal need Inventory (IPNI) scale by Pareek, 2002) tool were used together data.

Youth describe themselves assertive and yielding independent, instrumental (task oriented) and expressive (feeling oriented). This study examined that 36.25% number of subjects fell in 'androgynous' category(actual) and 43.33% 'desired' to be in the above category in the total sample. Second larger numbers of subjects scored in the 'feminine' category on 'actual' aspect (33.54%) and 'desired' to be in the high masculine and 'Masculine categories (18.33%. and 14.16%). Impact of age on androgyny traits and interpersonal needs were not found to be significant. On interpersonal need youth indicate a good balance in the way express themselves with other people they are social but 'interaction shy', 'Reserved' and 'intimacy responsive', 'caring' care responsive interdependent and influential.

Key words: Androgyny, masculine, feminine, interpersonal adjustment, Interpersonal need, stereotype, androgynous.

Introduction

The great challenge of transforming India can be achieved through youth which has got the power of ideas, ambition and ability. This resource of youth is an important building block for transforming India into a developed nation. The precious time has to be used for achieving the goal have confidence to win, have confidence to defeat the problem and succeed and have a righteous heart; youth will definitely succeed in all their own missions.

Young people (girls & boys) in adulthood are moving towards androgynous personality traits. Traditionally norms about the role of men and women in society have not adapted to keep pace with India's rapid economic growth and rise in opportunities for women. Now transforming new India young people are changing their personality moving towards androgynous personality traits. Since in culture by enlarge there are seen a greater demand for role flexibility and distribution of household and professional responsibility. Stereotype masculine and feminine and androgynous personality is more flexible adjusting to the personal familiar social and cultural demand. For human 'androgyny' in terms of gender identity masculine & feminine gender roles in their society.

Androgyny represents a combination of personality characteristics traditionally associated with men (masculine) & those associated with women (feminine) E.cook (1987). Androgynous personality is midway between 'masculine' and 'feminine'. An androgynous person is a female or male who has a high degree of both feminine (expressive) and masculine (Instrumental) traits.

The different characteristics are attributed to the two genders. men are attributes with characteristics like aggression, perseverance and assertiveness while woman are seen as having qualities like compassion, empathy, harmony, collaboration, nurturance, aesthetics and creativity. (Broverman et al., 1972)

An interpersonal need is one that may be satisfied only through the attainment of a satisfactory relation with other people (schutz, 1958).

As relationship between two people grows, and they learn more about the needs that motivate them, it becomes easier to express themselves in ways that other will understand.

Methodology

We Indian study who comprised of 240 youth (Boys & Girls) were selected through random sampling from Jaipur city, Rajasthan in the age group of 18 to 24 years from which 120 subjects were from professional educational background and another 120 from non-professional educational background. Subjects were drawn from Engineering (B.E.), Home Science, Bachelor and Masters of Arts, Science and Commerce. Androgyny scale (Pareek & Ray, 2002 and Interpersonal need Inventory (IPNI) scale by Pareek, 2002) was used to-gather data

Review of literatures describes that 'androgyny is a personality traits that implies a person is not sex-typed as either masculine or feminine, but disclose attributes of both. Androgynous refers to a condition in which sex roles are flexible, allowing all individuals male & female to behave in

ways that freely integrate behaviors traditionally thought to belong exclusively to one or the other sex (Kalpan & Bear, 1976). By this view both boys and girls can be assertive and yielding, independent and dependent, instrumental (task oriented) and Expressive (feeling oriented).

A review describes that androgynous individual display higher levels of self-esteem, social well being, social competence. Achievement motivation and demonstrate better behavioral flexibility than masculine feminine and undifferentiated sex type (Kurdek & Siesky, 1980) Lewin et al. and Tragos (1987). Similar results were found in Orlofsky, O'heren (1987) and Whitley (1983).

A review of literature examining proactive personality Bryan Fuller and Laura E. Marler (2009) results indicate proactive personality is positively related to objective and subjective career success. Learning goal oriented, self efficacy, four big five traits factors (extraversion, openness to experience, conscientiousness and neuroticism)

Rogers (1961) suggested that basic behind the successful development relationship is understanding when some one fully understand feelings of other.

Buss A.H., Plomin, R. (1984) found that the degree of consideration that an individual shows in a relationship is independent of his degree of responsibility, although both degrees are independent of each other, they are both related to the success of relationship. The early interactions of the infant with his parents form his faith and mould his development and influence his interpersonal style.

Felson, R., & Messner, S. (1950) conceptualized interpersonal behavior as composed of two intersecting dimensions of love hate (represented, a horizontal line) and dominant submit (represented a vertical line). With in this framework , it was proposed that causes of interpersonal behavior could be placed in specific segments within any of the quadrants, depending on the kind and degree of the dimension reflected by a particular behavior (Leary et al. 1951).

Results

We Indian study the results indicated that 36.25% number of subjects fell in the 'androgynous' category (actual) and 43.33% 'desired' to be in the above category. Second larger numbers of subjects scored in the 'feminine' category on 'actual' aspect; from and 'desired' to be in the 'masculine' and 'high masculine' categories. Among the subjects from professional educational background, the second larger number of youth 'desired' to be in the 'high masculine' category, while, subjects 'desired' to be in the 'feminine' category from non-professional educational background (Table 1).

Table 1

Frequencies & percentages of professional and non-professional youth (18-24 years) boys & girls on Feminine and Masculine (actual and desired) scores on androgyny (N=240) Jaipur City, Rajasthan

Table 1

S. No.	Categories on androgyny scale	Feminine and Masculine			
		Desired		Actual	
		Frequency	Percent	Frequency	Percent
1.	High Masculine	88	18.33%	11	2.29%
2.	Masculine	68	14.16%	47	9.79%
3.	Androgynous	208	43.33%	174	36.25%
4.	Feminine	101	21.04%	161	33.54%
5.	High Feminine	15	3.12%	87	18.12%
6.	Total	480	100%	480	100%

Androgynous individuals display higher levels of self-esteem, social well-being, social competence, achievement motivation and demonstrate better behavioral flexibility than masculine, feminine and undifferentiated sex types (Kurdek & Siesky, 1980) Lewin et al. and Tragos (1987).

Harris and Schwab (1990) suggest that masculine 'tend to reveal a higher level of personal and social adjustments' than other personalities. The most stereotypically masculine were the most popular and best adjusted during their adolescence Burchardt, C.J. & Serbin, L.A. (1982).

Table No. 2

S. No.	Behavior Needs			(16-24 yrs.)	
				Frequencies	Percentage (%)
1.	Give Belonging	- High	Over Social	52	21.66%
		- Low	Under Social	85	27.08%
		- Medium	Social	123	61.25%
	Receive Belonging	- High	Interaction avid	31	12.91%
		- Low	Interaction shy	88	36.66%
		- Medium	Social responsive	12	5.04%
2.	Give affiliation	- High	Over Personal	57	23.75%
		- Low	Reserved	87	36.25%
		- Medium	Friendly	68	27.6%
	Receive affiliation	- High	Intimacy avid	45	18.75%
		- Low	Intimacy shy	91	37.91%
		- Medium	Intimacy responsive	103	42.91%
3.	Give Extension	- High	Over considerate	47	19.58%
		- Low	Un-concerned	73	34.41%
		- Medium	Caring	120	50%
	Receive Extension	- High	Care avid	46	19.16%
		- Low	Care shy	94	39.16%
		- Medium	Care responsive	110	45.83%
4.	Give Recognition	- High	Ingratating	71	29.58%
		- Low	Un appreciative	61	25.41%
		- Medium	Gracious	107	44.58%
	Receive Recognition	- High	Visibility avid	48	20%
		- Low	Visibility shy	102	42.5%
		- Medium	Appreciative	85	32.91%
5.	Give Control	- High	Autocrat	65	22.91%
		- Low	Abdicate	80	33.33%
		- Medium	Democrat	105	43.75%
	Receive Control	- High	Dependent	34	14.16%
		- Low	Counter Dependent	76	31.66%
		- Medium	Inter Dependent	120	50%
6.	Give Influence	- High	Influence avid	72	30%
		- Low	Influence shy	69	28.75%
		- Medium	Influential	99	41.25%
	Receive Influence	- High	Over amenable	64	26.66%
		- Low	Unreceptive	64	22.5%
		- Medium	Receptive	122	50.83%

Androgyny, Interpersonal Need as Significant Personality of Youth

Dr. Poonam Panghal

The table gives the frequencies and percentages of subjects scoring in the three categories of 'high' 'medium' and 'low', on six interpersonal needs and in the two types of needs, i.e., 'Giving' and 'Receiving'. On almost all the needs, larger number of subjects scored in the 'medium' category on both 'giving' and 'receiving' types. In recognition needs (receive) more subjects fell in the 'low' category. Similar results were found in affiliation need (giving).

On interpersonal needs, youth indicate the following characteristics in way they express themselves with other people they are social but 'interaction shy'; 'reserved' and 'intimacy responsive'; 'caring' and 'care responsive'; 'gracious' but 'visibility shy'; 'democrat' and 'interdependent'; and 'influential' and 'receptive'. Although the traits indicate a wholesome pattern of the characteristics of interpersonal needs in youth, there appears a slant towards youth being 'reserved' and 'shy'.

Conclusion

It is important to challenge these stereotypes as they hamper attainment of 'full potential' as among both male & females. What is unnatural about a man wanting to be at home to look after the children, so what if a woman has good business acumen & wants to run the family business or start her own. Gender equality is as much about freedom as it is about stereotype women can and have broken many stereotypes by themselves, empowered entire communities or challenged, existing economically social cultural, health & environmental stereotypes & norms so that transforming effect will be more impactful and sustainable. Youth indicate a good balance in the way express their interpersonal need with one another.

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References

1. Bem, S.L. (1974). The measurement of psychological androgyny. *Journal of consulting and clinical Psychology*, 42, 155-162.
2. Broverman, Inge K., S.R. Vogel, D.M. Broverman, F.E. Clackson and P.S. Rosencrantz (1972). Sex rollsterotypes: A current appraisal. *Journal of social issues*, 28, 59-78.
3. Burchardt, C.J. & Serbin, L.A. (1982). Psychological androgyny and personality adjustment in college and psychiatric populations. *Sex Roles*, 8, 835-851.
4. Buss A.H., Plomin, R. (1984). *Temperament : Early developing personality traits*. Hillsdate, NJ : Erlbam.
5. Ellen Pielock *Psychological Androgyny; A review of research*, July 1, 1987
6. Felson, R., & Messner, S. (1950). The control motive in intimate partner violence. *Social Psychology Quarterly*, 63, 86-94.

7. Hill, J.P., Lynch, M.E. (1973). The intensification of gender related role expectations during early adolescence. In J. Brooks Gum and A.C. Peterson (eds.) girls at puberty: Biological and Psychosocial perspectives (pp. 201-228). New York: Plenum.
8. Kurdek, L.A., and Siesky, A.E. (1980). Sex roll sex roll self-concept of single divorced Parents and their children. Journal of Divorce, 3 : 3 249-261.
9. Leary,N. (1951). Journal of social and personal relationship 17, 503-521.
10. Lewinsohn, P.M., Rosenbaum, M. (1987). Recall of parental behavior by acute depressives, remitted depressives, and non-depressives. Journal of personality and social psychology. 52 : 3 : 611-619.
11. Pareek, Udai (2002): Training Instrument for Human Resource Development, New Delhi, Tata Mc Graw Hill.
12. Rogers, Carl (1961). A theory of therapy personality and interpersonal relationship as developed in client centered framework : IN S. Koch (ed) : Psychology : A Study of Science New Delhi : Mc Graw Hill, p. 200.
13. Shimonaka Y, et al. Androgyny and Psychological well-being among older and younger Japanese adults. Aging (Milao), 1994.

Impact of Cash Less Transactions in Agricultural Sector

Meenakshi Mathur

Abstract

Reports of stress in agriculture have begun to appear because of cashless transaction. Cash is the primary mode of transaction in agriculture sector which contributes 15% to India's total output. Formal financing in many parts, especially Punjab, Uttar Pradesh, Odisha, Maharashtra, Gujarat and Kerala is significantly from cooperative banks, which are barred from exchange-deposit of demonetized currency. Notably, this is a time of kharif harvest and start of rabi sowing, partly explaining why this period is dubbed the 'busy season' from a standpoint of credit demand, the other being bunching of festivals and weddings. Agriculture is impacted through the input-output channels as well as price and output feedback effects. Sale, transport, marketing and distribution of ready produce to wholesale centres or mandis, is dominantly cash-dependent. Disruptions, breaks in the supply chains feedback to farmers as sales fall, increased wastage of perishables, lower revenues that show up as trade dues instead of cash in hand and when credited into bank accounts with limited access affect the sector.

Introduction

Currently, many of these networks are operating sub-optimally or altogether at a standstill, depending upon location, market links and other item-specific factors. The input side is equally affected as many payments/purchases, such as seeds, fertilizers, implements and tools, are outright in cash. Borrowing-financing operations of larger farmers and organized producers are also cut off or severely clipped (1,2).

Agriculture is the backbone of our Indian country. In our country 75% of people are either directly or indirectly depend on agriculture. The farmers struggled a lot at the time of cashless transaction because the saving habits as well the payment mode of farmers were only on cash. Farmers used to handle liquid cash as it is essential for their day to day transactions. 70% of the farmers market their products through Farmers Market (uzhavar santhai) or they may be street vendors where cashless transaction is impossible. Daily wage earners in agriculture were earning small amount per day. When the withdrawals from banks were limited the farmers were unable to draw cash to pay their labors which result on postponing their works and get the labors jobless for days or months. Cash is the primary mode of transaction in agriculture sector. The farmers who own limited acres will not have bank accounts, which had a large impact on the farmers at the time of cashless transaction. Not only agriculture sector but also other industries which depend on agriculture were also affected. These impacts make the farmers to depend on

illegal money lenders and black marketers to cater their transaction needs. Cashless transaction has affected every Indian, but it has hit the agricultural sector to the core. The government should try to reach out to the farmers of rural areas also to come out from the above issues.(3,4)

Discussion

The cashless transaction of Rs 500 and Rs 1,000 notes will hurt agriculture, informal sector workers — about 482 million people who earn cash incomes — and disrupt India's consumption patterns for at least the next quarter, according to an assessment released last week by Deloitte, an international consulting firm.

In contrast, sectors like e-commerce and payment banks, payment gateways are set to gain as transactions using cashless methods will increase over the coming months, the Deloitte report said, emphasising that “the long-term outlook remains positive”.

“Overall, a likely negative impact on disposable income is expected along with disruption in the consumption patterns of the general populace,” said the report, which called cashless transaction “arguably one of the most significant reform measures in its tenure” and “an expeditious move to boldly counter the black money and parallel economy”.(5,6)

Others are not as optimistic. Cashless transaction has perhaps “penalised” the entire informal sector and damaged it permanently”, especially the informal financial sector, which could account for a fourth of bank lending, or 26 percent of GDP, wrote Pronab Sen, country director of the India Central Programme of the International Growth Centre, a think tank.

“There is no doubt whatsoever that Modi has pulled off a major political and publicity coup and substantially enhanced his reputation as a muscular leader, but surely somebody needs to ask: at what price?” wrote Sen on 14 November, 2016 in Ideas for India, an economics and policy portal.

Rs 14 lakh crore – or \$217 billion, 86 percent of the value of Indian currency then in circulation – became useless from midnight of 8 November, 2016, part of the government's crackdown on black, or unaccounted, money, which accounts for about a fifth of the economy, as *IndiaSpend* reported on 8 November, 2016.

Agriculture, under stress for two years, was forecast to grow 4 percent

Agricultural growth in India contracted 0.2 percent in 2014-15 and grew no more than 1.2 percent in 2015-16, largely because of back-to-back droughts.

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Results

Agriculture was expected to grow at 4 percent this year according to this October 2016 CRISIL report, but cashless transaction is likely to dent that forecast. India is currently in the midst of the winter sowing season, but farmers are reported to be running out of cash to buy seeds.

Jaipur Vidyut Vitran Nigam Limited- Structural and Functional Analysis

Dr. Meenakshi Vijay

Abstract

Electricity is an essential requirement for all facets of our life. It has been recognized as a basic human need. It is a critical infrastructure on which the socio-economic development of the country depends. Supply of electricity at reasonable rate to rural India is essential for its overall development. Equally important is availability of reliable and quality power at competitive rates to Indian industry to make it globally competitive and to enable it to exploit the tremendous potential of employment generation. Service sector has made significant contribution to the growth of our economy. Availability of quality supply of electricity is very crucial to sustained growth of this segment. JAIPUR VIDYUT VITRAN NIGAM LIMITED (Jaipur Discom) is an undertaking of GoR engaged in distribution and supply of electricity in 12 districts of Rajasthan, namely Jaipur, Dausa, Alwar, Bharatpur, Dholpur, Kota, Bundi, Baran, Jhalawar, Sawaimadhopur, Tonk and Karauli. (Except Kota City & Bharatpur City)

Introduction

Government of Rajasthan issued (July 2000) a gazette notification unbundling Rajasthan State Electricity Board into five Companies i.e. Rajasthan Rajya Vidyut Utpadan Nigam Limited (generation Company); Rajasthan Rajya Vidyut Prasaran Nigam Limited (transmission Company) and three regional distribution Companies namely Jaipur Vidyut Vitran Nigam Limited, Ajmer Vidyut Vitran Nigam Limited and Jodhpur Vidyut Vitran Nigam Limited. Jaipur Vidyut Vitran Nigam Limited (Company) was incorporated under the Companies Act, 1956 by Government of Rajasthan, and was created with the principal object of engaging in the business of distribution and supply of electricity in 12 districts* of Rajasthan. The operation of Company is managed by eight distribution circles*The Company is managed by BOD. Chairman and Managing Director is the Chief Executive of the Company and is assisted by various departmental heads at the corporate level. At present, the IT needs of the Company are seen by Executive Engineer (IT) and Executive Engineer (CRP), who function under the Chief Engineer (RP). However, prior to this (i.e. audit period), Superintendent Engineer (Commercial) and Chief Accounts Officer were looking after the implementation and maintenance of HT billing system (1).

Discussion

'Rent, Rates and Taxes' was understated by ` 14.47 crore due to nonprovision of liability towards statutory dues. Consequently, 'Current Liability and Provisions' as well as 'Loss for the year'

were understated to the same extent. 'Depreciation' was understated by ` 14.50 crore due to non-charging of depreciation for the entire year in respect of feeders completed under Feeder Renovation Program in 2008-09. Consequently, 'Fixed Assets' were overstated and 'Loss for the year' was understated to the same extent. 'Sundry Debtors' were overstated by ` 19.91 crore due to non writing off of the dues in excess of the amount of one time settlement with Urban Local Bodies on account of public street lighting. Consequently, 'Other Debits' as well as 'Loss for the year' were understated to this extent(2)

Results and Conclusion

The increase in distribution capacity could not match the pace of growth in consumer demand, as against the planned additions of 1200 sub-stations during 2006-11, the actual addition was only 1142 sub-stations and further, as compared to the growth of connected load from 11792 MW as on April 2006 to 20857 MW as on March 2011, the increase in transformers capacity was from 11310 MVA to 15469 MVA. In JdVVNL, delay ranging between five and 27 months in completion of 28 sub-stations against scheduled dates of completion as on 31 March 2011 deprived envisaged energy savings of 17.44 MUs valuing ` 11.37 crore(3)

The Company did not ensure the implementation of service level agreement with the vendor. Incorrect mapping of business rules resulted in deficient billing application software. This led to incorrect billing of the consumers, especially in cases of changes in the consumer parameters leading to financial loss to the Company. The Company did not have adequate back up policy nor a disaster recovery plan. Thus continuation of the billing function in case of any eventuality was not ensured. Thus, the Company was vulnerable to the risk of loss of revenue apart from disruption of important function of the revenue realization(4).

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Bibliography

1. <http://rvunl.com/contact%20Us.html>
2. http://rvunl.com/Installed%20capacity_RVUN.php
3. <http://www.rvunl.com/Dholpur.php>
4. <http://www.rvunl.com/Ramgarh%20thermal%20power%20station.php>

Reproductive Impairment Associated with the Hydro Ethanolic Extract of *Calendula Officinalis* (Petals) on Wistar Strain of Male Albino Rat (*Rattus Norvegicus*)

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Abstract

Ingestion of hydro ethanolic extract of *Calendula officinalis* flower (COH_{ETEX}) to adult Sprague-Dawley male rats at the dose level of 300 mg/kg body weight for 60 days did not result in body weight loss but decreased the weight of testis, epididymis, seminal vesicle and ventral prostate in a significant manner. Sperm motility as well as sperm density was reduced highly ($P \leq 0.001$) significantly which resulted in 100% negative fertility. Serum testosterone level showed highly significant ($P \leq 0.001$) reduction. Biochemical parameters like protein and sialic acid, in testis, epididymis, seminal vesicles and ventral prostate and glycogen and Lipid Peroxidation in testis and liver were decreased significantly where as testicular cholesterol concentration was elevated highly significantly. TEC and TLC count, haemoglobin, haematocrit, Mean corpuscular volume, mean corpuscular haemoglobin, mean corpuscular haemoglobin concentration, blood urea and Blood sugar, Serum Glutamate Pyruvate Transaminase, Serum Glutamate Oxalo Acetate, Acid Phosphatase, Alkaline phosphates, testosterone, Bilirubin, blood sugar and blood urea were remained in normal range reflecting no effect upon the normal mechanism of the body of male albino rat.

Keywords- Antispermato-genic, bilirubin, Sialic acid, cholesterol Sperm motility, *Calendula*

Introduction

Investigations in to traditional plant medicines conducted with modern theories and techniques can enrich western medicines by absorbing new ideas and concept from all over the world. *Calendula officinalis* known as (marigold), cultivated through out the world and also valued for its culinary and medicinal properties (Bisset 1994) It is also used in homeopathic medicines as a way to promote the healing of minor sun burns, scrapes, and skin irritations. (Alonso 2004) *Calendula* was associated with a fatal reduction in blood glucose, accompanied by decreased serum, lipid and protein. It is also act as a herpes simplex virus infection, urinary retention, uterus problem, menstrual period abnormalities (Krag et al 1976), fatigue, diuretic. Extract of dried flower from *calendula officinalis* were examined for their ability to inhibit the human immunodeficiency virus type - 1 (HIV-1) replication (Kalvatchev et al 1997). It is also used as antiseptic and anti-inflammatory disease (Cordova et al 2002) Potentially active chemical consistent identified were Sesquiterpene and flavonoglycosides (pieta et al 1992) some estrogenic activity has been reported in ovariectomized mice by *Calendula officinalis* extract. It has traditionally been thought to have harmful effect on sperm and to cause abortion.

But there is no scientific evidence documented referring to the male antifertility, it was therefore of interest to evaluate the effective concentration of (COFET) of calendula officinalis on reproductive system of male rat to explore new male contraceptive, thus the present study is attempt to investigate the effect (COH_{ETEX}) on reproduction of albino rat without having any toxic effect to the body as no report of acute toxicity exposure related to Calendula officinalis have been made to poison control centre (poisedex 1991)

Material and Method

The flowers of Calendula officinalis were purchased from market, Botanical identification was authenticated at the Botanical department of Rajasthan University in comparison with the pre existing vouchers specimen (RUBL 20102) the flowers were shade dried and powdered and 100 gm of powder were subjected to soxhlet extraction with 50% ethanol for 24 hours. The solvent was evaporated under reduced pressure to obtain the residue. 23.33%. Adult, healthy male of wistar strain 185-200 Gms were selected from the inbred animal colony for the experimental use and the animal were maintained according to the guide lines of care and use of animals for scientific research (INSA) The rats were divided in two groups having 10 rats in each group.

Group 1- Vehicle (distilled water) 0.5ml/rat/day for 60 days through pearl point needle.

Group 2- 300 mg/rat/day (COH_{ETEX}) dissolved in 0.5ml of distilled water for 60 days through pearl point needle

Fertility and Efficacy Test

The mating test of control and treated groups were performed on day 55-60 using the method of W.H.O (W.H.O Protocol 1990). The rats were cohabited with normal adult proestrous females in the ratio of 1:2. The mated females were separated for normal delivery. On 16th day of pregnancy Number of pregnant females, no Implantation sites, and number of (normal and absorbed foetus viable fetuses, and the implantation site were recorded.

Autopsy

After 24 hours of last dose rats were weight and autopsied under light ether anesthesia the blood was collected from heart in pre-heparinized tubes for hematological studies and serum was also separated from non-heparinized tubes for RIA studies. The animal were autopsied, the reproductive and vital organs (testis, epididymis, seminal vesicle, ventral prostate vas deferens) and vital organs weight (liver, adrenal and kidney) were taken out and trimmed free of fat and weight separately on electronic balance.

Sperm Motility and Density

At autopsy, the caudal epididymis was dissected out, an incision was made caudal epididymis. Sperm fluid was then squeezed on to the microscope slide. Epididymal sperm motility was assessed by calculating motile spermatozoa per unit area and was expressed as percent motility Sperm density was assayed by the method of Briefly, total number of sperm were counted using

haematocytometer after further diluted the sperm suspension from cauda epididymis and testis. The sperm density was calculated in million /ml as per the dilution (Yokoi K et al 2003)

Blood and Serum Analysis

The whole blood was estimated for total erythrocyte count (Schalm et al 1975), Total leukocyte count (Lynch et al 1969), haematocrit values (Benson et al 1992) Blood sugar (Astoor and king 1954) and blood urea (Varley 1969) M.C.V,M.C.H.,MC.H.C and .Serum biochemistry (serum glutamate pyruvate transaminase ,serum glutamate oxalo acetate, acid phosphates, alkaline acid phosphates, Bilirubin,) determinations were performed, by using the standard methods. And the testosterone was estimated by Radio Immuno assay (commercial kit).Serum luteinising hormone (LH) and follicular –stimulating hormone (F.S.H) and estradiol were measured using standard parameters.

Biochemical Analysis

Frozen testis, epididymis, seminal vesicle and ventral prostate were subjected for the analysis of protein (Bradford,1976), glycogen (Montgomery 1957), cholesterol (Oser 1965) ,Sialic acid (Warren 1959).and Lipid peroxidase by (Okhawa 1979)

Results

Table 1

Designed to show that intragastric administration of (COH_{ETEX}) flower extract had no significant effect on the body weight of treated male rats when compared with those of the control group. However the absolute and relative weight of weight of testis, epididymis, seminal vesicles and ventral prostate and vas deferens were reduced highly significantly ($p \leq 0.001$).

Table 2 :

It shows that oral administration (COH_{ETEX}) of brought about no significant changes in serum biochemistry serum glutamate pyruvate transaminase and serum glutamate oxaloacetate, acid phosphates, alkaline phosphates, , and Bilirubin, and circulating level of hormone like Estradiol ,F.SH and L.H level were in normal range. Table 3: It showed that sperm motility % and sperm density in cauda epididymis was severely impaired ($p < 0.001$) and fertility test showed 100 % negative fertility along with number of pregnant females, number of implantation sites and number of viable fetuses ($p < 0.001$) in comparison to control group.

Table 4 :

A marked significant reduction in protein, Sialic acid content of testis, epididymis, seminal vesicles and ventral prostate were observed along with testicular Glycogen and lipid peroxidase of treated animals when compare with that of control group and the cholesterol level was increased highly significantly in testis,liver and that of adrenal gland.

Table 5 :

Designed to show that oral administration of *Calendula officinalis* resulted in no alteration in hematological parameters of male rats, it showed that total leukocyte count, Hemoglobin, Hematocrit and Blood urea, Blood sugar , M.C.V,M.C.H.,MC.H.C, were in normal range.

Discussion

Calendula officinalis flower extract is a potent antifertility agent with little or no apparent effect on organs other than those involved in the reproductive process (Table- 1). Significant decline in the testicular weight is due to decrease in the number of spermatogenic elements and spermatozoa (Sherins and Hawards,1978;Takahara et al .,1987). Reduction in the weight of accessory reproductive organs directly supports the reduced availability of androgens (Sharma and Jacob, 2001) and the process of spermatogenesis and function of accessory sex organs are androgen dependent.(Dym et al 1979)and (Desjardins et al 1978). The drug may act on the pituitary gland and decrease the main hormone of spermatogenesis like testosterone.

The plant material showed no toxicity as indicated by the normal values of several haematological parameters most importantly like haemoglobin, haematocrit, total number of R.B.C, W.B.C, and Serum biochemistry analysis also indicated that liver and kidney functions were not notably different from those of the control group.

calendula officinalis has been shown to induce reproductive abnormalities which was reflected in decreased sperm count (Mathew et al .,1992).Suppression of gonadotrophin might have caused decrease in sperm density in testis (Sinha et al .,1995)low caudal epididymal sperm density may be due to alteration in androgen metabolism.the 100% negative fertility test may be attributed to lack of forward progression and reduction in density of spermatozoa and altered biochemical milieu of cauda epididymis.

Mode of action of *Calendula officinalis* extract was not through pituitary gonadal axis, which was confirmed by unaltered level of F.S.H, L.H, and estradiol level

Protein contents of reproductive organs were decreased significantly due to low level of androgens (Chinoy and Bhattacharya 1997) Reduction in the protein contents of testis and reproductive accessories may be due to low androgen level as the androgens extract a profound infrequence on transcription and regulate the synthesis of protein by provision of more mRNA and functional ribosome (Farooq.,1991. Reduced level of glycogen might be due to some metabolic change induced by the drug as it may interfere in glucose metabolism (Bbadwal et al 1994) Nag et al 1977 have reported that an optimal level of sialic acid is essential for functional integrity of spermatozoa. Therefore decrease in the contents of sialic acid in testis, epididymis, seminal vesicles and ventral prostate reported decrease in the testicular sialic acid concentration due to antifertility activity of *Calendula officinalis* (Gupta and Ahmed 1991). After the administration of COFet increased testicular cholesterol might be due to arrest of steroidogenesis of testosterone (Gupta et al 2002).Lipid per oxidation of the testis and liver were decreased these result obtained suggest that the *calendula officinalis* posses a significant free radical scavenging and antioxidant activity (Cordova et al 2002)

From the present study it is concluded that the oral administration of crude (COFet) may lead to fertility control in male rats due to interfere in the testicular androgens level which arrest the process of spermatogenesis in testis.

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Bibliography

1. Astoor A. and King E.J.,(1954): Simplified Calorimetric Blood Sugar Method Journal of Biological Chemistry 56 XIIV.
2. Bedwal r.s.,Edwerds ,MS.,Katoch, M.,Bahuguna and Dewan R.(1994) Histological and biochemical changes in testis of zinc deficient balb/c.strain of mice Ind.j.exp.bio 32(4),243-247.
3. Chinoy M.R.N. and Bhattacharya S., (1997): Effect of chronic administration of aluminium chloride on reproductive function of testes and accessory sex organs of male mice. Journal of Environmental Toxicology 7, 12-15.
4. Cordova C.A Netlo C A, Yunes RA (2002): Calendula used for the treatment of skin disorders antiseptic and anti-inflammatory disease. Redox Reproduction 7, 95-102.
5. Farooq, Vanithakumari g, Bhuvaneshwari, g, Malini, T and Mananayaki, S.(1991): Effect of anthle on seminal vesicle of albino rats. Anciant sci.life.11(1-2),9-11.
6. Gupta DR, Ahmed B, emarginatosides B and C: Two new saponins from Sapindus ema Indian journal of chemistry .1991;29b:268-270.
7. Gupta R.S, Sharma R., Sharma A., Bhatnagar A., Dhobal M.P., Joshi Y.C. and Sharma M. G. (2002): Effect of Alstonia scloris bark extract on testicular function of Wistar rats. Asian journal .of Andrology, 4 (3) 175-8
8. Sherins, R.J., Hawards, S.S., 1978. Male infertility .In Pertmutorer ,A.D., Stamey ,T.A., Walsh, (Eds). Campbell's Urology, vol 1.4th ed..WB Saunders Co, Philadelphia ,pp 175-180.
9. INSA (2000): Use of animals in scientific research. Indian Council of Medical Research, Ministry of Health and Family Welfare, New Delhi.
10. Lynch J. M., Raphel S. S., Melvir L. D., Spare P. D. and Inwood M. J. .M (1969): In medical laboratory and clinical pathology pub., Sounders Company Sohm Ltd., Tokyo 626, 647-662 .
11. Montgomery R., (1957) Determination of glycogen. Arch Biochemistry and Biophysics 67, 378.
12. Mathew, G., Vijailakshmi, K.K., Rehima, M.A., 1992 Methyl parathion induced sperm shape abnormalities in mouse mutat res 280, 169-173.
13. Oser B. L. (1965): Hawk's physiological Chemistry. 14th Ed. New York, McGraw Hill, p 246.

14. Nag S, Sarkar D, Ghosh JJ 1977, Sialic acid and sialidase activity in rat testis and epididymis in different antifertility agent. Indian journal of experimental biology.
15. Okhawa M, Ohishi N, Yogi K. Assay for lipid peroxidation in animal tissue by Thiobarbituric acid reaction. *Analyt Biochem* 1979; 95: 351-51.
16. Sharma N. and Jacob D. (2001): Antifertility investigation and toxicological screening of the petroleum ether extract of the leaves of *Mentha arvensis* in male albino mice. *Journal of Ethnopharmacology* 75, 5-12.
17. Schalm O.W., Jain N C., Carrollt E.J (1975): *Veterinary Hematology* 3RD Lea and Febiger Philadelphia PP 324_335
18. Takihar, H., Cossentino, M.J., Sabotobu, J., Cockett, A.T.K., 1987. Significance of testicular size measurements in Andrology. Correlation of testicular size with testicular function. *J. Urol.* 137, 416-419.
19. Warren (1959): The thiobarbituric acid assay. *Journal of Biological Chemistry* 234, 1971.
20. WHO (1990): Special programme of research development and research training in human reproduction. Biennial report (1988-89) World health organization, Geneva.
21. Yokoi K, Uthus EO, Nielsen FH, Nickel deficiency diminishes sperm quantity and movement in rats. *Biol Trace Elem. Res* 2003; 93:141-153.
22. Bisset NG. Herbal drug and phytopharmaceutical. Stuttgart; Med Pharma CRC press; 1994:566.
23. Kalvatchev Z, Walder, R. and Garzaro, D. (Anti HIV activity of extract from *Calendula officinalis* extract flower. *Biomedicine and pharmacotherapy* vol 51, issue 4.
24. Kishimoto S., Maoka T., Sumitomo K., Ohmiya A, Analysis of carotenoid composition in petal of *Calendula (Calendula officinalis L)* *Biosci Biotechnol Biochem* 2005 nov; 69 (ii): 2122-8.
25. Krag K. Plant used as contraceptive by the North American Indian: an ethnobotanical study. *Botanical museum. Cambridge, MA: Harvard university*, 1976: 1177.
26. Banaszkiiewicz W, Kowalska M, Mrazokiewicz Z. Determination of the estrogenic activity of extract from *Calendula officinalis* flower. *poznam Towarz przyia ciol nalek* 1962; 1: 53-63.
27. Poisindex. *Calendula arvensis*. *Healthcare series vol series 99: micromedex* 9/91.
28. Alanso, J, Tratado D, *Fitofarmacos Y Nutraceuticos*, Barcelona corpus, 2004 p: 251-55. (633-ALO)
29. Varley, H (1969): Determination of blood urea by urea nitrogenase method. In *Practical clinical Biochemistry* 4th ed. White Herres Press Ltd; London, pp 158.
30. Sinha KN., Narayan R., Shankar R, Saxena, D.K, 1995. Endosulphan induced biochemical change on rat Sertoli germ cell Coculture. *Rapid. toxicol.* (291-294)
30. Brodford, M.M (1976): A rapid and sensitive method for the quantitative microgram quantities of utilizing the principle of protein dye binding. *Anal Biochem* 72: 248-254.



fig 1 chemical structure of calendic acid

Table 1. Body and Organ weight

Treatment	Body weight (gms)		Reproductive organs weight (mg/100 gm b. wt.)					Vital organ weight (mg/100gm b. wt.)			
	Initial	Final	Testes	Epididymis	Seminal Vesicle	Ventral Prostate	Vas deferens	Heart	Kidney	Liver	Adrenal
Group I control	-	270.20±5.1	1314.8±9.7	415.9±4.0	580.8±7.1	270.1±8.5	150±15.1	406.78±8.96	699.10±01.20	3289±18.021	24.95±01.20
Group- II 100mg/kg b.wt./day for 60 days	189.10±5.6	192.00±10.5 ^{ns}	1002.00±41.6 ^{ns}	503.90±16.5 ^{ns}	498.0±15.8 ^{ns}	286.1±16.4 ^{ns}	140±2.51	392.68±7.89	697.12±02.21	3281±18.102	27.89±02.02
Group- III 300 mg/kg b.weight for 60 days	186.00±7.0	190.00±6.6 ^{ns}	888.60±29.00 ^{**}	409.00±15.00 ^{**}	468.00±10.5 [*]	260.0±4.5 [*]	100±1.02	365.76±5.29	687.12±02.71	3120±17.012	24.02±03.02

Economic Value Added : An Overview

Dr Pawan Kumar Patodiya

Abstract

Economic value added is a powerful new management tool which is considered to be an important source of corporate governance. It is an alternate performance measurement technique which is used to overcome the limitation of traditional measurement criteria by correlating with shareholder's wealth and action of a company's manager. Various performance measurement criteria have been adopted by corporate entities, among them return on investment is considered to be an important tool for determination of profitability. The main aim of every corporate management is to maximize its shareholder's value and value of business.

From past few years EVA has emerged as a new way to measure financial performance of highly reputed corporation like Coca-Cola, AT&T, Quaker, Oats and Briggs and Stratton have set up EVA measurement system throughout their organization.

Key word: Economic value, capital invested, NOPAT, CAPM, Beta estimation

Introduction

Economic value added is considered to be a tool for measuring corporate performance not only for evaluating performance of companies but also for determination of incentive pay. It tries to cope with the tension that exists between the need to come up with a performance measure which is correlated with shareholder's wealth and at the same time less subject to random fluctuations in stock prices.

EVA is a rupee amount rather than a ratio remaining after capital charge or cost of capital is deducted from the amount of operating profits. EVA model indicates that EVA is net result of excess of risk adjusted cost of capital employed to generate cash flows. Estimation of stock market data represented in calculating EVA does not form a part of standard accounting principles. So EVA is a way of measuring an operation's real profitability. It holds a concern accountable for the cost of capital it used to expand and operate its business. It is better than traditional method as it encourages growth through investment in new products, management and shareholders. EVA is linked with bonus to employees, remuneration to management, and bonus share to equity shareholders.

Definition of EVA

According to Peter F. Drucker, "EVA is based on something one has known for a long time, what we call profits, money left to serve equity, is not profit until a business returns profit, that is

greater than cost of capital it operates at loss. The entire enterprise returns less to the economy than it devours in resources until it does not create wealth, it destroys it”.

“ As a performance measure EVA comes too closer than any other tool to capture the true economic profit of an enterprises. It is directly linked to the creation of the shareholders wealth over time EVA based financial management and incentive system gives manager superior information and motivation to make decisions that will create the greatest shareholders private enterprise”.

“Economic Value Added (EVA) is an increasingly popular corporate performance measure one that is often used by companies not only for evaluating performance, but also as a basis for determining incentive pay. Like other performance measure, EVA attempts to cope with the basic tension that exists between the need to come up with a performance measure that is highly correlated with shareholders wealth, but at the same time somewhat less subject to the random fluctuations in stock prices. This is a difficult tension to resolve, and it explains the relatively low correlation of all accounting based performance measures with stock returns, at least on a year-to-year basis”.

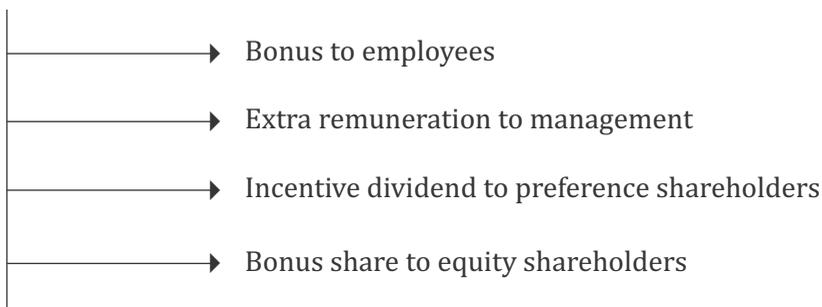
According Stem Steward, “EVA makes use of principles and methods modern economics to provide a accurate measure of Weighted Average Cost of Capital (WACC)”.

EVA is also defined as

“Excess profit of a firm after charging cost of capital”.

EVA is a corporate surplus, which should be shared by the employees, management and the shareholder. Efficiency bonus, profit sharing schemes, managerial remuneration over and above a minimum sustenance salary, issue of bonus shares and incentive divided to equity and preference shareholders respectively can be better linked to EVA.

EVA



The Intellectual Capital and Intangible Report of Balarampore Chini Mills Ltd. Describes that, 'What makes EVA potentially potent is in its application; it can be based to structure employee remuneration or increments in proportion to the act of their creation/ destruction of wealth. When applied through the organization, the separate divisions are able to break down their expenses/income structure more analytically than if the exercise were carried out by a centralized accounting head.'

Economic value added considers all aspects of a company's financial management and it also caters into account minimum expectation of shareholders.

Value of EVA

$EVA = \text{Net Operating Profit After Tax}$

$\text{Capital Charge (or overall cost of capital)}$

EVA is positive when NOPAT exceeds capital charges.

Negative in case when capital charges exceeds NOPAT.

$EVA = \text{NOPAT} - \text{Capital Charge}$

Or $EVA = \text{NOPAT} - (\text{WACC} \times \text{Invested Capital})$

Where WACC = Weighted Average Cost of Capital

NOPAT = Net Operating Profit before Interest but after depreciation and Tax

Invested Capital = Invested Capital at the beginning of year.

Relative profitability and invested capital are the two factors which derive EVA. So the formula shows if return of a company are not enough to cover cost of capital then more investment will bring more negative EVA. So in such case company must make efforts to improve EVA by either increasing the return or reducing the amount of capital invested.

EVA can be improved by earning higher profits without using more capital, investing capital in projects having high returns and using reduced capital to carry same operation.

So calculation of EVA facing some tricky issues. Each element is discussed separately. The important adjustments which had to be made to Stewart computed EVA arrives at modified EVA are as follows:

(I) Net Operating Profit After Tax (NOPAT)

NOPAT is income available to shareholders plus interest expenses (after tax). According to Stewart, "It is the profit derived from the company's operation after taxes before financing cost and non cash book keeping entries". In order to reach at NOPAT depreciation is subtracted. Non-operating income is also considered as part of NOPAT. Stewart said that in order to arrive at NOPAT adjustments have to be made which would eliminate distortions in accounting results. In calculation of NONPAT four adjustments which is also known as equity equivalents are made. These adjustments are added to invested capital and periodic change is added to operating income to arrive at NOPAT. The adjustments are as follows:

(1) Deferred Income Tax Reserve

For accounting purpose current tax and deferred tax liability are considered. Deferred tax liability exists when tax is more than tax liability as per income tax laws. NOPAT is charged with taxes paid in cash/ actual instead of accounting provision for taxation. So deferred tax liability is added to NOPAT and deferred tax asset is deducted from NOPAT.

But in India there is no standard on accounting for income tax. Tax charge for a period is determined on the basis of tax effect accounting method which recognize deferred tax liability and deferred tax asset. But this approach will need some time to reach financial statements. So tax payable method can be used for the time being till this approach comes. Most of the companies and companies under study use tax payable method only.

(2) Goodwill Amortization

Goodwill arises from the accounting for amalgamation in nature of purchase by purchase model. Goodwill is shown in balance sheet as money's worth been paid. It should be amortized over a period of not more than five years. In case of major acquisition at high premium would depress profits seriously. Pooling of interest also leads to non-recognition of goodwill. In this case difference between purchase consideration and equity share capital of acquired company must be adjusted in a reserve which leads to reduction in equity of acquired company. If purchase method is used equity will be reduced to amortization of goodwill. So return on equity capital post-amalgamation will be low. So goodwill recognition shows true cost of acquisition which is the market value of securities. So periodic amount of amortization of goodwill is added to NOPAT and cumulative amortization of goodwill is added back to equity.

(3) The Last In First Out (LIFO) Reserve

This method is used for valuation of inventories in order to save tax at high price rise. In this case companies using this method, make adjustments and inventories in balance sheet are shown at recent prices. It is the difference between FIFO and LIFO value of inventory. Periodic increase in LIFO reserve is added to NOPAT.

(4) Amortization of Research and Development Cost

Long term success in competitive market is assessed by research and development efforts. Research cost must be immediately expensed while development cost can be amortized on fulfillment of certain conditions.

Many companies make charge for entire R & D cost in the year in which they occur. So profits get lower for that year. So a company discouraged to lie upon R & D program. Annually charged R & D expenditure is added back to NOPAT and an amortized portion is deducted from NOPAT.

Many companies which are following practice of writing off R & D cost have included same in natural heads of accounts. So it is not possible to find out costs written off. So only a part of capitalized R & D cost is amortized through annual depreciation and R & D cost of revenue is written off in year in which it incurs. So no adjustment in NOPAT is made for R & D cost of revenue nature.

(II) Invested Capital

Invested capital is defined as net worth plus borrowed funds where borrowed funds include both long-term and short-term funds borrowed. And net worth is total of paid up share capital

plus free reserve and surplus less miscellaneous expenditure if any.

Invested Capital Is Shown As :-

Invested capital = Net Worth + Total Borrowings

Where

Net worth = Share Capital + Reserve & Surplus

-Revaluation Reserve – Accumulated Losses

-Miscellaneous Exp.

Total Borrowings = Long-term Interest bearing debt

+ Short-term Interest bearing debt

(III) Weighted Average Cost Capital (WACC)

WACC is calculated as :-

$$WACC = \frac{E}{CE} \times K_e + \frac{LTB}{CE} \times K_d$$

Where

E = Equity capital

CE = Capital employed

LTB = Long term borrowings

K_e = Cost of equity

K_{dk} = Cost of debt

It is the study to include two costs i.e. cost of equity shares (k_e) and cost of debt (k_d) where cost of debt is obtained by multiplying pre tax debt cost (I-T) where 't' is effective tax rate post tax debt cost is calculated because debt cost enjoy tax shield.

Company with low tax rate can enjoy tax shield with debt and company with high tax rate must have higher proportion of debt in its capital structure.

Cost of debt is calculated as :-

$$\text{Cost of debt } (k_d) = \frac{\text{Total Interest Expense}}{\text{Total Borrowings (Beginning)}} \times (1 - T) \times 100$$

Value obtained through this can give high figure because total expenses are much in relation to beginning total interest bearing debts. Repayments of loans, rescheduling of loans repayments are some of the reasons due to which borrowing cost show high value.

K_e i.e. cost equity can be calculated by Capital Asset Pricing Model (CAPM). Cost of equity may be defined as, “the minimum rate of return that a firm must earn on equity – financed portion of an investment project in order to leave unchanged the market price of the share”. It is used to determine minimum required rates of return from investment in risky assets. So CAPM is used as

measure for cost of equity in order to compute EVA. The expected return on equity under CAPM is calculated by following formula.

$$R_j = R_f + \beta (R_m - R_f)$$

Here, R_j = Expected return on scrip j

β = Beta representing the volatility of scrip j against market volatility

R_m = Expected stock market return

The formula given above shows required rate of return on equity is equal to the sum of risk free rate of return and increment which compensates investors for accepting assets risk.

Factors which are needed to be applied for capital asset pricing model are :-

(I) Estimated Market Return

Market means whole capital market. Market return is estimated on basis of scrip traded in secondary capital market i.e. stock exchange in India, the most famous stock exchange are Bombay Stock Exchange (BSE) and National Stock Exchange (NSE). According to data of 31st March 1999, BSE had 848 companies and NSE had 645 companies under it, BSE is the oldest Stock Exchange in Asia and a gateway to capital market in India. NSE was founded by public limited company owned by leading institutional investors in the country. It is managed by Board of Directors. In this membership of Exchange does not mean ownership of Exchange. Market operating decisions are taken by the Board to an Executive Committee which comprises members of public, management and trading members.

Every Stock Exchange has an index of shares trade. Each scrip is compared with the index. Every stock price moves because of news about the nation or company. Each stock has a mixture of stock news and index news. In case of averaging the return on many stock individual stock news cancel out. There can be good or bad stock specific news for any day. In good index such variations are canceled out and news will be left for common stocks.

Although NSE and BSE are fast, regular but BSE SENSEX is considered as appropriate index because BSE provides a longer time series of price data than NSE, many companies are traded on BSE as compared to NSE and information related to corporate action is not provide by NSE. So a particular methodology is required for calculating such return, on the basis of studies carried out it was found out that CAPM given more reliable and accurate estimate of equity cost.

CAPM give a biased and misleading equity cost of R_m i.e expected market return is not calculated property. This misleading estimation can lead to less the risk free rate of return. R_m depends on size and quality of portfolio. But it does not mean that if size is increased R_m will smoothed. For good results portfolio must consist of traded shares.

Market return for any particular period is calculated as

$$\left[\frac{P_t - P_{t-1}}{P_{t-1}} \right] \times 100$$

Here, t = period and P = closing index value.

In this monthly index value are considered and monthly return is estimated as

$$\frac{\text{Change in market Index value for two consecutivemonths}}{\text{Index value of first month}}$$

(I) Annual Risk-Free Rate of Return

Reserve Bank of India (RBI) issue treasury bills of four kinds 14, day, 19 day, 182 day, and 364 day. Before 1991, only one kind of Treasury bill was available that was 91 days Treasury bill. It was sold at discount rate of 4.6% in the period 1979 to 1991. Government then started a scheme of auction for 91 days bills. 4.6% discount rate cannot be taken as average risk free rate because in same period call money rates were between 9% -10%. 364 day treasury bills are considered as risk free rate for years concerned.

However, doubts have been expressed above the risklessness of risk free rates by Petit. It was said by Petit that treasury bills are bit risk free and adjustments have to made to get risk free rated for this historical yield statistics of treasury bills and stocks are required.

However, doubts have been expressed above the risklessness of risk free rates by Petit. It was said by Petit that treasury bills are not risk free and adjustments have to made to get risk free rates for this historical yield statistics of treasury bills and stocks are required.

(II) Corporate Beta Estimation

Beta is a measure of volatility of security's return relative to returns of broad based market portfolio. Securities which have high beats exaggerate market development and those which perform well, Market goes in positive direction and goes down then market is downward. Beta is a measure of exposure to systematic risk. It is estimated by the following formula:-

$$\beta = \frac{\text{Co - variance } (R_j R_m)}{\text{Variance } (R_m)}$$

Beta is calculated on monthly return basis where,

$$\frac{\text{Return on scrip } R_{jt}}{\text{(month } t)} = \left[\frac{\text{Adjusted Closing Price of } j \text{ in } (t) \text{ month}}{\text{Adjusted Closing Price of } j \text{ in month } (t-1)} \right]$$

$$\left[\frac{\text{Return of SENSEX } (R_{mt})}{\text{(in month } t)} \right] \left[\frac{\text{Closing Value of SENSEX in month } (t)}{\text{Closing Value of SENSEX in month } (t-1)} \right]$$

Beta can be calculated from regression relationship on basis of ratio of past stock prices and market return.

Low beta sign indicate low return of security; negative beta implies a price of security is moving opposite to market. Beta of one indicates that risk of specified security is equal to market. Zero beta indicates that there is no market related risk in investment. Beta also depends on leverage. High financial leverage can lead to increase in company's beta which increases volatility of profits.

(I) Estimated Risk Premium

It is the difference between

$$k_d \times (\text{Beginning Total Borrowings} / \text{Beginning Investment Capital})$$

$$k_e \times (\text{Beginning Net Worth} / \text{Beginning Invested Capital})$$

Where Invested Capital = Beginning Total Borrowings + Beginning Net Worth

Implementation of EVA

In order to make EVA an effective management tool, system planning, execution and evaluation are required to be done properly. Proper plan must be set up and management success in carrying out the plan is measured in terms of EVA.

In order to carry out process properly there are four conditions which are required to be met, which are as follows:-

- (A) Property defined objective must be find laid down
- (B) Specific criteria must be set for making investment project i.e. only positive projects which can earn at least their cost of capital.
- (C) At regular time interval companies must evaluate actual performance of their investment. EVA is used to measure the wealth creation on destruction from point of shareholders.
- (D) Incentives in form of yearend bonus lead to EVA must be provided to managers who are responsible for capital allocating. This encourages them to take decisions consistent with shareholder's objectives.

One of the important strength of this approach is the consistency that it maintains among the three management phases of strategic planning, performance, measurement and managerial compensation.

EVA Reporting

In order to make EVA an effective tool, three, stages of EVA systems are required i.e. Planning Execution and Evaluation. Management must start by making a proper plan in terms of expected EVA and then it becomes responsibility of management.

Four basic requirements in order to make EVA effective are as follows:-

- (a) Managerial objective must be well defined so that positive EVA can be obtained.
- (b) Proper criteria must be used for investment in projects
- (c) At regular time interval, proper evaluation of performance of company's investment must be done.
- (d) Bonus scheme must be provided to manager as an incentive in capital allocation.

EVA represents value added to shareholders by generating operating profits in excess of cost of capital employed in business.

EVA = Net Profit After Tax (NPAT) - WACC

Benefits Of EVA

Benefits of EVA are as follows :

- (1) EVA links corporate strategy to financial results.
- (2) EVA creates greater accountability among employees.
- (3) EVA increases productivity through incentives.
- (4) It leads to driven cultural transformation
- (5) It creates a common framework in the organization

Criticism

The EVA measurement, like any other management technique suffers from limitations.

Boston Consultancy Group (BCG) has said that in solving the capital investment problem EVA results in making managers milk their existing assets and discourage them from making investment in future.

EVA and MVA

MVA is the difference between market value determined by stock price and economic book value. It is a more revealing figure than a simple rise in a market capitalization because latter fails to consider the money investors put up.

EVA is the ultimate measure of corporate success. It measures current performance, share prices reflect expectations, good current EVA must hold for future EVA improvement for market to react favorably.

EVA is breaking down annual installments of multiyear NPV which is calculated by using DCF capital budgeting technique. MVA is equal to present value of all future EVA's like NPV.

MVA cannot be calculated for private firms and nonprofit companies because they do not trade shares. It is a performance measure of consolidated firms. At individual unit level there is no measure of MVA.

How To Improve EVA

EVA can be improved by not growing the business but improving the efficiency and increasing return on existing capital. It can also be improved by getting rid of those part of business which offer no promise for improvement and grow the business by taking new investment which promise to earn more than cost of capital.

So EVA encourages managers to engage in periodic willing of their business.

Conclusion

This concept emphasizes that equity capital of an organization is expensive and an organization capable of monitoring net profit would generate value for its owners. Its other objective is to identify whether organization NOPAT in a given period is capable of covering cost of capital for same period and create value for its owners.

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Bibliography

1. Baciandre, M.Jeffrey, Boquist A. John, Milbourn, Told and Thakor V. Anjan : **EVA and Total Quality Management**, Journal of Applied
2. Bruner, Ross Paul : **EVA as a measure of Relative Profitability**, Chicago USA : Glenlake Publishing Company Limited, Global Equity Selection Strategies (ed.),1978.
3. Ghoshe , T.P : **Economic Value Added – A Tool for Business Planning**, Calcutta: The Institute of Cost and Works Accountants of India, First Edition, July 1999.
4. Khan, M.Y. and Jain , P.K : **Financial Management- Text and Problems**, New delhi : Tata McGraw Hill Publishing Company Limited, Eleventh Reprint -1998.
5. Osborn , R.C. : **Corporate Finance** , New York : Harper and Brothers, 1959.
6. Ottoson , Erik and Weissenrieder, Fredrik, : **CVA –new method for Measuring Financial Performance**, Gotheburg Studies in Financial Economics, Study No. 1996, 1, 1996
7. Rao, P.Mohan : **Value Added Reporting – In Theory Practice and Research**, New Delhi: Deep and Deep Publications Pvt. Ltd.2001.
8. Sinha Gokul : **Value Added Income**, Calcutta : Book World, 1983
9. Solomanm, Ezara : **The Theory of Financial Management** : New York: Columbia University Press, 1963
10. Tracy , John A : **Fundamentals of Financial Accounting**, New York: John Wiley & Sons, 1978.

Role of Media in Elimination of Gender Discrimination

Dr. Padma Pandel

Abstract

The aim of Media is providing lot of information to the masses in the form of advertisements, entertainments, and news through different medium like electronic media (TV, films, internet), and print media (newspapers, magazines, newsletters, brochures, posters, banners, and billboard). The media providing information that is collected and edited based on the media guiding principals of accuracy, fairness and balanced representation. Through these medium, the media shapes the ideas, behavior and concepts of general public's. Media is playing a vital role in changing behavior and attitudes of people. Nowadays everyone is affecting through media. However it can be said that level can be differ. It can be said that media has power to create awareness in society. By shaping public opinions, personal perception and personal beliefs, media influences the process of socialization and shapes ideology and thinking.

Keywords: Gender discrimination: women- men, media, anti-discrimination laws

Introduction

In India, discriminatory attitude towards men and women have existed for generations and affect the lives of both genders. Although the constitution of India has granted men and women equal rights, gender disparity still remains. Gender discrimination violates human rights. These are mostly seen in family land sharing among sisters and brothers. There is specific research on gender discrimination mostly in favor of men over women. Due to a lack of objective research on gender discrimination against men, it is perceived that it is only women who are suffering [1].

Women are perceived to be disadvantaged at work [2]. Indian laws on Rape, Dowry and Adultery have women's safety at heart, but these highly discriminatory practices are still taking place at an alarming rate.

Gender Discrimination in India: A Reality Check

Over the past century there has been much to rejoice about the positive development of women in India: increased visibility of women in the public sphere, closing of gender gaps in primary and secondary school enrolment, the presence of women in the labor force across international borders, and lower fertility rates. In addition, women's organizations have been able to raise issues such as sexual and reproductive health and rights, violence against women, and inequality of power in gender relations, and make these the pivotal issues of debate in national and global arenas. Yet these achievements have not eliminated, nor decreased, gender discrimination or patriarchy. Rather, in some cases, secular trends have reinforced patriarchal positions, says

Kalpana Sankar, chief executive of Handin Hand, a Tamil Nadubased non governmental organization, which aims to eliminate poverty by creating jobs. "Being poor and a woman is doubly crippling. Given the constraints faced by poor women, any developmental approach for providing assistance needs to consider their reality."

Taking Charge

The focus in previous Indian government, development programmes and projects has been on economic activities. That helped poor rural women in their daily struggle to feed, clothe and shelter their families. But now a more holistic approach may be needed.

"Women have to be considered as equal participants in shaping the future society in India," [3]. "It is not enough for poor women to earn more; She must have control over her earnings in order to continue to be productive. She must experience the benefits of that increased income. For many women, the process will involve confronting established social norms and hence the emphasis on striving for social change". Advances made in social legislation and the relative ease with which some Indian women have secured legal and political equality, entered professions and occupied positions of power has led to the perception that, unlike in some Asian societies, the status accorded to women in India is very high. In reality, six decades after independence and after five decades of planned development, the position of women has worsened considerably in every sphere with a declining gender ratio, a declining economic participation rate and growing gaps in life expectancy and mortality rates between men and women.

Glass Ceilings That Need to be Broken

It is needed to empower women to avoid perpetuating women as second-class citizens in the house, community, society, religion, politics and culture. "Even loans are denied to single women and they are marginalized to a large extent even among the literate community. Women are not perceived as successful even if they make progress in their careers if they are not able to manage their home front. Women are scrutinized much more than men: mistakes committed by women and women leaders are blown out of proportion in comparison to their male counterparts". Women are also generally viewed in their reproductive roles, taking care of their families, without political rights being taken into consideration. "Citizenship has for long been a largely male domain with women firmly embedded in cultural institutions in the realm of family and community. The impact of political institutions of law and citizenship on women has been largely overlooked, as has been the manner in which these institutions are regulated and controlled by the state's mechanisms". Consequently women are treated as being "different from men, leading to formulation of policies specific to them" [3].

It is not in India where there is a place for gender discrimination but it is happening all over the world:

- In Guatemala, two women are killed every day. This country ranks third for murders of women in the world

- Bolivia has the highest rates of domestic violence in Latin America
- In Mexico, more than 1,800 women were victims of femicide in 2011
- In the United States, one-third of women murdered each year are killed by their partners
- In South Africa, a woman is killed every 6 hours by her partner
- In India, 22 women were killed each day in 2007 in dowry-related murders
- Between 250,000 and 500,000 women and girls were raped in the Rwandan genocide in 1994
- Between 40 and 50 per cent of women in European Union countries are victims of sexual harassment in the workplace
- Women and girls are 80 per cent of the people trafficked annually. 79% are trafficked for sexual exploitation (UN, 2011; Observatorio Ciudadano Nacional del Femicidio, 2011) [4].

Discrimination against women can be categorized into three stages:

Infancy to Childhood

Both women and men are important for reproduction. The cultural construct of Indian society which reinforces gender bias against men and women, with varying degrees and variable contexts against the opposite sex, [5] has led to the continuation of India's strong preference for male children. Female infanticide and sexselective abortion is adopted and strongly reflects the low status of Indian women. Census 2011 shows decline of girl population (as a percentage to total population) under the age of seven, with activists estimating that eight million female fetuses may have been aborted in the past decade [6]. The 2005 census shows infant mortality figures for females and males are 61 and 56, respectively, out of 1000 live births [7], with females more likely to be aborted than males due to biased attitudes. A decline in the child sex ratio (0–6 years) was observed with India's 2011 census reporting that it stands at 914 females against 1,000 males, dropping from 927 in 2001 the lowest since India's independence [8]. The demand for sons among wealthy parents is being satisfied by the medical community through the provision of illegal service of fetal sex determination and sex selective abortion. The financial incentive for physicians to undertake this illegal activity seems to be far greater than the penalties associated with breaking the law [9].

Childhood to Adulthood and Education

Education is not widely attained by Indian women. Although literacy rates are increasing, female literacy rate lags behind the male literacy rate. Literacy for females stands at 65.46%, compared to 82.14% for males [10]. An underlying factor for such low literacy rates are parents' perceptions that education for girls are a waste of resources as their daughters would eventually live with their husbands' families and they will not benefit directly from the education investment [11].

Adulthood and Onwards

Discrimination against women has contributed to gender wage differentials, with Indian women on average earning 64% of what their male counterparts earn for the same occupation and level of qualification [12]. Discrimination against women has led to their lack of autonomy and authority. Although equal rights are given to women, equality may not be well implemented. In practice, land and property rights are weakly enforced, with customary laws widely practiced in rural areas. Women do not own property under their own names and usually do not have any inheritance rights to obtain a share of parental property [1].

Discrimination Towards Men

Although socially women have been at a disadvantage, Indian laws highly favor women. If a husband commits adultery he will be jailed, but a woman cannot be jailed for adultery and neither will she be punished by the courts. There is no recognition of sexual molestation of men and rarely the police stations lodge a First Information Report (FIR) ; Men are considered the culprit by default even if it was the woman that committed sexual abuse against men. Women can jail husband's family for dowry related cases by just filing an FIR. The law IPC 498A demands that the husband's family be considered guilty by default, unless proven otherwise, in other words it implements the doctrine of 'guilty unless proven innocent' defying the universally practiced doctrine of 'innocent until proven guilty'. According to one source, this provision is much abused as only four percent of the cases go to the court and the final conviction rate is as low as two percent [13].

The Importance of Eliminating Discrimination

Eliminating discrimination from an organization is a challenge but one that can improve the chances that won't have to battle former employees in court or devise creative ways to recruit candidates. Developing an equal employment opportunity policy establishes a foundation for an organization's mission and philosophy on mutual respect, but it's only a start. Commitment to that policy requires the unwavering support of the organization's highest level of leadership, which trickles down to managers, supervisors and staff [14].

Role of Media In Eliminating Gender Discrimination

However, the media has contributed more for elimination of gender discrimination in society by hitting at change in attitude through sensitising the population. It has highlighted various cases and in a manner which became the talk of the town, like those of Dr Shazia Khalid in Sui (Balochistan), Ayesha in Lahore, Shaista Alimani in Sukkur, and Mukhtaran Mai in Muzaffargarh. Change of attitude of the male population towards women needs to be eulogised in the media [15].

- To provide truthful and informative stories, reports, programs, advertisements and films for the benefit of the public.
- To develop industry awareness and commitment to its social responsibilities, including the promotion of values.

Examples from Fiji, India and other countries show how positive media coverage of gender issues can effectively contribute to the elimination of discrimination and violence against girls. Lakshmi Krupa of Ginjapalle of the University of Madras mentioned the positive use of television in India: "The country's PBS - public broadcasting system, Doordarshan, and All India radio have its main motto as Information, Education and Entertainment. True to living up to the spirit of this, they have launched round the clock information and education channels. They run almost 75% of shows for the welfare and improvement of the society with more than 15 channels in different Indian languages. They run special shows on girl child's welfare, women's welfare schemes and talks from NGO heads, and interviews of women achievers, and so on and so forth. One of the most successful campaigns has been their use of a cartoon image of a girl child to address several social issues. It is also to be noted that this is a central autonomous body receiving funds from the government and hence does not frankly care about profit as such. This is a great disadvantage with commercial TV and radio channels, because they feel it is a waste of resource and precious airtime." NGOs should actively engage with public TV stations to advocate for girls' empowerment, as well as with private and commercial stations. Commenting on the role of media, Linda MacDonald of Canada wrote about the importance of public broadcasts including messages on gender equality: "There need to be direct media messages that tell girls that there is gender inequality in the world. Just like racism and other hate crime ads we see, I think we need just as direct messages about gender inequality. They could be written in the positive but still direct. Statements such as: All girls in the world have human rights even if they are not treated as such – or: Girls are equal persons in the world. These messages could be on TV during daytime children's shows and be posted in schools."

Anti-discrimination Laws

Australia has obligations under a number of international human rights treaties to take measures to eliminate discrimination including on the basis of age, race, sex, pregnancy, marital status and disability.

The Commonwealth Government has implemented some of these obligations through legislation such as the:

- *Age Discrimination Act 2004*
- *Disability Discrimination Act 1992*
- *Racial Discrimination Act 1975*
- *Sex Discrimination Act 1984*
- *Australian Human Rights Commission Act 1986*

The Law Council monitors the implementation of Australia's human rights obligations through these Acts and responds to legislative reviews or related matters.

The current Commonwealth anti-discrimination regime provides an important legislative framework for promoting equality in Australia and contains many positive features that operate to protect against certain forms of discrimination in certain circumstances. Despite these features, many individuals and groups within the Australian community experience discrimination, and the notion of substantive equality remains, at least for some, still out of reach. Substantive equality allows different groups to be treated differently so that they can enjoy their human rights equally. It differs from formal equality, which is achieved if the law treats all people the same way. Formal equality may not address discrimination as it does not take into account disadvantage experienced by different groups.

The current Commonwealth regime also deals with different grounds of discrimination in different ways. Four grounds of discrimination - sex, age, disability and race - are dealt with under the specific Acts listed above while other more limited protections are provided under the Australian Human Rights Commission Act 1986 (Cth). This results in a confused and fragmented scheme, which is difficult to use.

For these reasons the Law Council supports reforms to the current Commonwealth anti-discrimination regime that make it easier to access and understand, improve its capacity to address all forms of discrimination, promote substantive equality, and that implement Australia's international obligations in this area. For these reasons, the Law Council supports the consolidation of the existing Commonwealth discrimination laws into a single Act, provided that this process preserves or enhances existing protections against discrimination and improves the ability of the regime to promote substantive equality, as well as removing the regulatory burden on business [16].

Conclusions

- Media creates awareness about sexual harassment at the workplace, and the need to combat it. This can be done through posters, handouts, pamphlets, bulletins, notices, badges (something like 'Zero Tolerance Zone for Sexual Harassment').
- They should conduct workshops to promote gender sensitivity among union members.
- They should conduct workshops in self-defense and personality development in order to boost the confidence of women union members.
- They should set up Gender Councils to take the issue forward. Support any woman who complains about sexual harassment, and assist her in pursuing justice.

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References

1. "Chronic Hunger and the Status of Women in India" (http://www.thp.org/where_we_work/south_asia/india/research_reports/chronic_hunger_and_statusof_women). Thp.org. Retrieved 20120910.
2. Subhash C. Kundu, (2003) "Workforce diversity status: a study of employees' reactions", *Industrial Management & Data Systems*, Vol. 103 Iss: 4, pp.215-226
3. Grace Segran, "Gender discrimination in India: a reality check", 2010
4. Aimée Vega Montiel, "Violence against women and media: advancements and challenges of a research and political agenda".
5. "The EU's Contribution to Women's Rights and Women's Inclusion: Aspects of Democracy Building in South Asia, with special reference to India" (http://www.idea.int/resources/analysis/upload/Das_low_2.pdf) (PDF). Retrieved 20120910.
6. "India's unwanted girls" (<http://www.bbc.co.uk/news/worldsouthasia13264301>). BBC News. 20110523.
7. "The India Gender Gap Review" (<https://members.weforum.org/pdf/gendergap/IGGR09.pdf>) (PDF). Retrieved 20120910.
8. "Census of India 2011: Child sex ratio drops to lowest since Independence" (http://articles.economictimes.indiatimes.com/20110331/news/29365989_1_ratio-malesgirlchild). The Times Of India. 20110331.
9. "Why do educated and well-off Indians kill their girl children?" (<http://makanaka.wordpress.com/tag/sexdetermination/>). Retrieved 6 May 2012.
10. "Literacy in India" (<http://www.census2011.co.in/literacy.php>). Census2011.co.in. Retrieved 20120910.
11. "Women's Education in India" (<http://www.census.gov/population/international/files/wid9801.pdf>) (PDF). Retrieved 20120910.
12. "Working women face longer days for lower pay" (<http://www.wageindicator.org/main/WageIndicatorGazette>). Wageindicator.org. 20120529. Retrieved 20120910.
13. "Fight Against misuse of Dowry law (IPC498a)" (2012) publisher=498a.org" (<http://www.498a.org/index.htm>). 20060730. Retrieved 17 May 2012.
14. Ruth Mayhew, "The importance of eliminating discrimination", Demand Media
15. Media and gender discrimination Newspaper DAWN.COM
16. <http://www.lawcouncil.asn.au/lawcouncil/index.php/currentissues/antidiscrimination>

Distribution Channels of Micro Insurance: An Overview

Devika Agarwal

Abstract

Micro-insurance is a key element in the financial services package for mass people, particularly, for economically weaker sections of people. The poor face more risks than the well-off, but more importantly they are more vulnerable to the same risk. Building on the recommendations of the consultative group, IRDA notified Micro-Insurance Regulations on 10th November 2005 with some key features to promote and regulate micro-insurance products.

A key concern in the pricing of an insurance product is the element of cost of acquisition and its delivery. Obviously, the delivery costs have to be contained to keep the cost of insurance sufficiently low to attract the poor and to incentivise the insurer to venture into this segment viewing it as a genuine market opportunity. In this respect, the question comes to mind is, how can micro-insurance products be sold and serviced cheaply? It is a low-value, high-volume business. Recently, many micro insurance marketing models have emerged in India to provide insurance to low-income populations like Partnership model, Agency model and Micro-agent model.

Keywords : IRDA- Insurance Regulatory and Development Authority, NGO- Non Governmental Organization, MFI- Micro Finance Institutions

Introduction

India's market potential and the decrease in percentage of poor people living below the poverty line lessening year by year offers great investment opportunity, but still approximately at present, 21.9% of the Indian population lives below the poverty line. In order to promote mass insurance coverage, the regulator established obligations of insurers to rural or social sectors in 2002 and has since amended it. While the rural sector obligations aim to cover the hinterland which is predominantly agrarian, the social sector includes unorganised, informal sector comprising economically vulnerable classes across rural and urban areas. In 2005 Insurance Regulatory Development Authority (IRDA) has come up with micro insurance approach for the first time in India. Whereas, in 2002 rural and social sector rules and obligations were developed by IRDA that was compulsory for every insurance companies to fulfill the percentage of policies to be sold in rural areas and lives to be covered in the social sector. However, the major challenge in front of the insurance companies was design most cost effective marketing models so as to reduce the incidence as well as attain deeper and wider penetration in the rural as well as urban social sector.

Methodology

The study is based on the collection of secondary data collection Government Journals, Notifications, Gazettes, Research Papers, Books, Websites etc. The research the highlights the various models adopted to market the micro insurance schemes among poor to achieve deeper and wider penetration.

Distribution Channels of Micro Insurance Schemes

Following are the three distribution models adopted by Insurance companies for their micro insurance products:

- Partnership model
- Agency model
- Micro-agent model

Partnership model (The partner-agent model)

As the name implies this model involves a partnership between an insurer and an agent that provides some kind of financial service to large numbers of low-income people. This could be a microfinance organization, an NGO, or a business that supplies pre-cuts to large numbers of low-income people, such as a fertilizer supplier. This party is an agent, selling insurance policies to the clients on behalf of the insurance provider (usually) in exchange for a commission or fee. The insurance provider utilizes the established distribution channels of this agent and its financial transactions with low-income groups that would otherwise be too costly to set up.

The partnership model uses the comparative advantage of each partner so that each can focus on its core business: the insurance provider is responsible for designing and pricing the product, the final claims management, and the investment of reserves, and absorbs all the insurance risks.

In addition to selling the policies, the agent offers its infrastructure for product servicing such as marketing the product, premium collection, and assists in claims management.

MERITS:

- The system works better than in-house because the synergies are maximized, enabling both organizations to focus on their core business and expertise;
- With a single partnership agreement it is possible to sell micro-insurance to over a quarter of a million low-income people;
- Requires fewer skills for the agent than an in-house model;
- Uses legally recognized insurance companies that have adequate reserves, adhere to capital requirements, employ certified insurance professionals, and operate under the insurance law;
- Insurer has access to reinsurance;

- The overhead costs of both the organizations, the agent and the insurance company, are reduced: the agent can use its infrastructure for collecting premiums, etc.; the insurer provides the expertise on product development, etc;

It reduces the need to build the capacity of agents such as NGOs and MFIs to sell insurance because the insurer can do some of this;

The insurer assumes all the risks;

The agent earns commission without risk, while the insurer earns profits.

Demerits

Because of the quota system, the most well-known agents are already taken and have existing relationships with insurers. There are still many other organizations, however, that could act within a partnership;

The insurance provider is dependent on the quality of the agent;

NGOs in particular are often 'here today, gone tomorrow', relying on donor recognition and goodwill for their survival;

Conflicts of interest may occur, especially when working with non-financial institutions.

NGO or MFI staff or management may develop compassion for a client and be lax about underwriting or claims verification. It should be noted that this is less likely to occur with an MFI partner that is used to financial discipline with its lending activities.

Agency model

In this model the insurer uses its normal agency office and sells micro insurance products directly. The client comes to the agency office for sales and servicing of the product. Insurers described this model but the authors could find no examples of it operating in practice.

Merits

Does not require much additional investment in infrastructure; Better control of the quality of the agent is possible than with the partnership model.

Demerits

Difficult to reach large numbers especially in rural areas where clients may be unwilling to travel to the office;

Agents will need special training in dealing with low-income clients; Offices may intimidate poor clients;

Individual policies only would be sold; generally such micro insurance policies have not proved commercially viable.

Micro-agent model

While the partnership model is relatively common, the micro-agent model described below is

distinctive. It is the invention of Tata-AIG, specifically an employee of Tata-AIG. The central building blocks of the model are Rural Community Insurance Groups (CRIGs) supervised by rural organizations such as churches, NGOs or MFIs. CRIGs are a partnership firm formed of five women from a self-help group (SHG). The leader of the CRIG is licensed as an agent. The CRIG is a de facto brokerage firm (in the technical, not the legal sense of the term). All CRIGs in the same geographic area meet in a single centre, usually organized with the assistance of the rural organization, and receive training and assistance from Tata-AIG. This practice reduces training costs. Most CRIGs consist of four to five members. These members are usually women who are part of an SHG. A typical leader will be educated to the 12th standard or above, have a good track record of past social-sector performance and integrity, be systematic and organized, with leadership qualities, and public speaking and training skills.

The CRIG leader and members are involved in promotion, sales and collection of insurance proceeds and maintaining records. The CRIG leader will document all fortnightly CRIG meetings and all weekly meetings with the NGO concerned.

MERITS

The model creates an insurance distribution infrastructure in low income neighbourhoods. In addition, it creates a new profession, that of micro -agent, with new livelihood opportunities in his/her vicinity;

Sustainability: Because the position is a commercial one with financial incentives, it will last in the long term, facilitating the sale of long-term products.

As mentioned under the partner-agent model, NGOs and MFIs are often dependent on the goodwill and public recognition of aid flows, and so their long-term existence is precarious. Chances are good that CRIGs, being registered firms, will survive, in the event of a member or leader dropping out. The leader could be replaced by another from the community, thus mitigating the risk of orphaned policies;

In the event that a CRIG disbands, the orphaned policies can be taken over by another CRIG that operates under the same NGO.

Demerits:

Training is costly, especially in relation to premium values;

The transaction costs of the sales agent are cheap at first but increase as soon as the agent has sold to all the peoples/he knows and needs to sell to strangers, especially to those living far away;

In many cases in the partnership model, when a claim arise the MFI or NGO investigates the claim, pays the benefit immediately, and then claims it back from the insurer. Immediate payment of claims helps maintain client confidence, and this is not possible under the CRIG system;

This model is new, and much more experience is needed before it can be reasonably evaluated.

Conclusion

The discussions above have highlighted the characteristics of the micro-insurance market in India in terms of the parties involved, distribution models and challenges, products and outreach. It can be observed that the Indian micro-insurance regulation is designed to promote such products through its liberal and developmental approach, but there are crucial omissions and design glitches that limit its efficacy. Specifically, the exclusion of corporate MFIs, the restriction of collaborations to one life and one non-life insurer and the limitations placed on pricing have a dampening effect on the micro-insurance market.

However, it is becoming increasingly clear that micro-insurance needs a further push and guidance from the IRDA as well as the government. Moreover, MFIs are playing a significant role in improving the lives of poor households. Quite apart from this, linking micro-insurance with micro-finance makes better sense as it helps in bringing down the cost of lending. Given this, there is a need for strengthening the link between micro-insurance and micro-credit.

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References

1. Dalal. A and Morduch. J (2010), "The Psychology of Micro insurance, Small Changes can make a Surprising Difference". International Labor Office, Geneva: ILO, 2010, pp. 22.
2. Report of the Committee on Financial Inclusion, January 2008, NABARD.
3. World Bank (2000) World Development Report 01: Attacking Poverty.
4. Ahuja,R. Insurance and Risk Management, Birla Institute of Management Technology, Allied Publishers Pvt. Ltd. 2005, pp362
5. ILO's Micro insurance Innovation Facility Annual Report.
6. Annual Reports of IRDA.
7. www.microinsurancecentre.org
8. GTZ: Deutsche Gesellschaft für Technische Zusammenarbeit (September 2009) Working Paper 2, Global Development Network,
9. http://shodhganga.inflibnet.ac.in/bitstream/10603/22173/11/11_chapter2.pdf
10. Alliance AG GTZ and UNDP. Public private partnership (2006). Micro Insurance Demands and Prospects in India

“Reduce Cost Optimization of Supply Chain Network”

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Abstract

In this paper a review on three in-stock procedures – course through, local and single DC focal stock and built up a basic transportation-stock model keeping in mind the end goal to look at their aggregate expenses is finished. We have additionally portrayed a dissemination display proposed by in which the model is detailed as a non-straight whole number streamlining issue. Due to the non-linearity of the stock cost in the goal work, two heuristics and a correct calculation is proposed so as to take care of the issue.

The outcomes got from the transportation-stock models demonstrate that the single territorial focal stock systems are more cost-effective separately contrasted with the course through approach. It is prescribed to take the single DC and the territorial focal stock procedures for moderate moving and requesting items individually: Limiting stock and transportation cost of an industry: a store network improvement.

Keyword: Supply chain, Preliminary Distribution model, Cross-Dock and Direct Shipment Models Lagrangian Method.

I. Introduction

1.1 Supply chain management SCM is the management of a network of inter connected businesses involved in the provision of product and service packages required by the end customers in a supply chain. Supply chain management spans all movement and storage of raw materials, work-in-process inventory, and finished goods from point of origin to point of consumption. According to (Berman et al [2006]) there are two important issues in the supply chain area that contribute to the total cost of the supply chain network namely transportation and inventory costs. That being said retail companies can achieve significant savings by considering these two costs at the same time rather than trying to minimize each separately.

As mentioned above in this paper the two distribution strategies mainly direct delivery and shipment through cross dock are considered where a group of products are shipped from a set of suppliers to a set of plants. The cost function consists of the total transportation, pipeline inventory, and plant inventory costs. The presence of the plant inventory cost has made the model to be formulated as a non-linear integer programming problem. According to (Berman et al [2006]) the objective function is highly nonlinear and neither convex nor concave; therefore, a greedy heuristic is suggested to find an initial solution and an upper bound. And then a branch-and-bound algorithm is developed based on the Lagrangian relaxation of the non-

linear program. Before getting into the formulation portion of the model, I am going to provide a brief background of the two distribution strategies discussed in the report and then briefly state the assumptions made by (Berman et al [2006]) in order to have a solvable problem. For many retail companies products are shipped by suppliers through one of the following shipment strategies. The first one is direct shipment where products get shipped directly from the supplier to the DC/plant without stop. The second method of shipment is milk-run (peddling) where trucks pick up products from different suppliers on their ways and finally drop them at one or several DCs. The last but not least is cross-dock where products get shipped to DCs through cross-dock by suppliers. Below is a graphical representation of the three distribution strategies.

II. Methodology

2.1 Preparatory Distribution Model Before getting into the modeling portion of my work, I would like to briefly explain inventory requirements for each of the product groups and how they vary according to different distribution channels (Shapiro [2005]). [4] As shown in Figure 2, products can flow in three different paths. In the first path,

product is shipped through a cross dock to a store, meaning that no inventory is held in that place. Inventory is only held at a store. Costs associated with this path are transportation as well as fixed and variable processing costs at cross dock site. Cost of transportation is also related to the shipment volume (either truckload (TL) or less-than-truckload (LTL)).

In the second path, product is directly shipped by the supplier to stores. The only costs associated with this path are the costs of transportation and inventory at stores. In the third path inventory is only held both at DCs and stores. Again transportation, inventory holding and fixed as well as variable processing costs are considered for this path.

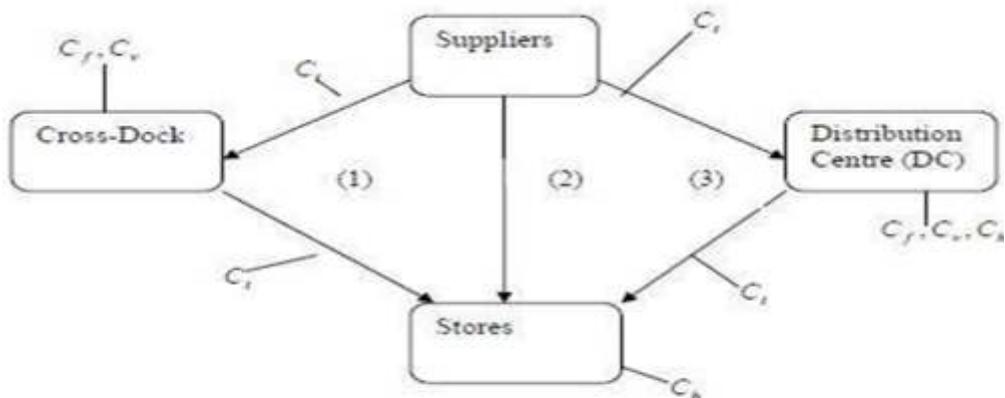


Figure 2 – Distribution strategies (Shapiro [2005])

In the modeling of the network, I have considered a supply chain in which suppliers ship product either directly to stores, or cross dock site or DCs as explained earlier. Location and capacity allocation decisions have to be made for distribution centre (DC). Multiple DCs may be used to satisfy demand at a market.

The goal is to identify distribution locations as well as quantities shipped between various points that minimize the total fixed and variable costs. Define the following decision variable preliminary version of the problem.

The objective function minimizes the total fixed and variable costs of the supply chain network. The constraint in equation 1 specifies that the total amount shipped from a supplier cannot exceed the supplier's capacity. The constraint equation 2 enforces that amount stocked in the DC cannot exceed its capacity. The constraint in equation 3 states that the amount shipped out of a cross-dock site is exactly equal the amount received from the supplier. The constraint in equation 4 specifies that the amount shipped out of a DC site cannot exceed the amount received from the supplier. The constraint in equation 5 specifies that the amount shipped to a customer must cover the demand.

2.2. Cross-dock and Direct Shipment Models

Before getting into the details of the final model that I developed and used for 1 supplier, 1 cross-dock and 2 distributions centers case as well as assumptions that I made in order to maintain the linearity of the objective function I would like to briefly describe an optimization model suggested by

Objective Function

Min

$$\sum_{i=1}^n \gamma_i (F_i + T_i) + \sum_{e=1}^l \sum_{j=1}^m c_{ej} x_{ej} + \sum_{i=1}^l \sum_{j=1}^m c_{ij} x_{ij} + \sum_{i=1}^l \sum_{j=1}^m c_{ie} x_{ie}$$

$$\sum_{i=1}^l \sum_{j=1}^m c_{ij} x_{ij} + \sum_{i=1}^l \sum_{j=1}^m c_{ij} x_{ij} + \sum_{e=1}^l \sum_{j=1}^m c_{ej} x_{ej}$$

Subject to

- $$\sum_{i=1}^n \sum_{j=1}^m \sum_{e=1}^l (x_{ij} + x_{ie} + x_{ej}) \leq S_h \text{ for } h=1, \dots, l$$

Total amount shipped from a supplier cannot exceed the supplier's capacity
- $$\sum_{j=1}^m x_{ij} \leq E_i + \gamma_i \text{ for } i=1, \dots, n$$

Amount stocked in the DC cannot exceed its capacity
- $$\sum_{i=1}^l x_{ie} - \sum_{j=1}^m x_{ej} = 0 \text{ for } e=1, \dots, l$$

The amount shipped out of a cross-dock site is exactly equal the amount received from the supplier
- $$\sum_{i=1}^l x_{ie} - \sum_{j=1}^m x_{ij} \geq 0 \text{ for } i=1, \dots, l$$

The amount shipped out of a DC site cannot exceed the amount received from the supplier
- $$\sum_{i=1}^l \sum_{j=1}^m \sum_{e=1}^l x_{ij} + x_i = D_j \text{ for } j=1, \dots, m$$

The amount shipped to a customer must cover the demand

(Berman et al [2006]) that is the solution to a distribution strategy selection problem where cost functions of both direct delivery and shipment through a cross-dock are modeled and compared.

There are two important issues in the supply chain area that contribute to the total cost of the supply chain network namely transportation and inventory costs. That being said retail companies can achieve

significant savings by considering these two costs at the same time rather than trying to minimize each separately. As mentioned above in this paper the two distribution strategies mainly direct delivery and shipment through cross dock are considered where a group of products are shipped from a set of suppliers to a set of plants.

The cost function consists of the total transportation, pipeline inventory, and plant inventory costs. The presence of the plant inventory cost has made the model to be formulated as a non-linear integer programming problem. The objective function is highly nonlinear and neither convex nor concave; therefore, a greedy heuristic is suggested to find an initial solution and an upper bound. And then a branch-and-bound algorithm is developed based on the Lagrangian relaxation of the non-linear program. Before getting into the formulation portion of the model, I am going to provide a brief background of the two distribution strategies discussed in the paper and then briefly state the assumptions made in order to have a solvable problem.

2.3 Design of Model

2.3.1 Distribution Strategies

\For many retail companies products are shipped by suppliers through one of the following shipment strategies. The first one is direct shipment where products get shipped directly from the supplier to the DC/plant without stop. The second method of shipment is milk-run (peddling) where trucks pickup

products from different suppliers on their ways and finally drop them at one or several DCs. The last but not least is cross-dock where products get shipped to DCs through cross-dock by suppliers.

2.3.2 Model Assumptions

As mentioned earlier to have a solvable problem, a couple of assumptions have been made in this paper

1. It is assumed that the product quantities are infinitely splittable, in other words a product can be shipped in any quantity within a vehicle shipment.
2. Delivery frequency can be any positive number and is not limited to a set of potential members.
3. Products are always available for shipping at suppliers, no matter which distribution strategy is chosen
4. Inbound-outbound coordination at the cross-dock is ignored.

5. All units of the same flow (a flow is a combination of supplier, plant and, product) are assigned to the same transportation option, i.e., direct or through the same cross-dock.
6. Each truck is fully loaded. Only the volume of products is concerned when calculating truck capacity usage. The transportation costs are only determined by the source and destination, regardless of the weight.

	PROCESS	Mr SANDEEP	Mr ASHUTOSH	Mr DEEPESH	Mr RAHUL	Mr AIAY
MILK RUN	DELIVERY TIME	M	M	S	M	M
	DELIVERY FREQUENCY	S	M	M	M	M
	INVENTORY COST(PLANT)	S	M	M	M	M
	INVENTORY COST(PIPE LINE)	M	S	M	M	M
DIRECT	DELIVERY TIME	S	M	S	S	S
	DELIVERY FREQUENCY	S	S	M	S	S
	INVENTORY COST(PLANT)	M	H	H	H	M
	INVENTORY COST(PIPE LINE)	M	S	S	M	S
CROSS DOCK	DELIVERY TIME	M	H	H	H	H
	DELIVERY FREQUENCY	H	M	H	H	H
	INVENTORY COST(PLANT)	S	S	M	S	S
	INVENTORY COST(PIPE LINE)	H	M	H	H	H

Table: 1.Delivery Time, Deliver Frequency, InventoryCost of Varies Distribution Strategy

Data Collected Through Questionnaire Through Varios Domain Experts

Distribution	Process	Mr. Sandeep	Mr. Ashutosh	Mr. Deepesh	Mr. Rahul	Mr. Vijay
Milk Run	Inventory	96500	98630	97560	96800	97200
	Transportation	150760	135900	125800	150500	140200
Direct	Inventory	963005	986000	110006	120500	160050
	Transportation	105006	110560	125308	106008	986200
Cross Dock	Inventory	105100	125000	130500	963200	95200
	Transportation	12500	13500	126500	114000	115800

Table – 2 1, Inventory Cost & transportation cost Of Varies Distribution Strategy

Reduce Cost Optimization of Supply Chain Network

Mohammad Afzal Ali & Nonihal Singh Dhakry

III. Data Analysis

3.1 Computation OF Stock and TRANSPORTATION COST Utilizing LAGRANGIAN Technique

Table 1b
Parameters for network in figure 1.

F	Fixed order cost	10
$g_j, \forall j \in J$	Fixed shipping cost from supplier to DC	1
$a_j, \forall j \in J$	Unit shipping cost from supplier to DC	1
β	Transport weight	1
$z\alpha$	Service level parameter	1.96
θ	Inventory weight	1
L	Lead time	1
h	Unit holding cost	2
χ	Days per year	1

3.2 For Milk Run

Lagrangian Method to n-dimensional case we find and optimum of a differentiable function

$$Z=f(x), x=(x_1, x_2, \dots, x_n) \in R^n$$

Whose variable are subject of the M (€n) constants

$$g_i(x)=0, i=1, 2 \dots m \text{ and } x \geq 0$$

Where the $g_i(x)$ are also differentiable. We form the Lagrangian Function

$$L(x, \lambda) = f(x) - \sum_{i=1}^m \lambda_i g_i(x)$$

Involving the Lagrangian multiplier

$$\lambda = (\lambda_1, \lambda_2, \dots, \lambda_m)$$

These necessary condition for max (or min.) of $f(x)$ are the system of (m + n) equation

$$\frac{dl}{dx_i} = \frac{df}{dx_i} - \sum_{i=1}^m \lambda_i \frac{dgi}{dx_j} = 0 \quad j=1, 2, \dots, n$$

Parameter	Value
Maximum number of iterations	400
Minimum alpha multiplier	0.00000001
Maximum number of iterations before halving alpha	12
Crowder's damping factor	0.3
Initial Lagrange multiplier value	$10\bar{\mu} + 10f_j$

$$y = (y_i, y_e, v_i, v_e, x_{ih}, x_{eh}, x_m, x_n) \quad g_1(y) = x_{hi} + x_{ij} + h_{ij} - 50 = 0$$

$$g_2(y) = x_{ij} - 3.4 = 0$$

$$g_3(y) = x_{hi} - x_{ij} - 10 = 0$$

$$g_4(y) = x_{hi} - x_{ij} - 18 = 0$$

$$g_5(y) = x_{ij} + x_{ij} - 12.5 = 0$$

We constaints the Lagrangian function for multiplying $f(y)$

$$f(y) - \lambda_1 g_1(y) - \lambda_2 g_2(y) - \lambda_3 g_3(y) - \lambda_4 g_4(y) - \lambda_5 g_5(y)$$

This gives the following necessary condition :

$$\frac{\partial L}{\partial y} = 2x_{ij} - \lambda_1 - \lambda_2 = 0 \quad \frac{\partial L}{\partial y} = 3x_{ij} + \lambda_1 - \lambda_3 = 0 \quad \frac{\partial L}{\partial y} = x_{ij} - \lambda_1 - \lambda_3 - \lambda_5 = 0 \quad \frac{\partial L}{\partial y} = x_{ij} - y_{ij} - \lambda_5 = 0$$

$$\frac{\partial L}{\partial y} = x_{ij} - \lambda_1 + \lambda_3 - \lambda_4 = 0$$

DISTRIBUTION STRATEGY	INVENTORY COST	TRANSPORTATION COST
MILK RUN	98760.60	178950.56
DIRECT	109865.32	196563.82
CROSS-DOCK	98560.71	146892.62

$$y_i = \frac{2\lambda_1 + \lambda_2}{4}$$

DISTRIBUTION STRATEGY	INVENTORY COST	TRANSPORTATION COST
MILK RUN	94343.512	114075.135
DIRECT	98798.67	7152533.377
CROSS-DOCK	93798.673	142533.324

$$y_e = \frac{2\lambda_5}{4}$$

$$x_m = \frac{\lambda_1 + 2\lambda_3}{2}$$

$$x_{ij} = \frac{\lambda_1 + \lambda_2 + 3\lambda_4}{5}$$

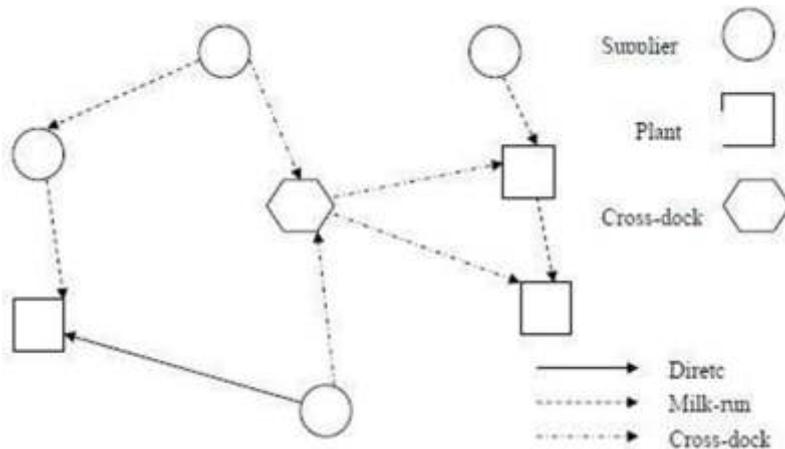
$$\lambda^* = (\lambda_1, \lambda_2, \lambda_3, \lambda_4, \lambda_5) = \left(\frac{40}{9}, \frac{51}{9}, \frac{314}{3}, \frac{127}{2}, \frac{413}{17} \right)$$

By substituting the values of l_1, l_2, l_3, l_4, l_5

then get transportation cost and inventory cost. Transportation Cost = 114075.1358 Inventory Cost = 94343.512

IV. Result

4.1 - Developed a distribution strategy model Developed a table of three distribution of strategy with the help of questionnaire through domain experts of various organization



Developed two objective function for transportation and inventory and transportation model and reduce the cost of transportation and inventory by lagrangian methods for different strategies.

4.2 Comparison Between Data Given By Experts and Data Calculated From Lagrangian Method

4.2.1 Comparison By Experts

Table – 3 Comparison By Experts

4.2.2 - Comparison By Lagrangian Method

Table – 3 Comparison by Bylagangian Method

V. Conclusion

- Achievement of significant cost savings and improvements in profitability requires a typical retail company to make long-term decisions regarding the structure of its supply chain network and bringing its facilities, suppliers and customers closer together under the strategic supply chain planning.
- As part of my study I have developed a transportation-inventory model for a single source to multiple distribution strategy. I have also studied the distribution model proposed by (Berman) that can be used for transportation system.

- We will develop a questionnaire we get further information for objective function and to minimize the transportation cost and inventory cost and reduce the cost of transportation and inventory by lagrangian methods for different strategies.
- Developed a table of three distribution of strategy with the help of questionnaire through domain experts of various organization.

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References

1. A. Tversky and D. Kahneman, "Advances in Prospect Theory: Cumulative Representation of Uncertainty," *Journal of Risk and Uncertainty*, vol.5, pp.297-323, October, 2005
2. Berman O., Whang Q. [2006], "Inbound Logistic Planning :Minimizing Transportation and Inventory Cost" transportation Science, 2006
3. 1989Berman O., Whang Q. [2006], "Inbound Logistic Planning: Minimizing Transportation and Inventory Cost" transportation Science, 2006
4. Chopra S., Meindl P. [2003], Supply Chain Management: Strategy, Planning, and Operations, 2nd ed. Prentice Hall
5. D. Schmeidler, "Subjective probability and expected utility without additivity", *Econometrica*, vol.57, pp.571-587,
6. Edited by John Quiggin, *Generalized Expected Utility Theory*. Massachusetts:Kluwer, 1993, ch. 2.
7. Fisher M. L. [1997], "What is the Right Supply Chain for Your Product?" Harvard Business Review, 1997
8. Shafer G., *A mathematical theory of evidence*. Princeton University Press, Princeton, NJ, 1976.
9. A. Tversky and D. Kahneman, "Advances in Prospect Theory: Cumulative Representation of Uncertainty," *Journal of Risk and Uncertainty*, vol.5, pp.297-323, 1992.

10. Shapiro, J. F., Wagner S., Jacobs K. [2004], "A Practical Guide to Supply Chain Network Design" SLIM Technologies, September, 2004
11. H. Tamura, "Behavioral models for complex decision analysis," *European Journal of Operational Research*, vol.166, pp.655-665, 2005.
12. H. Tamura and Y. Miura, "Value judgment of the sense of security for nursing care robots based on the prospect theory under uncertainty," *Int. J. of Knowledge and System Sciences*, vol.3, pp.28-33, 2006.
13. H. Tamura, "Behavioral models of decision making under risk and/or uncertainty with application to public sectors," *Annual Reviews in Control*, vol.32, pp.99-106, 2008.
14. H. Tamura, Y. Miura and M. Inuiguchi, "Value judgment for the sense of security based on utility theoretic approaches," *International Journal of Knowledge and Systems Sciences*, vol.2, No.2, pp.33-38, 2005.
15. R. R. Yager, "Decision Making under Dempster-Shafer Uncertainties," *Int. J. General Systems* vol.20, pp.233-245, 1992.
16. R. R. Yager, "Uncertain modeling and decision support," *Reliability Engineering and System Safety*, vol.85, pp.341-354, 2004.

An Analytical Study of Customers Attitude Towards The Re-launch of Maggie Noodles in Jaipur City

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Abstract

Fast to cook, good to eat - MAGGI 2-MINUTE NOODLES were launched with local production in 1992 and in doing so nestle' pioneered the category of instant noodles in India. In May 2015, Food Safety Regulators from Barabanki, a district of Uttar Pradesh, India reported that samples of Maggie 2 Minute Noodles had unexpectedly high levels of monosodium glutamate, as well as up to 17 times the permissible limit of lead. Maggie has always insisted that its noodles are safe. This study gives the major findings of a survey conducted among many consumers of Maggie to find out their attitude towards its Relaunch after the major controversies.

Keywords: Attitude, Perception, Buying Behavior, Consumption Level, Brand Switching.

Introduction

MAGGIE NOODLES - INDIA

Maggie in Indian market considered to be conservative and typical about food consumption. It appropriate realization of target segment, effective positioning and effective promotion and sales made Maggie to Noodles in India as Xerox it photocopier. Maggie also became successful in sauces, ketchups and soups Market in India. Though NIL tried to extend to other ready to eat products like pickles, cooking aids and paste, it was unsuccessful so dumped those products. Maggie Brand of products sustained recession in 2000 and 2001 in India by introducing economy packets.

Maggie Noodle had till 2005 five product line on noodles with four variant in Maggie 2 Minutes Noodle. In 2005 Maggie brand worth was 3.7 billion from 1.7 billion market worth in 1.7 billion in 2003. Maggie Noodle is Market leader with around 80% market share in Noodles/Pasta and Maggie Sauce is market leader with almost 37% of market share in 2005 in 1.8 billion market of India. Knor has taken over Maggie in Soup market recently.

AFTER BAN Maggie has always insisted that its noodles are safe. Maggie had to pull stock worth nearly Rs 320 crores from the shelves and had to pay 20 crores to a cement factory to burn the product. In addition Corporate Affairs Ministry imposed Rs 640 crores fine on Nestle' India, for finding MSG and lead beyond the permissible limit. The court stated that proper procedure was not followed in issuing the ban and called into question the test results, as the samples were not tested at authorized laboratories accredited to the National Accreditation Board for Testing and Calibration Laboratories (NABL). Received test results from all three laboratories mandated by the Honorable Bombay High Court to test MAGGI Noodles samples. All the 90 samples, covering

6 variants, tested by these laboratories are clear with lead much below the permissible limits. NithinJ.Maniyal (2015) in his research paper has concluded that Nestle' will have to work hard to build up the faith among the people and it may take a long time might be several years to up bring its brand again.

Nestlé India has conducted over 3500 tests representing over 200 million packs in both national as well as international accredited laboratories and all reports are clear. In addition to these, various countries including USA, UK, Singapore, Australia and others have found MAGGI Noodles manufactured in India safe for consumption. These tests, representing more than 200 million packets of noodles in total, have found Maggie noodles safe for consumption Nestle' committed to reintroduce the most beloved MAGGI Noodles at the earliest. Nestle' received results from all three NABL (National Accreditation Board for Testing and Calibration Laboratories) accredited laboratories mandated by the Honorable Bombay High Court to test newly manufactured MAGGI Noodles samples. All the samples of the MAGGI Noodles Masala have been cleared with lead much below permissible limits.

RELAUNCH OF MAGGIE On 30 November 2015 popular instant noodles Maggie is back on the shelves in select markets five months after it was banned for allegedly containing lead beyond the permissible limit, with Nestle' India preparing a staggered roll out except in eight states where it is still not allowed. The company, which has suffered a damage of 70-85 million Swiss Francs nearly Rs 530 crores due to the ban, has also not ruled out a suit against food safety regulator, FSSAI. Maggie has been re-launched in 100 towns through 300-odd distributors.

Statement of The Problem

Nestle' India has re-launched Maggie Noodles in the market after five months ban. In this study, an effort has been made to analyze the attitude of consumers towards the re-launch of the Maggie noodles in Jaipur city.

Objectives of The Study

1. To understand the response of consumers in Jaipur District towards the ban on Nestle' Maggie noodles.
2. To evaluate their attitude towards the product on its re-launched.
3. To identify the consumption level among consumers of "Maggie instant noodles" before and after the ban and compare them.
4. To identify whether the ban has made the consumers shift from "Maggie" to other instant noodle brands.
5. To identify whether the ban has affected the consumers trust on other products under the brand "Maggie" and other products by Nestle Ltd.

• Primary Data

The study was conducted on a sample of 100 respondents chosen on convenient random sampling method. A questionnaire consisting of 15 questions was distributed to these

respondents and the information provided by them was analyzed using Percentage Method. Interview schedule was also adopted to gather the necessary information. The area of study is confined to Jaipur district.

• **Secondary Data**

For the purpose of study, secondary data was collected from published materials like journals, newspaper articles and also from the official website of Nestle' India.

Limitations of The Study

The study is limited to the consumers in Jaipur district due to time constraints.

Time was a limiting factor while distributing and collecting data through questionnaires.

Respondents may be biased.

Sample may not be representative of the interest of the entire population.

Major Findings of The Study

1. Majority of the respondents (98%) have used Nestle' Maggie noodles.
2. With regard to the usage of products of Maggie, (72%) of the respondents have consumed Maggi noodles.
3. 40% of the respondents are highly satisfied with the products of Maggie.
4. Regarding the preference of Maggie Products, 35% of the consumer prefers Maggie due to its flavor and two-minute preparation.
5. About 50% of the consumers feel that the prices of Maggie Noodles are reasonable.
6. It is observed that 64% of the respondents are excited to find out new flavors and the remaining 36% are not much excited.
7. It is observed that 63% of the respondents prefer Maggie due to its flavor.
8. It is observed that in a family, 55% of Children prefer Maggie, 18% by husband, 21% by wife, and the remaining 06% by elderly people.
9. It is observed that 95% of the respondents are aware of the recent controversy about the Maggie Noodles.
10. It is observed that 50% of the respondents believe in the controversy against Maggie Noodles.
11. It is observed that 40% of the respondents believe that Maggie Noodles have been re-launched slightly well.
12. It is observed that 40% of the respondents believe that innovative advertisements on Maggie Noodles might be useful in retaining customers.
13. It is observed that 35% of the respondents substitute Maggie Noodles with Yippee in its absence.

14. It is observed that 20% of the respondents prefer and shall buy the product (Maggie Noodles) in spite of its controversies.
15. It is observed that 45% of the respondents are attracted towards the product due to its celebrity endorsement.

Suggestions

- With a brand that has 70% market share and one of the most trusted product in the middle-class Indian households, the trouble Lead issue has created for Nestle is much bigger. The main buying point from consumer point of view was healthy promise from Nestle which established the trust and made it big. they lose their market due to the high lead content so they have to regain their market share by promising food safety to all consumers
- This issue has mainly affected this trust in majority of households, though it's young consumer base (students, bachelors, elders). There is still being reluctance even after it shows some positive results. Given this situation, can Nestle launch a Maggie come back with a big bang trust winning campaign or has the instant food giant lost its ground to more healthy substitute products .The advertisements with the FSSAI certificates showing to customer will improve the customers trust.
- The company is likely to focus more on the labeling issue, in order to make sure that it does not violate the food safety standards "Labels such as 'No added MSG' could be removed from the new packs,".

Conclusion

The Swiss brand MAGGI owned by Nestle' makes a variety of products, including bouillon cubes, various Asian-type sauces, and powdered soups, but in India the word is essentially synonymous with "2Minute Noodles." In May 2015, Food Safety Regulators from Barabanki, a district of Uttar Pradesh, India reported that samples of Maggie 2-Minute Noodles had unexpectedly high levels of mono-sodium-glutamate, as well as up to 17 times the permissible limit of lead. On 3rd June 2015, the New Delhi Government banned the sale of Maggie in New Delhi stores for 15 days due to these findings. On 4th June 2015, the Gujarat FDA banned the noodles for 30 days after 27 out of 39 samples were detected with objectionable levels of metallic lead, among other things. Maggie has always insisted that its noodles are safe. Maggie had to pull stock worth nearly Rs 320 crores from the shelves and had to pay 20 crores to a cement factory to burn the product. In addition Corporate Affairs Ministry imposed a Rs 640 crores fine on Nestle' India, for finding MSG and lead beyond the permissible limit.

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References

1. Retrieved from <https://www.nestle.in/aboutus/asknestle/answers/maggi-noodles-indiamsg-lead-ban-recall>
2. Retrieved from <http://www.hindustantimes.com/india-news/maggi-noodles-in-soupeverything-you-need-to-know-aboutthe-controversy/article11354268.aspx>
3. Retrieved from <http://www.ukessays.com/essays/marketing/maggi-noodles-ismanufactured-by-nestle-marketingessay.php#ixzz3jExPpVhB>
4. Retrieved from <http://www.hindustantimes.com/india-news/maggi-noodles-in-soupeverything-you-need-to-know-aboutthe...>
5. Nitin J. Maniyal, , Dr. M. M. Munshi (2015), “ Impact of Maggi Noodles on the Youth”, Pezzottaitte Journals, Volume 4, Number 3, July-September 2015, ISSN print 2279-0394, (online):2279-0942.
6. SharmisthaMukherjee(2015). “Nestlé’s Maggi makes a comeback without major brand ambassadors. Indian Express, 12th Nov 2015.
7. NehaGarg (2015). Impact of Maggi Row in India. International Journal of Management and Social Sciences Research (IJMSSR). Volume 4, No. 7, pp. 46-52.
8. Bino Gupta (2015) Maggi Noodles: The Rise and Stumble Saga of the Two-Minute Delicacy. The International Journal of Business & Management Vol 3 Issue 6.

Ethics in Business and New Dimension in The Changing Business Paradigm

Dr. Anita Sharma

Introduction

Every business has an ethical duty to each of its associates namely, owners or stockholders, employees, customers, suppliers and the community at large. Each of these affect organization and is affected by it. Each is a stakeholder in the enterprise with certain expectations as to what the enterprise should do and how it should do it.

Business ethics is applied ethics. It is the application of our understanding of what is good and right to that assortments of institutions, technologies, transactions, activities and pursuits that we call business. Ethical behaviour is the best long term business strategy for company, however this does not mean that occasions may never arise when doing what is ethical will prove costly to a company nor does it mean that ethical behaviour is always rewarded or that unethical behaviour is always punished. On the contrary, unethical behaviour sometimes pay off and the good sometimes lose. Strategy means merely that over the long run and for most of the part, ethical behaviour can give a company significant competitive advantages over companies that are not ethical.

Concept of Business Ethics

A discussion of business ethics must begin by providing a framework of basic principles for understanding what is meant by the terms good and right, only then we can proceed to discuss the implications of ethics to our business world.

Managers should hold and develop a deeper knowledge of the nature of ethical principles and concepts and an understanding of how these apply to ethical problems encountered in business. This type of knowledge and understanding should help managers more clearly see their way through the ethical uncertainties that confront them in their business lives.

According to the dictionary, the term ethics has a variety of meanings. One of the meanings given to it is, " the principles of conduct governing An individual or a group". We sometimes use the term personal ethics while referring to the rules by which an individual lives his or her personal life. A second and more important meaning of ethics according to the dictionary is, ethics is the study of morality'. Although ethics deals with morality, it is not quite the same as morality. Ethics is a .kind of investigation and includes both the activity of investigating as well as the results of that investigation — whereas morality is the subject matter that ethics investigates.

Now the basic question which arise is what morality is. It is often said that morality is the standards which individual or group determine about deciding what is right or wrong and good

or evil. Moral standards include the norms we have about the kind of actions we believe are normally right and wrong as well as the values we place on the kinds of objects we believe are morally good and morally bad. Moral norms can usually be expressed as general rules or statements such as 'Always tell the truth' or 'it is wrong to kill innocent people.'

Ethics is the discipline that examines one's moral standards or the moral standards of the society. It asks how these standards apply to our lives and whether these standards are reasonable or unreasonable — that is whether they are supported by good reasons or poor ones.

The above conveys an idea of what ethics is. Now coming to business ethics, it is a specialized study of moral right and wrong. It concentrates on moral standards as they apply to business policies, institutions and behaviour and how these apply to the systems and organizations through which modern societies produce and distribute goods and services and to the people who work within these organizations. Business ethics therefore includes not only the analysis of moral norms and moral values but also attempt to apply the conclusions of this analysis to that assortment of institutions, technologies, transactions, activities and pursuits that we call business.

To cope up with their complex coordination and control problems, the officers and managers of large corporations adopt formal bureaucratic systems of rules that link together the activities of the individual members of the organization so as to achieve certain outcomes or objectives. So long as the individual follows these rules the outcome can be achieved, the outcome can be achieved even if the individual does not know what it is and does not care about it.²⁰ Business enterprises are the primary economic institutions through which people in modern societies carry on the tasks of producing and distributing goods and services.

Scope of The Ethics

The issues that business ethics covers encompass a wide variety of topics. However, business ethics briefly investigates three kinds of issues — systemic, corporate and individual. Systemic issues in business ethics are ethical questions raised about the economic, political, legal and other social systems within which business operates. These include questions about the morality of capitalism or of the laws, regulations, industrial structures and social practices within which business operates.

Corporate issues in business ethics are ethical questions raised about a particular company. These include questions about the morality of the activities, policies, practices or organizational structure of an individual company taken as a whole. Here questions about morality would be a company's decision to invest millions of dollars on a project that the company knew would probably not generate any profits.

Finally, individuals' issues in business ethics are ethical questions raised about a particular individual or particular individuals within a company. These include questions about the morality of the decisions, actions, or character of an individual. An example here could be the

question whether it is moral for a leader of an organization to allow its researchers to develop a drug that would probably not generate any profits.

Though this categorization may be helpful for our understanding, often we come across decisions that involve a large number of extremely complicated interrelated kinds of issues that can cause confusion unless the different kinds of issues are first carefully sorted out and distinguished from each other. Corporate organizations pose major problems for anyone who tries to apply moral standards to business activities. Must we say that it makes no sense to apply moral terms to organizations as a whole but only to the individuals who make up the organization? Organizations are composed of related human individuals that we conventionally agree to treat as a single unit and they 'act' only when we conventionally agree to treat the actions of these individuals as the actions of that unit.

It makes perfectly good sense to say that a corporate organization has moral duties and that it is morally responsible for its acts. However organizations have moral duties and are morally responsible in a secondary sense. A corporation has a moral duty to do something only if some of its members have a moral duty to make sure it is done and a corporation is morally responsible for something only if some of its members are morally responsible for what happened. Individuals are the primary carriers of moral duties and moral responsibilities. However corporate policies, corporate culture, corporate norms and corporate design can and do have an enormous influence on the choices, beliefs and behaviors of corporate employees.

Business and Ethics

One way to argue that ethics should be brought into business is simply by pointing out that, ethics should govern all voluntary human activities and because business is a voluntary human activity. The other way of looking at it is that business is a cooperative activity whose very existence requires ethical behaviour. For example, any individual business will collapse if all of its managers, employees and customers come to think that it is morally permissible to steal from, lie to, or break their agreements with the company. Because no business can exist entirely without ethics, the pursuit of business requires at least a minimal adherence to ethics on the part of those involved in business.

Second, all businesses require a stable society to carry on their business dealings and the stability of any society requires that its members adhere to some minimal standards of ethics. Another persuasive way to argue that ethics should be brought into business is by showing that ethical considerations are consistent with business pursuits in particular the pursuits of profit. As we understand, TATA. is renowned for its long standing ethical culture and yet it is one of the most spectacularly profitable companies of all time.

Business Ethics and External Environment

The process of producing goods forces businesses to engage in exchanges and inter actions with two main external environments — the natural environment and a consumer environment.

Here you will understand the ethical issues raised by these exchanges and interactions. The two basic problems related to the natural environment are — pollution and resource depleting. Several consumer issues, including product quality and advertising are the probables related to consumer environment.

The External Environment

For centuries, business institutions were able to ignore their impact on the natural environment, an indulgence created by a number of causes. First business was able to treat air and water as free goods. However in today's context unless business recognize the interrelationships and interdependencies of the ecological systems within which they operate unless they ensure that their activities will not seriously injure these systems we can not hope to deal with the problem of pollution.

Environmental issues raise large and complicated ethical and technological questions for our business society. What is the extent of the environmental damage produced by present and projected industrial technology? How large a threat does this damage pose to our welfare? What values we must give up to halt or slow such damage? Whose rights are violated by pollution and who should be responsible of paying for the costs of polluting the environment? How long will our natural resources last? What obligations do firms have to future generations to preserve the environment and conserve our resources?

Economists often distinguish between what it costs a manufacturer to make a product and what the manufacturer of that product costs as a whole when a firm pollutes its environment. In any way, the firm's private costs are always less than the total social costs involved. This is a problem because when the private costs diverge from the social costs involved in its manufacture, markets no longer price commodities accurately. Consequently they no longer resources efficiently. As a result the welfare of society declines. The remedy for the external costs is to ensure that the costs of pollution are internalized - that is they are absorbed by the producer and take into account when determining the price of good. Goods will be accurately priced, market forces will provide the incentives that will encourage producers to minimize external costs and some consumers will no longer end up paying more than others for the same commodities.

Business Ethics and Internal Environment

The Internal Environment

The process of producing goods forces businesses not only to engage in external exchanges, but also to coordinate the activities of the various internal constituencies that must be brought together and organized into the processes of production. Employees must be hired and organized, stockholders and creditors must be solicited and managerial talent must be tapped. Inevitably, conflicts arise within and between these internal constituencies as they interact with each other and as they seek to distribute benefits among themselves. The ethical issues raised by these internal conflicts fall into two broad areas of job discrimination and the issue of conflicts

between the individual and the organization. Although many more women and minorities are entering formerly male-dominated jobs, they still face problems that they would characterize as forms of discrimination. Experiences suggest that sexual discrimination and racial discrimination are alive and they do create flutters in the society.

Regardless of the problems inherent in some of the arguments against discrimination, it is clear that there are strong reasons for holding that discrimination is wrong. It is consequently understandable that the law has gradually been changed to conform to these moral requirements and that there has been a growing recognition of the various ways in which discrimination in employment occurs. Among the practices now widely recognized as discriminatory, few of them are recruitment practices, screening practices, promotion practices and conditions of employment. Women as noted earlier are victims of a particularly troublesome kind of discrimination that is both overt and coercive. They are subject to sexual harassment.

Many businesses are aware of these trends and have undertaken programmes now to respond to the special needs of women and minorities. However it should be clear in view of the future demographic trends that enlightened self interest should also prompt business to give women and minorities a special hand. It is for these reasons that companies have instituted aggressive affirmative programmes aimed at integrating large groups of minorities into their firms where they are provided with education, job training, skills, counseling and other assistance designed to enable them to assimilate into workforce.

The employee's main moral duty is to work toward the goals of the firm and avoid any activities that might harm those goals. To be unethical basically is to deviate from these goals to serve one's own interest in ways that if illegal are counted as form of 'white collar crime'. There are several ways in which the employee might fail to live up to the duty to pursue the goals of the firm. The employee might act on a "conflict of interest". the employee might steal from the firm or the employee might use his or her position as a .leverage to force illicit benefits out of others through extortion or commercial bribery.

The ethical issue of misusing proprietary information has become much more prominent in the last decade as new 'information technologies' have increasingly turned information into a valuable asset to which employees have regular access. As information technologies continue to develop, this issue will continue to grow in importance. Insider trading is also unethical-not merely because it is illegal but because it is claimed, the person who trades or insider information in effect 'steals' this information and thereby gains an unjust or unfair advantage over the member of the general public.

In the course of performing a job an employee may discover that a corporation is doing something that he or she believes is injurious to society. Indeed, individuals inside a corporation are usually the first to learn that the corporation is marketing unsafe products, polluting the environment , suppressing health information or violating the law. Employees with a sense of

moral responsibility who find their company is injuring society in some way will normally feel an obligation to get the company to stop its harmful activities and consequently will often bring the matter to the attention of their superiors. Unfortunately if the internal management of the company refuses to do anything about the matter, the employee today has few other legal options available. In the absence of legal protections of the employee's right to freedom of conscience the practice of whistle blowing is discussed and debated.

Whistle blowing is an attempt by a member or former member of an organization to disclose wrongdoing in or by the organization. It can be internal or external. If the wrongdoing is reported only to those higher in the organization it is internal whistle blowing. When the wrongdoing is reported to external individuals or bodies such as government agencies, newspapers or public interest groups, the whistle blowing is said to be external.

However, it is for the ethical judgment to decide whether external whistle blowing is wrong because employees have a contractual duty to be loyal to their employer and to keep all aspects of the business confidential. When an employee accepts a job, the argument goes, the employee implicitly agrees to keep all aspects of the business confidential and to single mindedly pursue the best interests of the employer. The whistleblower latest this agreement and thereby violates the rights of his or her employer.

The Changing Business Paradigm and Ethical Dilemmas

Most of the big corporate houses operate globally and maintain manufacturing, marketing, service or administrative operations in many different host countries. With a worldwide presence, these corporations draw capital, raw materials and human labour from wherever in the world they are cheap, skilled and available, and assemble and market their products in whatever nations offer manufacturing advantages and open markets. The fact that these corporations operate in more than one country produces ethical dilemmas for their managers than the managers of firms limited to a single country.

The reason to this is that the corporations have operations in more than one country, and the ability to shift their operations out of any country that becomes inhospitable and relocate in another country that offers it cheaper labour, less stringent laws or more favourable treatment. This ability to shift the operations sometimes enables the multinationals to escape the social controls that a single nation might attempt to impose on the multinational and can allow the corporation to play one country against another. Environmental laws for example which can ensure that domestic companies operate in responsible manner that a country deems right for its people, may not be effective constraints on a corporation that can simply move or threaten to move to a country without such laws. The managers therefore are confronted with the dilemma of choosing between the economic needs and interests of their business, on the one hand and the local needs and interests of their host country on the other hand.

Another set of dilemmas is created since corporations operate plants in several countries, it can sometimes transfer raw materials, goods and capital among its plants in different countries at

terms that enable it to escape taxes and fiscal obligations that companies limited to a single nation must bear. Yet another group of dilemmas is faced by multinationals-because they operate in several countries they often have the opportunity to transfer a new technology or set of products from a developed country into nations that are less developed. The multinational wants to carry out the transfer of course because it perceives an opportunity for profit and the host country wants and allows the transfer because it perceives these technologies and products as key to its own development. However, the transfer of technologies and products into a developing country can create risks when the country is not ready to assimilate them.

Now the dilemma which arises is where does the consumer's duty to protect his or her own interests end and where does the manufacturer's duty to protect consumers' interest begin? Three different theories on the ethical duties of manufacturers have been developed, each one of which strikes a different balance between the consumer's duty to himself or herself and the manufacturer's duty to the consumer - the contract view, the due care' view, and the social cost view. The contract view would place the greater responsibility on the consumer, whereas, the due care and social costs views place the larger measure of responsibility on the manufacturer.

Political behaviour in an organization can easily become abusive. Political tactics can be used to advance private interests at the expense of organizational and group interests, they can be manipulative and deceptive and they can seriously injure those vliu have little or no political power or expertise. However, political tactics can also put at the service of organizational and social goals, they may sometimes be necessary to protect the powerless and they are sometimes the only defense a person has against the manipulative and deceptive tactics of others. The dilemma for the individual in an organization is knowing where the line lies that separates morally legitimate and necessary political tactics from those that are unethical.

"Oskosh corporation is honoured to be recognized as one of the world's most ethical companies "said Oskosh corporation president and CEO. Wilson R.Jones "our employees around the world are the ones who have made this possible with ethical business practices and a commitment to our core value of citizenship, honesty, accountability, integrity and respect. At Oshkosh doing the right way isn't just part of our culture, it is the only way we do business."

L'Oral' has devoted itself to beauty for over 105 years. With its unique portfolio of 28 international diverse and complementary brands. The group generated sale amounting to 23 billion euros in 2013 and employs 77500 people worldwide. As the world's leading beauty company. L'Oreal is present across all distribution networks, mass market, department stores, Pharmacies and drugstores, travel retail and branded retail. Research and innovation and a dedicated research team of 4000 people are, at the core of L'Oreal's strategy working to meet beauty aspirations all over the world and attract one million new consumer in the years to come L'Oreal's new sustainability commitment for 2020" sharing beauty with all" sets out ambitious sustainable development objective across the group's value chain in 2014, the etisphere institute, a leading international think-tank for business ethics, corporate social responsibility

and sustainability, recognized L'Oreal as one of the world's most ethical companies. This is the fifth time that L'Oreal has received this distinction.

Conclusion

People taking objections to bringing ethics into business argue that persons involved in business should single mindedly pursue the financial interests of their firm and not side track their energies or their firm's resources into doing good works.

Some argue that in perfectly competitive free markets the pursuit of profit will by itself ensure that the members of society are served in the most socially beneficial ways. However what experts like Manuel G Velasquez argue is that often assumptions behind this argument like perfectly competitive market situation do not exist.

Another argument is that business managers should single-mindedly pursue the interests of their firms and should ignore ethical considerations.

This argument finds its basis in 'loyal agent's argument', which suggests that a manager engaged in certain illegal or unethical conduct be excused because he did it not for himself but to protect the interests of his company. However, again the assumptions behind this argument can be questioned on several grounds.

The third kind of objection is that to be ethical it is enough for business people merely to obey the law. Business ethics is essentially obeying law. It is wrong however to see law and ethics as identical. It is true that some laws require behaviour that is same as the behaviour required by our moral standards. However, law and morality do not always coincide. Some laws have nothing to do with morality because they do not involve serious matters. These include dress codes, parking laws and other laws covering similar matters.

Beyond these arguments for and against the role of ethics in business, discussions happen Whether ethical companies are more profitable than unethical ones. There are many different ways of defining ethical, many different ways of measuring profits an the findings of different studies remain inconclusive. However, studies do suggest that by and large ethics do not detract from profit and seems to contribute to profits.

Lecturer

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The Right to Information – Process & Appeals (The Right to Truth)

Dr. Lekha Jain

The Right to Information Act-2005 was enacted by the parliament in the fifty-sixth year of the Republic of India. It is an Act to offer for setting out the practical administration of right to information for citizens of India to secure access to information under the control of public authorities. In order to uphold precision and answerability in the working of every public authority, the constitution of a Central Information Commission and State Information Commissions and for matters connected therewith or incidental thereto, the act was brought down by the government.

Right to Information Act- What it is-

It is an authoritative tool for

- Strengthening Democracy and
- Enhancing Good Governance

The Right to Information is a fundamental right under the Constitution of India demanding and being given information as a matter of right is called “Right to Information”.

One of the very crucial laws in the country, the Central legislation RTI act flows from two Fundamental Rights preserved in the Constitution of India.

Article 19-Freedom of speech and expression:

The Article puts down that the Information is required to shape and articulate opinions, dissent or support on any matter. It is therefore a part of Article 19 (1) (a)

Article 21-Right to life and liberty:

The Article says that the Information is essential for protection of the right to life and liberty. It is therefore a part of Article 21.

Right to Information Act - When and Where. :-

The RTI act 2005 was enacted by consent and authority of His Excellency, President of India. This act was enacted by the Parliament on 15.06.2005 and notified in the Gazette of India dated 21.06.2005.

It extends to the whole of India except the State of Jammu and Kashmir.

Who can exercise his / her right under The RTI Act 2005?

Subject to the provisions of this Act, all citizens shall have the right to information.

Right to Information act - Why

In India, the Official Secrets Act, 1923 throws a veil of secrecy on government procedures and in turn there comes the problem of undue secrecy. Therefore, much of the common person's anguish and helplessness is traceable to lack of access to information and lack of knowledge of decision-making processes". The Right to Information has already received judicial recognition as a part of the fundamental right to free speech and expression. An Act is needed to provide a statutory frame work for this right.

As it is widely believed that Information is vital for the functioning of a true democracy, people have to be kept informed about current affairs and broad issues – political, social and economic. Free exchange of ideas and free debate are essentially desirable for the Government of a free country.

And if this information is buried, it will be the single most cause responsible for corruption in society. It facilitates clandestine deals, arbitrary decisions, manipulations and embezzlements.

So, with an aim to bring transparency in dealings and to provide Indian citizens access to the government proceeding, the act was brought down in the country.

Overriding effect [Sec.22]

It is clearly mentioned in the section 22 of the RTI act-05 that the provisions of the Act have a superseding effect over anything inconsistent contained in the Official Secrets Act, 1923 or any other law or instrument.

Chronology of RTI-

The act has finally come in to effect after passing through the number of laws made earlier. Following is the chronology.

- FOI law first enacted, Sweden, 1766
- Raj Narain vs. State of UP, India, 1776
- Mazdoor Kisan Shakti Sangathan (MKSS) Movement in Rajasthan, India, 1990
- Freedom of Information Act, India, 2002
- Right to Information Act, 2005

Objectives of RTI act-05

- To frame a realistic regime of right to information for citizens
- To ensure access to information under public authorities control
- To prop up transparency and accountability in the working of every public authority
- To hold corruption
- To raise citizens' awareness and ability to use their other rights
- To offer them to partake importantly in the development process

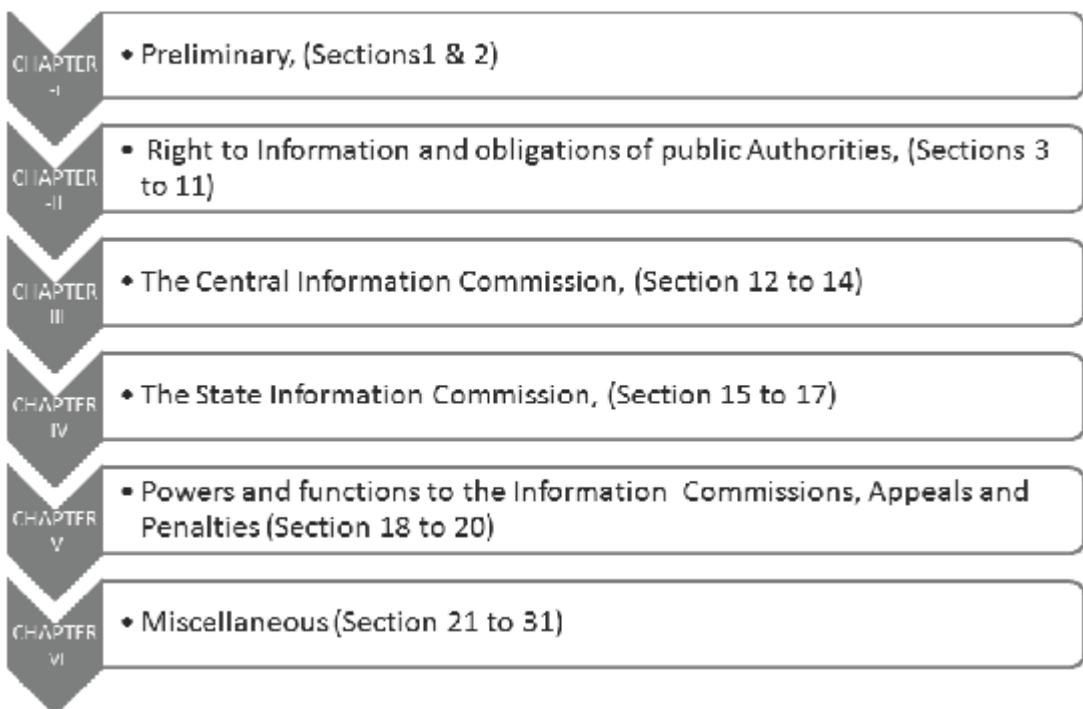
Logo of RTI Act-

The Logo provided is very simple and iconic. It depicts a sheet of paper engraved information on it and the authority figure in background providing the information. This basically symbolizes two key stakeholders in the course of sharing information under the RTI Act. To be more elaborative, the lines drew on the sheet of paper are espoused in a manner that makes it look translucent, viewing throughout the form of 'i' from behind.



Here the “ i ” is used to portray of the human form or it can simply be related to i for information. The bright blue color sets for transparency and purity (free from misconducts) of process.

The act contains 6 chapters, 31 sections and 2 schedules. Structure of the act is as follows-



What is Right to Information? :-

As per the RTI act-2005, it is a right to access information held by public authority, information under the control of public authority and includes the right to a citizen that-

- He can examine work, documents, and records and take notes, extracts or certified copies of documents or records.
- He can take certified samples of material and can obtain information in the form of diskettes, floppies, Tapes, video cassettes or in any other electronic mode.

- He can also take the information through printouts where such information is stored in a computer or in any other device.

Whom does the Act apply to?

The RTI act is applicable to whole India except the state of J&K. The act gives Indian citizen right to ask information held by “public authorities” which Includes authorities, bodies, institution of self governments which are established or constituted –

- by the Indian constitution
- by a law of parliament or a state legislature
- by a notification or order of the State or Central Governments, bodies owned, controlled or substantially financed by the State or Central Governments.

It also includes non-government organizations which obtain substantial government funds directly or indirectly.

Whom does the act not apply?

As no law is absolute and contains some limitations with it, the RTI act also has some constraints. There are some areas of information that should remain protected in public and national interest, so the act has clear provision that the right given under the act shall not be applicable to the information in respect of the these matters- (1) International relations and national security; (2) Law enforcement and prevention of crime; (3) Internal deliberations of the government; (4) Information obtained in confidence from some source outside the Government; (5) Information which, if disclosed, would violate the privacy of an individual; (6) Information particularly of an economic nature, when disclosed, would confer an unfair advantage on some person or subject or government; (7) Information which is covered by legal/professional privilege, like communication between a legal advisor and his client and (8) Information about scientific discoveries and inventions and improvements, essentially in the field of weapons.

However, there is provision given to the citizens that they can seek information in respect of allegations of violations of human rights from the expelled organizations. In this case, these organizations may give the information within 45 days with the approval of the Information Commission concerned.

As far as the private bodies are concerned, they are not directly covered under the act but, all the information relating to private bodies, which can be accessed by a public authority, can be accessed by the Indian citizen.

Coming to the non-Government organizations, they need to comply with the act, if these non-Government organizations are substantially financed directly or indirectly by Government funds.

What are the benefits of the Act?

The act gives a right for a common man to ask any information about his/her applications or

complaints regarding ration cards, electricity connections, water connections and so on, pending with the public authorities and force them to restore his/her grievances speedily without any need of paying bribes.

Information:-

The S 2 (t) of the act defines Information as any material in any form which includes records, documents, memos, emails, opinions, advices, press releases, circulars, orders, logbooks, contracts, reports, papers, samples, models, data material held in any electronic form and information relating to any private body which can be accessed by a public authority under any other law for the time being in force.

Record

As per the act, Records includes-

- Any document, manuscript and file, microfilm, microfiche and facsimile copy of a document;
- Any reproduction of image or images embodied in such microfilm (whether enlarged or not); and
- Any other material produced by a computer or any other device.

Public Authority

It is any authority or body or institution of self government established or constituted.

- By or under the Constitution
- By any other law made by Parliament
- By any other law made by State Legislature

By notification issued or order made by the appropriate government, and includes any-body owned, controlled or substantially financed, non-government organization substantially financed, directly or indirectly by funds provided by the government.

Competent Authority:-

Under the act, the competent authority includes-

- a) The Speaker in the case of the House of the People or the Legislative Assembly of a State or a Union territory having such Assembly
- b) The Chairman in the case of the Council of States or Legislative Council of a State
- c) The Chief Justice of India in the case of the Supreme Court
- d) The Chief Justice of the High Court in the case of a High Court
- e) The President or the Governor, as the case may be, in the case of other authorities established or constituted by or under the Constitution
- f) The administrator appointed under article 239 of the Constitution.

Public Information Officers (PIOs)

PIOs are officers designated by the public authorities in all administrative units or offices under it to provide information to the citizens requesting for information under the Act.

Any other officer, whose assistance has been sought by the PIO for the appropriate discharge of his or her duties, shall render all assistance and for the purpose of breaching of the provisions of this Act, shall be treated as a PIO.

Central Information Commission

It is an autonomous body to inquire into complaints received from citizens. A person can complain to the CIC if refused access to information or how the public authority has handled his requested.

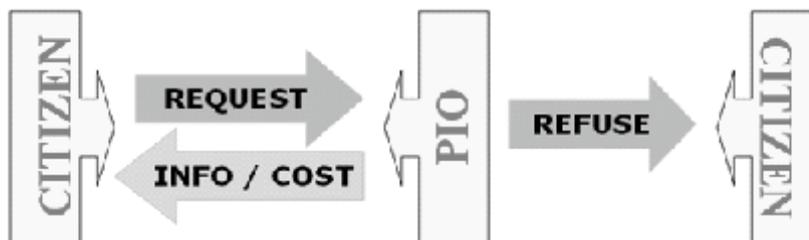
Third Party

Third party means a person other than the citizen making a request for information and includes a public authority.

How to apply for Information from a Public Authority?

If anyone wants to request for information under RTI act has to give his/her application to the Public Information officer appointed by any public authority. The request will need to be sent in English/Hindi/official language of that area or e-mail. In this, particulars of the information are needed to be mentioned with the details to contact. Therefore, no one is required to disclose reasons for the request and personal details.

The person who is applying the request needs to pay prescribed fee for application. But If you are a person below poverty line, you need not pay any fee.



**FLOWCHART SHOWING INFORMATION SHARING MECHANISM.
INFORMATION SHALL BE PROVIDED WITHIN 30 CALENDAR DAYS**

What is the requisite fee?

Under the act, the Government of India has prescribed the following fees in respect of information requested from Government of India departments.

The fees can be in form of draft / banker's cheque / Indian postal order payable to the Accounts Officer of the public authority. Fees may vary from one state to another.

To Submit Request	Rs.10.00
To Receive Information	
For each page created / copied (in A-4 or A-3 size paper)	Rs. 2-00
If the paper is in larger size	Actual charge / cost price
Diskette / floppy	Rs. 50.00
Samples / Models	Actual charge / cost price
Printed matter Price fixed	Rs. 2 for page of photocopy
For Inspection of records	
First hour	Free
Each subsequent 15 minutes	Rs. 5. 00

Time Period given to Authority to reply:-

From the date of receipt of application	30 days
If Application for information is given to Assistant Public Information Officer	35 days
For information concerning the life and liberty of a person	48 Hours
where the interests of a third party	40 days
For information pertaining to allegations of violation of human rights violations from security and intelligence organizations from the Second Schedule of the Act subject to approval of the Information Commission concerned.	45 days

It is clearly noted that failure to provide information within the specified period is deemed as refusal.

Obligations of Public Authorities

Every public authority shall maintain all its records duly catalogued and indexed in a manner and the form which facilitates the right to information under this Act and ensure that all records that are appropriate to be computerized are, within a reasonable time and subject to availability

of resources, computerized and connected through a network all over the country on different systems so that access to such records is facilitated.

The authorities will publish all relevant facts decisions affecting public and will do constant endeavourer to take steps to provide as much information suo motu to the public at regular intervals through various means of communications, including internet, so that the public have minimum resort to the use of this Act to obtain information.

The public authority will designate PIOs and APIOs In 100 days.

Dissemination of Information

The public authorizes can disseminate the information through various means that include-

- Notice boards
- Newspapers
- Public announcements
- Media broadcasts
- Internet
- Inspection of offices
- Other means

Particulars to be published

Its obligation of public authorities to publish following information -

- Particulars, functions and duties of the organization
- Powers, duties of officers & employees
- Procedure followed in decision making including channels of supervision
- Norms set for discharge of functions
- Rules, regulations, instructions, manuals, records used
- Statement of categories of documents held

Role of PIO & APIO

PIO- He provides information to anyone requesting for it

APIO- He receives applications and forwards them to PIO.

Functions of PIO-

After receiving requests for information, he should

- Offer reasonable assistance to applicant
- Provide access-enabling assistance to sensorily disabled
- Seek assistance from any other officer as considered necessary
- For the purpose of contravention of this act, such other officer will be treated as PIO.

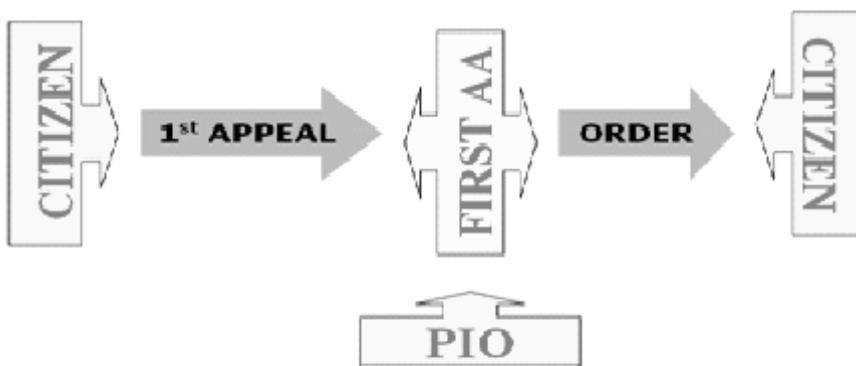
Appeals

If, the person asking information does not get the information, he can file appeal to a senior officer in the public authority (Designated Appellate Officer) as follows-

First appeal

If party is aggrieved by the decision of the Public Information Officer	within 30 days from the receipt of the decision
If you do not receive any response from the Public Information Officer	within 30 days from the expiry of the time limit

Appeal to be disposed of within a period of 30 days is extendable up to a total of 45 days



**FLOWCHART SHOWING FIRST APPEAL MECHANISM
ORDER SHALL BE PASSED WITHIN 30-45 DAYS**

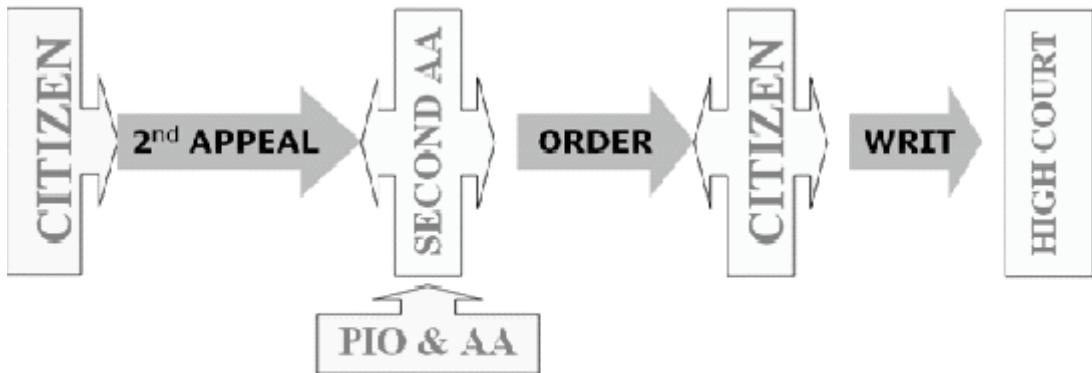
Second Appeal: -

A party can make second appeal to the Central / State Information Commission:-

- If no Public Information Officer is appointed.
- If the APIO or the PIO refuses your request.
- If unreasonable fees are demanded by the PIO.
- If incomplete, misleading or false information is given.

Against the decision of the first appellate officer	Within 90 days from the date of the receipt of the decision or expected date of the decision where no such decision was given.
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If there is delay in filing an appeal a sufficient cause should be shown. And it is also provided that if the party has suffered any loss or harm, it can claim compensation from the public authority.



**FLOWCHART SHOWING SECOND APPEAL MECHANISM
NO TIME LIMIT FOR PASSING THE ORDER. PENDENCY IS VERY HIGH.**

After getting an appeal, the Information Commission first hears the PIO, so that unless it agrees with the PIO, the party need not be bothered with personal presence before the Commission .However, if the Commission sees good point in the PIO's arguments, party will be given an opportunity to present its case in person / through any other person duly authorized by it. Decision of the CIC/SIC is final and binding.)

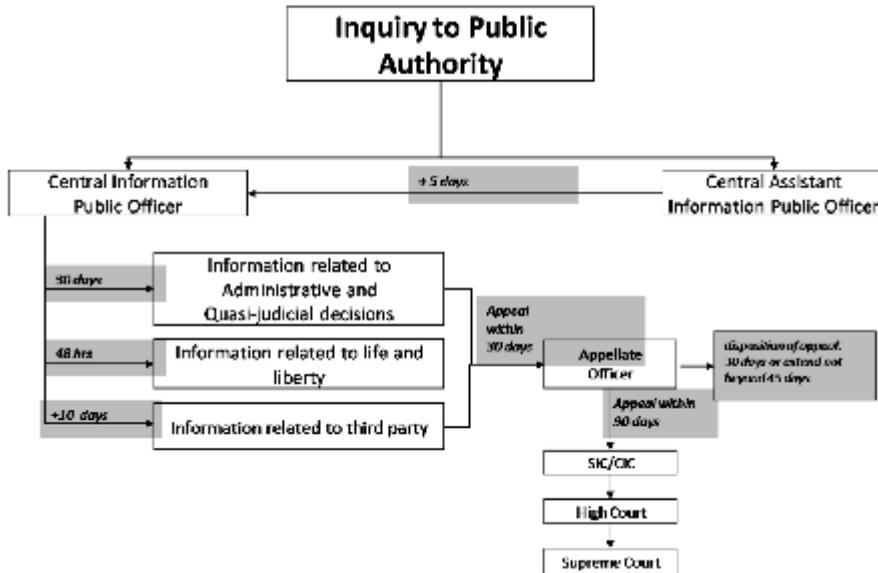
Penalty

The Information Commission can impose penalty of Rs. 250/- per day, up to a maximum of Rs. 25,000/- on mistaken PIOs, If he without any reasonable cause:

- refused an application
- delayed information release without reasonable cause
- Ill fully denied information
- Knowingly gave incomplete, incorrect, misleading information
- destroyed information that has been requested
- obstructed furnishing of information in any manner

The Commission also has powers to recommend disciplinary action against PIOs. It can also direct compensation to be paid to the appellant by the public authority.

The Diagrammatical Repetition of Application Process:-



Application Format for Seeking Information Under RTI-2005

Sl. No.	Particulars	Information to be provided by the information seeker
1	Name	
2	Nationality / citizenship	
3	Permanent address Phone : Email ID:	
4	Address for correspondence Phone : Email ID:	
5	Details of information required (If necessary a separate sheet may be attached)	
6	Details of application fee paid Demand Daft No. & date Amount Drawn in favor of	

Date:.....

To,

The Public Information Officer

(Name of the Public Authority)

(Address of the Public Authority)

Sir / Madam:

Sub: Request for Information under the Right to Information Act, 2005

[if applicable] Kindly, provide me the following information:..... (Mention the information you want as specifically and clearly as possible and the period of time to which the information pertains)

- ...

[if applicable] I request for receipt of the information in the following format(s) – true copy / print out / diskette / floppy / tape / video cassettes / certified copies of documents or records – in person / by post / by e-Mail.

[if applicable] I would like to inspect the following works / documents / records / take notes / extracts..... (Mention clearly and specifically what is wanted for inspection).

Kindly inform me the date and time for my visit.

[if applicable] Kindly, provide me certified samples of material (Mention specifically and clearly the material). I request for receipt of the certified samples (Describe)

The details of fees paid by me are as follows (Specify)..... /I belong to the 'Below Poverty Line Category' [if applicable, attach a photocopy of the proof] and I am not required to pay any fees.

Sincerely,

(Applicant's signature/Thumb Impression)

Applicant's Name:

Applicant's Address:

Applicant's Phone Number/e-Mail Address

Place:

Date:

The Right to Information act -2005 is one of the major successful events of UPA government; the utility of the act of a common Indian man can be described as followed.

In The Preamble of our constitution drafted 56 years ago, We, The People of India, determined to secure ourselves, LIBERTY of thought, expression.

Article 19(1) promises us the right to freedom of speech and expression and as recognized by the Supreme Court it also includes full right to information. The Right to Information Act, 2005 ("the Act") has established the necessary practical regime of right to information.

Right to information can authorize citizens to take charge by participating in decision-making and by challenging corrupt and arbitrary actions at all levels. With access to government records, citizens can evaluate and conclude whether the government they have elected is delivering the results that are expected. RTI is thus a tool that can change the role of the citizens from being mere spectators to that of being active participants in the process of governance.

*Assistant Professor
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Suggestions

In my view-

To make the Act more effective-

1. There should be a facilitation centre explaining the details of filing an RTI.
2. There should be a user manual/ guide present in every department, where RTI applications are filled.
3. Create more awareness among people by way of Television/ social media.

References

Websties

- <http://rti.gov.in>
- www.icar.org.in
- Scribe
- Wikipedia

Act - THE RIGHT TO INFORMATION ACT, 2005

Black Money and Demonitization in India; A Glimpse

*Akanksha Solanki

**Preeti Shekhawat

Abstract

In 2016 The Government of India declared that the Rs 500 and Rs. 1000 denominated currency notes will stop to be legal tender. The move was besieged towards tackling corruption, black money and terrorism. After initial euphoria, questions began to materialize what are the expenses of this demonetization? Will it be valuable if people can still create new black money thereafter? Will it amplify the GDP? Will it augment inflation? What about tax revenues? We will look for answers.

Keywords: India, black money, demonetization.

Black Money and Demonetization

To start off, black money is a wider communal ailment and demonetization is but one step in the war adjacent to black money. Black money and black economy are also two dissimilar constructs. The terms shadow economy and underground economy is also used as synonyms for black financial system. Black money is the currency of black economy. It refers to against the law money earned from all the illegal sources which has not been disclosed to the Indian government. The advantage of black money is that it links into the genuine economy, uses the recompense of the legitimate economy but does not pay the expenses.

Research on Tackling Black Money

The subject of black money has been well-explored. The National Institute of Public Finance and Policy has been on the go in study about black money. Their 1983 review of estimates of Black Money¹ led to a information on Aspects of Black Money² in 1985. The information of 2012 titled Measures to deal with Black Money in India and Abroad³ and the 2012 White Paper on Black Money⁴ by Ministry of Finance covers the different research studies and updates them. These studies however have not been capable to decide a constant estimation of the black economy. The estimates, together with from other sources, vary from 15% to 45% of the total economy. The papers, however, give a broad field of mechanisms to deal with black money.

Separately from the above Indian initiatives, there have been global initiatives to attempt “underground economy” or “shadow economy”. Primarily, the principles wait the same. Internationally, I find, they focus more on facilitate intentional compliance than enforcement. Maintaining belief and assurance in tax system takes precedence⁵. They also suggest risk based monitoring mechanisms, coordination amongst revenue departments and education among other things⁶.

1<http://www.nipfp.org.in/publications/working-papers/1509/>

2<http://www.nipfp.org.in/book/927/>

3http://dor.gov.in/sites/upload_files/revenue/files/Measures_Tackle_BlackMoney.pdf

4http://finmin.nic.in/reports/whitepaper_backmoney2012.pdf

5Comparing how some tax authorities tackle the hidden economy by UK National Audit Office
Rand Europe 2009

6Reducing opportunities for tax non-compliance in the underground economy – Information
Note dated January 2012

Principles of Tackling Black Money

The first law is that take out the systemic sting that leads to formation of black money in the first place. Blame lies with the tax sector. Black money is nil but money generated in reasonable transactions which are secret from government so as to keep away from paying the transaction cost (usually tax) in the legitimate economy⁷. This is generally done by using physical cash. This cash thereafter must be processed to change into utilization or investment. Black economy refers to different activities, transactions etc. that help process this physical cash, make returns on this cash, facilitate utilization using this cash etc.

The next principle has two parts. First, not all cash transactions are automatically black money transaction. They suit black money transactions only if they are secret from the legitimate economy. Hence a shop-keeper who does not give receipt but declares the sale (it's only hypothetical) does not generate black money. On the other hand, a shop-keeper who gives a receipt but discloses other receipt book to the tax authorities (happens all the time) creates black money transaction. Next, the black money must at some time or other be plugged into legitimate economy. Thus, it cannot be done using user-created money that cannot be exchanged with local currency. Hence it depends on legal tender. It means somewhere down the chain there must exist a person for whom division of this black money is legal cash income which he can use for his own utilization in legitimate channels. Generally this is the construction worker, or other poorest of the poor who will give definite services and his income will remain under the Shadow Economy Friedrich Schneider & Colin C. Williams, organization of Economic Affairs, 2013government radar. It can also be against the law traders in gold or diamonds etc. who can change this into valuable items that have quasi-official tender status.

The third insight is that black economy is constantly fed by parts of white economy that go underground. Quite a few people who do not want to support black money contribute to it. They are either coerced – say developer forcing consumer to pay him in cash or government administrator looking for bribes in cash. Hence, avoid white currency from becoming black the starting point. The recommendations of information titled Measures to tackle Black Money in India and abroad explain some strategies. The core principle is to raise the cost of converting legal money into cash (wherein government loses talent to track it) and falling the cost of electronic convey also promotes electronic transactions.

Black money flows from side to side a separate channel. Such channel has communications to handle black money. The information is black money seldom remains in cash. It moves into high worth items like valid estate, diamonds, gold, films etc. The people complicated in these sectors have well-evolved mechanisms to take up black money. in one direction is to create entire value chains that use only cash. It is simple in sectors where workers/suppliers are unorganized, contract workers – e.g. manufacture films production etc. Bringing systematic regulations that make it easy for the participants in the value chain to admit electronic payments will curb black money.

Black economy depends on black money financiers. These are money lenders earning like 2% per month on their investments for financing the actions in black money friendly sectors picture financing, production financing, financing retailer, dance bars, alcohol, etc. These financiers also need enforcement mechanism to make sure their money is safe. Obviously they ally with criminal elements. Al Capone, the famous Chicago mobster, was previously an enforcer but later a financier.

Black money faces the equal invest or use choice as legitimate money. On the savings side, it seeks sectors that are sociable for black money. So those people who purchase many apartments from developers and developer afterward sells these for revenue are contributing to investment side when their agreements are not registered and do not pay stamp duty. Jewelers and traders of valuable stones as well contribute supportively in this area.

On the consumption side, black money seeks to purchase three things legitimate goods that can be consumed openly (i.e. normal things in abnormal amounts – say many shoes, many suits etc.), illegitimate goods that can be consumed in secret (banned or imported exclusive foods – caviar or costly wines, costly furnishings, home decorations etc.) or stored secretly (high-end safes, etc.). Within these sectors there exist trails that lead to the people notice the money.

Black money is also used in official funds. Foreign channels play important task. Quite substantial investments in P-Notes are essentially round-tripped black money. The solution aspect of these instruments is creating secrecy by being away from arms of the laws of the country from where profits can be fed into the legitimate hands. In such cases, the foundation of income is illegal. Hence, many businesses in tax-havens such as Mauritius, Cayman Islands etc. exist to change illegal money into legal money. These investments come under the purview of currency laundering.

Incentives for electronic communication help check use of cash. Income tax deductions on credit cards or e-payments up to a certain limit can incentivize electronic transfers. South Korea used credit card income deduction experiment has been hailed as a success by OECD.

Strategies for Tackling Black Money

The distillation of various approaches can be summarized as under:

1. Establish identity of persons (through PAN Card, Aadhar Card etc.) operating in the country – citizens and foreigners.

2. Enable low the cost direct bank transfers (Implementation of NEFT/IMPS/RTGS and other formats) including direct transfers of subsidies to the beneficiaries under the Aadhar scheme.
3. Enable electronic register of assets (Underway through electronic land records, digitization of revenue records)
4. Reform tax system so that cost of compliance is lower than cost of tax evasion. (Through initiatives such as Saral forms, e-filing, self-declaration etc.) Indirect tax system through simplification (GST).
5. Widen the net for disclosure by filing Income Tax return. (Auto-processing returns for tax refunds)
6. Regulations that increase costs for black money creating activities. (Prevention of Corruption Act etc.)
7. Create attribution chain for funds entering and exiting the country (such as through P-Notes, FDI, Prevention of Money Laundering Act etc.)
8. Create e-trails of both incomes and expenditure.
9. Control on holding of cash and physical money including Indian and foreign money. (FEMA, recent demonetization) It is clear that black money clean up is underway on many fronts. Many of the pieces of puzzle have been put in place.

Semantics of The Current Demonetisation

Demonetization is the mechanism by which the government states to withdraw the money which is current legal tender. The government being sovereign can take such decision. The effect of this announcement is that the currency notes in circulation will now cease to be valid tender and can only be exchanged at the banks. Demonetization of higher denomination notes as an idea has been around⁸.

There are two important issues with respect to the present demonetization. First that the notes ceased to be legal tender from midnight of 8th November just 4 hours after announcement. So in effect the only places where they will be accepted will be banks. Second, even the banks have been given time until when they can accept the notes – 30th December. Third, the cash swap carries restriction. Thus, in effect the announcement forces these notes into the bank's deposits within a short period of time.

As per RBI estimates⁹, 15 billion notes of 500 denominations (approx. Rs. 7853.75 billion) and 6 billion notes of 1000 denominations (approx. Rs. 6325.68 billion)

⁸Proposed by various people such as Arthakranti and also by Peter Sands in essay titled Making It Harder for the Bad Guys: The Case for Eliminating High Denomination Notes, M-RCBG Associate Working Paper Series | No. 52 in February 2016 and later discussed by Lawrence Summers and others exist. In addition, RBI estimates that fake 0.2 million notes of Rs. 500 and

0.15million notes of Rs. 1000 were discovered. The actual number of fake notes in circulation will be higher. These will be worthless from 09 November 2016 but you can get the credit for the money held as these notes in the form of bank deposit. Naturally, those who can disclose deposits equal to the amount they hold in cash will have no problem.

Hasn't It Been Done Before?

Indeed, it has. The first demonetization took place in 1946 and Rs 1000 and Rs 10,000 notes were demonetized. Later in 1978, Rs. 1000, Rs. 5000 and Rs. 10,000 were demonetized. This is the third time demonetization has taken place.

The critical difference is in the quantum however. The first and second demonetization effected really high value notes which formed a small part of notes in circulation. We can arrive at the estimates by comparing the denomination of the note with the annual per capita GDP. In 1960, India's per- capita GDP was Rs. 400 (then currency), in 1978 per capita GDP was Rs. 1722/- whereas today it is Rs. 103,000/- (today's currency). Thus in 1960, a 1000 Rupee note was 2.5X and in 1978 it was 0.5X per capita GDP, considerably easy to withdraw. The second aspect is that today the 500/- and 1000/- currency notes represents ~85% of physical money in circulation. At that time, it was considerable less.

World Bank data in currency of respective year. Earliest data available is 1960 so we have used 1960 data. Devaluation was in 1946 which was way before this year. The numbers based on estimates by various agencies.

RBI earlier removed pre-2005 notes of all denominations from circulation as they have fewer security features compared with subsequent notes. The process of removing the older notes from circulation continued for nearly one year. The deadline was extended till December 2015 and those notes continued to remain legal tender till November 8. This was not exactly demonetization but removing from circulation and has now subsumed into the present demonetization.

Why Attack The Cash?

First, who holds black money in cash? Mostly corrupt people. Their pay-offs are in suitcases and hoarded in their houses. These are balances held till they find their target investments. A lot of black money itself is mainly held in gold and land.

As explained earlier, cash, i.e. black money is the currency of black economy. The government cannot do much about black money that remains stagnant if it remains a legal tender. But remove the legality of it and the government is able to alter the cost-benefits equation of corruption. Demonetization attacks the currency supply of the black economy. But removing the cash available to buy these gold and you affect the supply chains in black economy. When the flow gets interrupted the cost of corruption increases and payoff reduces dramatically. Such action attacks the chain that processes black money.

It is possible that as a result land prices and gold prices will fall. If land prices fall, middle class will be able to purchase land. If gold purchases are reduced, the fore pressure on INR will ease a bit. Thus, legitimate money which was being priced out of the economy gets an opportunity. Further, it prevents the black money processing chains from forcing white money into black.

Inflationary or Deflationary

Firstly, part of the actual money in circulation is never recovered. Depending on various conditions, at least 20% of this paper money will never reach banks. This stock of money is lost. Many believe this to be deflationary. It isn't. Since this money was never within the legal purview it was meaningless anyways. From government's point of view, it was like the money we forgot in an old diary and the diary was lost. This money did contribute to the economy but to smaller extent.

Some say "but this money was being used to buy Audis and other luxury goods". This is weak argument. Audi as a company does not receive unaccounted money (if they do that is criminal as well). The black money chain in such cases effectively starts with the dealers who game the system by discounting the vehicle or by making the vehicle pre-owned, prior owner being the dummy person. In either of these cases the black money is circulating to other illegal users. If such deals are curtailed it is good – not bad. In any case a black money purchaser who pays Rs. 2.5 million to buy Rs. 4 million Audi then can buy a Skoda legitimately.

Will it Work?

One argument is we tried it in 1978 and failed. Of course we failed. First the notes demonetized were too large for the size of the economy. Second, we can fairly estimate that the black economy may not have used the super high value notes as much too. The present action has better chance of success as it proceeds logically. First, people across India were given an Identity card (Aadhar), then bank accounts were opened for them (Jan-Dhan), and people across India can transfer money using SMS today. No strategy can succeed without proper systems in place. This time there are better mechanisms that people can switch to.

Another argument is that people can deposit the money now and withdraw cash five months later for black money transactions. Of course they can. But there are various laws in place that track the cash withdrawer. These guidelines were framed for Prevention of Money Laundering Act. As per RBI rules under that, every withdrawal needs a PAN card reference. Further, every branch manager is required to file detailed statement of weekly/monthly cash transactions. The cost-benefit for legitimate fellows becomes high. It is easier to monitor for the tax authorities. One person claims to have sent his 200 or so employees to convert old currency into new currency. Thus, per day at Rs. 4000/- per person he is converting Rs. 0.8million into cash. So has the system failed? The answer is no. It appears from the logical approach followed by the government that this is merely the beginning of effort against black money. I suspect these two mechanisms will be taken care of in subsequent actions.

The more fundamental answer is that black money is not a pool but a chain. Break the chain or make the chain costly and you inconvenience the poor who did not have access to bank systems. But with Jan-Dhan accounts, poor have ready access to banking channels (though not credit). So if you are law-abiding citizen then you can sail through mostly unscathed no matter how poor you are.

Do Terrorists Carry Money in Trunks?

One of the stated aims of the demonetization was to tackle terrorism. It has met with lot of ridicule. People are asking if terrorist do carry money in suit cases while coming across the borders. Again these people are missing the point. In fact, money laundering is one of the most important financing mechanisms for terrorists. It was after 9/11 that the US initiated substantial push towards enacting of anti-money laundering laws to prevent financing of terrorists. The anti-money laundering investigations fail when the money trail leads to cash. In India the terror-finance trail starts and ends with cash making it impossible to get early alerts of terrorist active in the country. Demonetization will upset the financing chain for the terrorists.

As noted, black money is the currency of black economy. It is the black economy, including financiers that need extra-judicial enforcement mechanisms. The terror groups are at the apex of criminal elements that provide this enforcement mechanism. If film producers do not pay their financiers, they get call from D- company – in effect an enforcement call. The black economy is also as innovative as any other. The criminal elements then seeking alternative revenue streams indulge in various terror activities. The terror finance chain comprises gold, diamonds and counterfeit currency. The counterfeiters don't keep the money in cash but quickly convert it into legitimate, legal bank accounts through SMEs and other small businesses. Using these fronts these terrorists use this money to buy information and access. The actual terror attack is only the "last-mile" effect. The ultimate "attackers" are usually pawns without any knowledge of systems.

Yet, the main effect of demonetization and subsequent introduction of new notes will be to increase the costs of the counterfeiters. It will serve to shock this supply chain.

Other Black Money Creators

There are other critical elements in black money chain or black economy. These elements represent turning smaller amount of white money into black by aggregation and misrepresentation.

For example, take NGOs. Some of the NGOs existing only on paper. Their model is thus. These NGOs collect legitimate amounts from citizens and push it into causes like animal shelters, girl child, and medical aid to needy etc. The main problem is that the costs of these NGOs are unreasonably high. They also commit fraud by misrepresenting number of animals and kind of facilities etc. creating a source of black money for the promoters who get salary and or benefits like cars and drivers from the NGOs. Cooperative banks are another piece of the puzzle. These accept smaller deposits from individuals and loan to founders and directors. The process is

illegal and escapes the law only because it is not regulated by the RBI but by Politicians who are themselves directors in such institutes.

Government aided/recognized schools, colleges and institutions which look innocuous and have no actual teachers, students or infrastructure but simply using approvals from complicit education officers create a chain wherein legitimate money turns into black money. Others institutes have proper systems, but use management quota to pool students' money into black money pools for the founders. Some use both mechanisms. Such entities are inherently different from SMEs which exist to service the needs of a wealthy black money holder or create black money through banks. These elements will be hit substantially by the demonetization and their promoters will be forced to declare these amounts or destroy them. However, the issue is that they can continue to create black money sources since their model has not been dismantled.

Role Of Religious and Other Public Trusts

The model of trusts is a little different but they are as important elements in processing black money as SMEs and others listed above. The trusts are both receptacles and users of black money. They are not creators.

Some allow devotees to make small but numerous donations while spending substantial amounts on expenditures related to their promoters. Others are created out of anonymous black money donations with specific beneficiaries. Their nature makes them a hot-potato issue where they seem to be untouchable by any government, religious entities being protected by constitution.

These trusts will die over time as their feeder mechanisms are constrained. Yet, the reason they are highlighted here is because within the next two months we will see a lot of trusts being formed with weird articles of constitution that violate the basic premise of laws on public trusts.

So Will Demonetisation Eliminate Black Money?

Not by itself. It is just one move of one piece in the chess board of black money. To check-mate the black money king, you have to win the board. There are various steps required as detailed above. Government can play all these moves and still fail if they play improperly. All we can say is that Government is playing well. But will it succeed? The efforts will bring massive amounts of cash into the banking system – a benefit in itself. Once the money is in the legitimate channels, it should be better utilized and revenue will be generated from its use. If that is success enough then yes.

Then again the government has tackled GST which represents 2/3rd of its revenues. It has tried to increase the size of the pie on which taxes are imposed by forcing the transactions into formal economy. The next part is reform of Income Tax which will tackle the remain 1/3rd of the revenue. Then will come loophole plugging. There seems to be well thought out method to this madness. Rest time will tell.

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References

1. Report On Aspects of Black Money, The National Institute Of Public Finance And Policy,1985
2. Report On “Measures to Tackle Black Money In India And Abroad”, Government Of India, Ministry Of Finance, 2012 (Report of committee headed by Chairman CBDT, Parts I & II)
3. The Reserve Bank of India's Balance Sheet: Analytics and Dynamics Of Evolution, Narendra Jadhav, Partha Ray, Dhritidyuti Bose And IndranilSen Gupta, Reserve Bank Of India Occasional Papers Vol. 24, No. 3, Winter 2003
4. Comparing How Some Tax Authorities Tackle the Hidden Economy, April 2008, UK National Audit Office and RAND Europe
5. Reducing Opportunities for Tax Non-Compliance In The Underground Economy, Forum On Tax Administration: SME Compliance Sub-Group, Information Note, OECD, Jan 2012
6. White Paper On Black Money, Ministry Of Finance, Govt. Of India, CBDT, 2012
7. A Study Of Issues And Challenges Of Tackling Black Money Menace In India Prof. Dr. Rahul Goyal, DrParulSaxena, ISJTM Vol. 5 Issue 8 Aug 2016
8. The Shadow Economy in Europe, 2013, Friedrich Schneider, (A. T. Kearney, Korea)
9. Black Money in Real Estate Sector, A Study, NIPFP, January 1995
10. Centre for Central Banking Studies, Handbook – No. 32 Understanding the central bank balance sheet, Garreth Rule, 2015 Bank of England
11. Making it Harder for the Bad Guys: The Case for Eliminating High Denomination Notes, Peter Sands, M-RCBG Associate Working Paper Series, No. 52, February 2016
12. The Shadow Economy, Friedrich Schneider & Colin C. Williams, The Institute of Economic Affairs
13. Illicit Financial Flows from Developing Countries: 2004-2013, DevKar and Joseph Spanjers, December 2015, Global Financial Integrity
14. Revenue Administration: Managing the Shadow Economy, Barrie Russell, Fiscal Affairs Department, IMF, June 2010

BSE and NSE: The Correlation with FII

Abstract

Since Indian stock market is extraterrestrial and striking for investors as a hotspot of investment from last decade. Institutional Investor is any investor or investment fund that is from or registered in a country outside of the one in which it is currently investing. Institutional investors include hedge funds, insurance companies, pension funds and mutual funds. The Indian market is steadily growing and had allured domestic investor's community and foreign investors group in the past. The study attempts to examine the impact of International capital flows on India's stock exchanges. We found that while there are no significant changes in the Indian stock market average returns. This paper tries to find out the co movement and interdependency among the Asian stock exchanges. The correlation shows that FII is co related with NSE (37%), BSE (36%). The granger causality test is used to study the cause and effect relationship among FII and the stock exchanges.

Keywords: FII, Stock exchanges, Correlation, Granger causality test, BSE, NSE

Introduction

An investor or investment fund that is from or registered in a country outside of the one in which it is currently investing. Institutional investors include hedge funds, insurance companies, pension funds and mutual funds. Foreign Institutional Investor (FII) means an institution established or incorporated outside India which proposes to make investment in securities in India. They are registered as FIIs in accordance with Section 2 (f) of the SEBI (FII) Regulations 1995. FIIs are allowed to subscribe to new securities or trade in already issued securities. This is just one form of foreign investments in India.

A share market or equity market is a public entity for exchanging company stock (shares) and derivatives at an agreed price; these are securities listed on a stock exchange as well as those only traded privately. Share market is a place where the shares of different companies are bought and sold. These are the organized Platform through which the buyers and sellers can trade in shares or other forms of securities like bonds, derivatives are called STOCK EXCHANGE. The stock exchanges could be a corporation or a mutual organization. They primarily serve the purpose of listing and trading the shares.

The BSE SENSEX (Bombay Stock Exchange Sensitive Index), also called the BSE 30 (BOMBAY STOCK EXCHANGE) or simply the SENSEX, is a free-float market capitalization-weighted stock market index of 30 well-established and financially sound companies listed on Bombay Stock

Exchange (BSE). The 30 component companies which are some of the largest and most actively traded stocks are representative of various industrial sectors of the Indian economy. Published since January 1, 1986, the SENSEX is regarded as the pulse of the domestic stock markets in India.

The National Stock Exchange (NSE) is stock exchange located at Mumbai, India. It is the largest in India by daily turnover and number of trades, for both equities and derivative trading. NSE has a market capitalization of around US\$1 trillion and over 1,652 listings as of July 2012. The NSE's key index is the S&P CNX Nifty, known as the NSE NIFTY (National Stock Exchange Fifty), an index of fifty major stocks weighted by market capitalization. NSE is mutually owned by a set of leading financial institutions, banks, insurance companies and other financial intermediaries in India but its ownership and management operate as separate entities.

Literature Review

Verma and Prakash (2011) found that the interest rate sensitivity of FII flows is not statistically significant and concluded that the BSE Sensex is a major pull factor for these flows into the domestic financial markets.

Kumar (2006) documented that the movement in Indian stock market can be explained with the direction of funds floated by foreign institutional investors. Therefore motivated by some interesting and time varying evidences with regard to the relationship between FIIs and stock market performance, the present study is destined to examine the relationship of FIIs and performance of Indian stock market.

Trivedi and Nair (2005),⁶ in their study examined the volume of foreign investment and profit booking in Indian market and thereby suggested that, given the huge volume of investments, the foreign investors can play as market makers and book their gains. They can also buy financial assets when the prices are declining and sell when the asset prices are increasing. Hence there may exist a bi-directional relationship b/w FII and equity stock returns.

Kulwantraj N. Bindu (2004) With the help of monthly data they found out that FII inflow depends on stock market returns, inflation rates (both domestic and foreign), and ex-ante risk. In terms of magnitude, the impact of stock market returns and the ex-ante risk turned out to be the major determinants of FII inflow. The study has not found any causative link running from FII inflow to stock returns.

Pal, P. (2004) found that FIIs are the major players in the Indian stock market and their impact on the domestic market is increasing. Trading activities of FIIs and the domestic stock market turnover indicates that FII's are becoming more important at the margin as an increasingly higher share of stock market turnover is accounted for by FII trading in India.

Rai and Bhanumurthy (2003) They studied the determinants of foreign institutional investment in India during the period 1994-2002. They found, using monthly data that the equity returns is the main driving force for FII investment and is significant at all levels. They further studied the

impact of news on FII flows and found that the FIIs react more (sell heavily) to bad news than to good news.

Gordon and Gupta (2003) have documented that lagged domestic stock market returns are an important determinant of FII flows.

Chakrabarti (2001) conducted the pair-wise Granger Causality tests between FII inflows and returns on the BSE National Index. He found that portfolio investment from FIIs was more an effect than a cause of market returns in India.

Prasuna (1999) also studied the determinants of FI investments in India using monthly data from January 1993 to March 1998. He found that lagged FII investment is significant at 1% level. Also, percentage change in BSE Sensex is also significant at 1%. Exchange rate, interest rates, forward premium and foreign exchange reserves have been found to be insignificant. Using monthly data between May 1993 and Dec. 1999.

Bekaert and Harvey (1998) the stock market shows more reaction to foreign investment as the economy liberalizes. A concern with the entry of FIIs is that they are positive feedback traders—traders who buy when the market increases and sell when the market falls. This acts as destabilizing because the sales by FII s lead the stock market to fall further and their buys increase the stock market

Objective

The primary objective of this paper is to study causality among Foreign Institutional Investment and Bombay stock exchange and National stock exchange.

Methodology

The Study

This study is based to find interdependence of FII with Bombay stock exchange and National stock exchange. In this paper the authors are presenting the inter dependency between BSE and NSE. Foreign Institutional Investor (FII) means an institution established or incorporated outside India which proposes to make investment in securities in India. They are registered as FIIs in accordance with Section 2 (f) of the SEBI (FII) Regulations 1995. FIIs are allowed to subscribe to new securities or trade in already issued securities. This is just one form of foreign investments in India.

BSE the 30 component companies which are some of the largest and most actively traded stocks, are representative of various industrial sectors of the Indian economy. Published since January 1, 1986, the SENSEX is regarded as the pulse of the domestic stock markets in India.

The National Stock Exchange (NSE) is stock exchange located at Mumbai, India. The exchange was established in 1992 and has grown to be the country's largest securities exchange NSE is also known as the NSE NIFTY (National Stock Exchange Fifty), an index of fifty major stocks weighted by market capitalization.

Data Collection

Day wise data of BSE, NSE and FII was collected for a period of two years i.e. from 28 Feb 2011 to 28 Feb 2013.

Data Analysis

The analysis was done on E views software and on SPSS software. The Granger Causality Test was performed to find the cause and affect relationship between the variables.

Result and Analysis

The correlation tables no 1 shows correlation among FII, BSE and NSE over a period of time. Correlation is statistical tool which measures the degree of relationship between two and more variable. Here, by term relationship, we mean the tendency of variable to move together. In the sense, it denotes interdependency amongst variables. The movement of variable may be in positive or negative direction. The Correlation of BSE with FII is 35%. The Correlation of NSE with FII is 37%. We can see that BSE is also highly correlated with NSE (99%) which means BSE is highly correlated with NSE.

Table 1 Correlation

	FII	NIFTY	SENSEX
FII	1		
Pearson Correlation		.372**	.357**
Sig. (2-tailed)		.000	.000
Sum of Squares and Cross-products	3.454E8	5.544E7	1.723E8
Covariance	690749.284	110886.884	344608.814
N	501	501	501
NIFTY		1	
Pearson Correlation	.372**		.997**
Sig. (2-tailed)	.000		.000
Sum of Squares and Cross-products	5.544E7	6.441E7	2.076E8
Covariance	110886.884	128829.321	415126.060
N	501	501	501
SENSEX			1
Pearson Correlation	.357	.997**	
Sig. (2-tailed)	.000	.000	
Sum of Squares and Cross-products	1.723E8	2.076E8	6.735E8
Covariance	344608.814	415126.060	1346920.144
N	501	501	501

** . Correlation is significant at the 0.01 level (2-tailed).

Table 2 Pairwise Granger Causality Tests

Null Hypothesis :	Obs	F-Statistic	Probability
SENSEX does not Granger Cause FII	499	11.9064	0
FII does not Granger Cause SENSEX		37.7140	
NIFTY does not Granger Cause FII	499	13.0609	0
FII does not Granger Cause NIFTY		38.7272	0
NIFTY does not Granger Cause SENSEX	499	0.34188	0.71060
SENSEX does not Granger Cause NIFTY		0.17177	0.84222

H₀ 1.1 SENSEX does not Granger Cause FII

Hypothesis is rejected. Since the probability value is 0% in table no. 2 is less than 5 percent, hence the hypothesis is rejected.

H₀ 1.2 FII does not Granger Cause SENSEX

Hypothesis is rejected. Since the probability value is 0% in table no. 2 is less than 5 percent, hence the hypothesis is rejected.

H₀ 2.1 NIFTY does not Granger Cause FII

Hypothesis is rejected. Since the probability value is 0% in table no. 2 is less than 5 percent, hence the hypothesis is rejected.

H₀ 2.2 FII does not Granger Cause NIFTY

Hypothesis is rejected. Since the probability value is 0% in table no. 2 is less than 5 percent, hence the hypothesis is rejected.

H₀ 3.1 NIFTY does not Granger Cause SENSEX

Hypothesis is not rejected. Since the probability value is 71% in table no 2 is more than 5%, hence the hypothesis is not rejected.

H₀ 3.2 SENSEX does not Granger Cause NIFTY

Hypothesis is not rejected. Since the probability value is 84.2% in table no 2 is more than 5%, hence the hypothesis is not rejected.

Conclusion

The Correlation Analysis reveals that the correlation of BSE with FII is 35%. The Correlation of NSE with FII is 37%. The Correlation of BSE with NSE is 99% which means BSE is highly

correlated with NSE. The granger causality test is used to study the cause and effect relationship between stock exchange and FII. From Granger causality test it can be reveal that BSE and NSE both affected by FII. These results are in conformity with the results generated by Patel & Patel (2006).

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References

1. A Kulwantraj N. Bindu(2004)."A study on: The determinants of foreign Institutional Investments in India and the role of risk, inflation and return", Indian Economic Review, Vol, 32, Issue 2, pages 217-229.
2. Bekaert, G and Harvey, C R (1998a), "Capital Flows and the Behavior of Emerging Market Equity Returns", unpublished working paper, Duke University
3. Chakrabarti, Rajesh. 2001. "FII Flows to India: Nature and Causes." Money and Finance 2 (7): 68-97.
4. Gordon, J. and Gupta, P., 2003. Portfolio Flows into India: Do Domestic Fundamentals Matter? IMF Working Paper No. 03/20, January, International Monetary Fund, Washington DC.
5. Kumar, S.S.S., 2006. Role of Institutional Investors in Indian Stock Market. Impact, July-December, pp.76-80.
6. Pal, P. (2004)," Foreign Institutional Investment in India", Research on Indian Stock Volatility. Vol 12. Publisher: Emerald Group Publishing Limited.
7. Prasuna, CA (2000), "Determinants of Foreign Institutional Investment in India", Finance India, Vol. XIV, No. 2, pp. 411-421.
8. Rai, K, and NR Bhanumurthy (2003), "Determinants of Foreign Institutional Investment In India: The Role of Return, Risk and Inflation", JEL Classification: E44, G15, G 11.
9. Trivedi and Nair (2005), "Recent Volatility in Stock Markets in India and Foreign Institutional Investors."2004, <http://www.icrier.org/pdf/wp124.pdf>
10. Verma, Radheshyam, Anand Prakash. (2011) "Sensitivity of Capital Flows to Interest Rate Differentials: An Empirical Assessment for India." RBI Working Paper Series: 7/ 2011, Dept. of Economic and Policy Research (DEPR), May.

Maternity Health and Safety

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Abstract

Maternal health is the health of women during pregnancy, childbirth, and the postpartum period. It encompasses the health care dimensions of family planning, preconception, prenatal, and postnatal care in order to ensure a positive and fulfilling experience in most cases and reduce maternal morbidity and mortality in other cases.[1]

The United Nations Population Fund (UNFPA) estimated that 289,000 women died of pregnancy or childbirth related causes in 2013.[2] These causes range from severe bleeding to obstructed labour, all of which have highly effective interventions. As women have gained access to family planning and skilled birth attendance with backup emergency obstetric care, the global maternal mortality ratio has fallen from 380 maternal deaths per 100,000 live births in 1990 to 210 deals per 100,000 live births in 2013.[2] This has resulted in many countries halving their maternal death rates.

While there has been a decline in worldwide mortality rates much more has to be done. High rates still exist particularly in impoverished communities with over 85% living in Africa and Southern Asia.[2] The effect of a mother's death results in vulnerable families, and their infants, if they survive childbirth, are more likely to die before reaching their second birthday.

Four elements are essential to maternal death prevention.[3] First, prenatal care. It is recommended that expectant mothers receive at least four antenatal visits to check and monitor the health of mother and foetus. Second, skilled birth attendance with emergency backup such as doctors, nurses and midwives who have the skills to manage normal deliveries and recognize the onset of complications. Third, emergency obstetric care to address the major causes of maternal death which are haemorrhage, sepsis, unsafe abortion, hypertensive disorders and obstructed labour. Lastly, postnatal care which is the six weeks following delivery. During this time bleeding, sepsis and hypertensive disorders can occur and newborns are extremely vulnerable in the immediate aftermath of birth. Therefore, follow-up visits by a health worker is assess the health of both mother and child in the postnatal period is strongly recommended.

Introduction

Maternity coverage is one of the 10 essential health benefits that must be covered by all health insurance plans offered to individuals, families, and small groups. Health insurance for pregnancy, labor, delivery, and newborn baby care became mandatory in 2014 under the Affordable Care Act. Before 2014, maternity coverage wasn't a guaranteed benefit, and only

about 12% of plans sold in the individual market included this coverage, according to ObamaCareFacts.com. Maternity coverage was offered only by some health insurance plans or had to be added as a special rider to a plan. Furthermore, pregnancy was considered a pre-existing condition, meaning maternity coverage was either unavailable to women who were already pregnant when they enrolled, or would cost more.(4)

This marks the first time in US history that women have had guaranteed access to maternity coverage, and is a clear advantage for women who are or may become pregnant.

Discussion

A woman's reproductive system is a delicate and complex system in the body. It is important to take steps to protect it from infections and injury, and prevent problems—including some long-term health problems. Taking care of yourself and making healthy choices can help protect you and your loved ones. Protecting your reproductive system also means having control of your health, if and when, you become pregnant.(5,6)

Preconception health refers to the health of women and men during their reproductive years, which are the years they can have a child. It focuses on taking steps now to protect the health of a baby they might have sometime in the future, and staying healthy throughout life.

Results

India's maternal mortality rate reduced from 212 deaths per 100,000 live births in 2007 to 178 deaths in 2012. The advance is largely due to key government interventions such as the Janani Shishu Suraksha Karyakaram (JSSK) scheme which encompasses free maternity services for women and children, a nationwide scale-up of emergency referral systems and maternal death audits, and improvements in the governance and management of health services at all levels.

However, adolescent and illiterate mothers and those living in hard to reach areas still have a much greater chance of dying in childbirth. Adolescent girls outside Indian cities are especially vulnerable as teenage marriage and pregnancies are very high in rural and remote areas of the country.

Conclusion

UNICEF India supports the Indian government at national and regional levels to improve the quality and coverage of high impact maternal health services and to increase community demand for the services. Its focus is on efforts to address the needs of adolescent mothers who are more at risk of complications during pregnancy and the delivery and post-delivery periods.

UNICEF supports cross-sector efforts to improve maternal health in partnership with the organization's Nutrition, Communication for Development (C4D) and Child Protection sections.

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References

1. WHO Maternal Health
2. ^ <http://www.unfpa.org/maternal-health>
3. ^ "The social determinants of maternal death and disability" (PDF). United Nations Population Fund.
4. Filippi, Veronique; et al. (28 October 2006). "Maternal health in poor countries: the broader context and a call for action". *The Lancet*. **368**: 1535–1541. . doi:10.1016/S0140-6736(06)69384-7. PMID 17071287.
5. Timmermans, Sarah; Bonsel, G.J.; Steegers-Theunissen, R.P.M.; Mackenbach, J.P.; Steyerberg, E.W.; Raat, H.; Verbrugh, H.A.; Tiemeier, H.W.; Hofman, A.; Birnie, E.; Looman, C.W.N.; Jaddoe, V.W.V.; Steegers, E.A.P. (February 2011). "Individual accumulation of heterogeneous risks explains perinatal inequalities within deprived neighbourhoods". *European Journal of Epidemiology*. 26 (2): 165–180. doi:10.1007/s10654-010-9542-5. PMC3043261 . PMID 21203801.
6. Izugbara, Chimaraoke; Ngilangwa, David (2010). "Women, poverty and adverse maternal outcomes in Nairobi, Kenya". *BMC Women's Health*. 10 (33). doi:10.1186/1472-6874-10-33.

Inventory Management (As-2): A Study of Carbon Credits as an Inventory

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Abstract

At present, downward trend in Environment due to rise in global temperature and climate change is one of the major challenge of this era. The momentum of warming has been almost three times the century long average since 1970. The major cause of this climate change is the human-induced emissions of Green House Gases (GHG's) through technological & industrial development into the environment. To address the issue of global warming Kyoto protocol has negotiated in 1997 and came into force on 16 February, 2005. The main objective of Kyoto protocol is to decrease GHGs emission by minimizing blusters of climate change in order to achieve global targets. In order to enforce this emission limit, the concept of Carbon Credit was proposed. Carbon trading practices are done to reduce GHGs emission on the basis of carbon credits (CERs) earned at global scale. For this purpose many national and international projects and schedules undertaken by the government as well as the non-governmental agencies. This paper is focused on Carbon Credit Accounting for Sustainable Energy Development. Carbon Credit being a derived concept, at present there are no uniform accepted accounting treatment for carbon credit is available but there are different accounting treatment options of carbon credits. This paper tries to draw lines and analyze the accounting way of these carbon credits in respect of AS-2 which can be executed in an unambiguous and a fair manner.

Keyword: Carbon Credit Trading, Clean Development Mechanism (CDM), Green House Gases and Kyoto Protocol.

Introduction

The globing warming has become the biggest challenge as it effects the depletion of ozone cover and natural calamities. To face this challenge of global warming, the United Nations Framework Convention on Climate Change (UNFCCC) was adopted a protocol in 1997 at the summit in Kyoto, Japan with the target of limiting the effect of Green House Gases (GHGs) in the atmosphere. Haefeli, S., Bosi, M., & Philibert, C. (2004): The challenge of controlling GHG emissions and meeting the emission reduction target seems formidable, as stabilization of carbon dioxide concentrations at any level might eventually need near-elimination of carbon dioxide emission. To meet the emission reduction targets, binding countries in turn set limits on the GHG emissions by their local businesses and entities. The details of Greenhouse Gases as follows:

Table 1: Green House Gases:

S.No.	Name of Gas	Origin	Source
1	Carbon Dioxide (CO ₂)	Occurs naturally	Coal mines, paddy fields, landfills and livestock.
2	Nitrous Oxide (N ₂ O)	Human made or occurs naturally	Generated by burning fossil fuels, cultivation of soils and in the manufacture of fertilizer.
3	<u>Perfluorocarbons</u> (PFCs)	Human made chemical	By-product of aluminum smelting.
4	HFC's	Human made chemical	Largely used in refrigeration and insulating foam.
5	<u>Sulphur</u> Hexafluoride (SF ₆)	Human made chemical	Largely used in these industries which are insulated high voltage equipment.
6	<u>Water Vapour</u> (H ₂ O (gas))	Occurs naturally	Due to rising global temperature.
7	Ozone (O ₃)	Occurs naturally. (By reactions involving nitrogen oxide gases.)	Resulting from motor vehicles and power plants.
<ul style="list-style-type: none"> • In above green house gases the <u>Water Vapour</u> and <u>Ozone</u> are uncontrolled gases. 			

Further, in order to enable the developed countries to meet their emission reduction targets, Kyoto Protocol provides three market-based mechanisms:

- Joint Implementation (JI),
- Clean Development Mechanism (CDM),
- International Emission Trading (IET).

Under **JI**, a developed country with a relatively high cost of domestic GHG reduction can set up a project in another developed country that has a relatively low cost and earn carbon credits that may be applied to their emission targets.

Under **CDM**, a developed country can take up a GHG reduction project activity in a developing country where the cost of GHG reduction is usually much lower and the developed country would be given carbon credits for meeting its emission reduction targets. Examples of projects include reforestation schemes and investment in clean technologies.

Under IET, developed countries with emission reduction targets can merely trade in the international carbon credit market. This means that entities of developed countries exceeding their emission limits can purchase carbon credits from those whose actual emissions are below their set limits.

Meaning of Carbon Credits

Sharma, P. K., & Verma, C. P. (2013): A carbon credit is a generic term for any tradable certificate or permit representing the right to emit one ton of carbon dioxide or the mass of another greenhouse gases with a carbon dioxide equivalent to one ton of carbon dioxide. One carbon credit is equal to one metric ton of carbon dioxide or in carbon dioxide equivalent gases.

According to Investopedia

A carbon credit is a financial instrument that allows the holder, usually an energy company, to emit one ton of carbon dioxide. credits are awarded to countries or groups that have reduced their greenhouse gases below their emission quota. Carbon credits can be legally traded in the international market at their current market price.

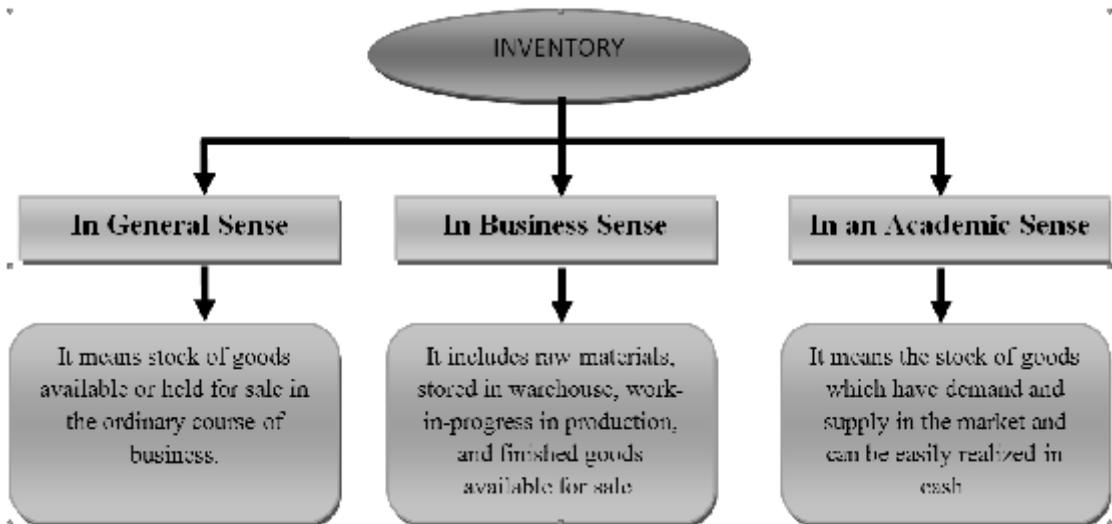
Carbon Credits as Inventory

Sharma, D. (2012): Accounting guidelines on carbon credits will come into force from 1st July 2009. "The Council of the Institute of Chartered Accountants of India (ICAI)" has scheduled a meeting between June 18-20 to approve the accounting guidelines on carbon credits," S Santhana Krishnan, chairman, Accounting Standards Board, ICAI, told TOI, which do emphasize on the recording the sale and purchase of the Carbon Credits in the books of accounts, but there still exists a kind of ambiguity.

Sivanesh,R. (2012): Different entities have started treating carbon credits in different ways. Some entities recognize revenue from carbon credits only when the carbon credit is finally sold, that too as other income in the Profit and Loss statement. While some other entities recognize them as intangible assets, still others treat them as government grants and account them according to AS -12 Accounting for Government Grants. But in this paper we will discuss accounting treatment of carbon credits as an inventory as per AS-2.

As per ICAI guidelines carbon credits can be treated as inventory as per AS-2. According to AS - 2, "Inventories are assets:

- (a) held for sale in the ordinary course of business;
- (b) in the process of production for such sale; or
- (c) in the form of materials or supplies to be consumed in the production process or in the rendering of services."

Figure 1: Meaning of Inventory:

Source: <http://lh3.googleusercontent.com/-cNgBQqZROag/UH0g0BoFUEI/AAAAAAAAAGbY/0bz8FmezLIk/s1024/definition-of-inventory.png>

From the above, it follows that CERs are inventories of the generating entity as they are generated and held for the purpose of sale in the ordinary course of business. Therefore, even though CERs are intangible assets these should be accounted for as per the requirements of AS 2.

Cost of CERS

As per AS – 2, the cost of inventories should comprise all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition.” According to Sharma, D. (2012); any enterprise that generates CER has to incur various costs set up a CDM project activity, operate the CDM project and generate CERs. But we have to be careful as to include only those expenses which are directly attributable to the generation of CERs. These may include the following: Compendium of Guidance Notes-

- (I) Research costs arising from exploring alternative ways to reduce emissions;
- (ii) Costs incurred in developing the selected alternative as a process/ device to reduce emissions;
- (iii) Costs incurred to prepare the Project Design Documents;
- (iv) Fees paid to DOEs for validation and verification and to the National Authority for approval;
- (v) Fees of registering with UNFCCC;

- (vi) Costs incurred for monitoring the reductions of emissions;
- (vii) Costs incurred for certification of CERs; and
- (viii) Operating costs incurred to run the CDM project.

Not all costs incurred by the generating entity give rise to CERs and therefore not all costs can be considered as the costs of bringing the CERs to existence (i.e., their present location and condition). For e.g. the research and development cost should not be inventoried but treated as intangible assets under AS – 26. Effectively if we see only the certification charges paid to UNFCCC, any charges paid to a consultant in the process alone can be treated as cost.

In order to certify and issue CERs, UNFCCC imposes two types of levies on the generating entity:

- (I) At the point of issuance :** The first type of levy is in kind whereby a specified percentage of the CERs earned are deducted at the point of issuance by the Accounting for Self-generated Certified Emission Reductions (CERs) UNFCCC. Presently this charge is fixed at 2% of the CERs produced. For e.g. if the entity produces 1000 CERs, UNFCCC will deduct 2% of the CERs and credit only 980 CERs to the Demat Account of the entity.
- (ii) Towards meeting administrative costs of UNFCCC :** The second type of levy imposed is in the form of a cash payment which is charged by the UNFCCC. In this levy, a fixed payment per unit of CER is charged for the total CERs credited to the generating entity. This fixed payment is presently fixed at \$ 0.10 per CER credited to the account of the entity. In the immediate example, the entity has to make a cash payment of $\$980 \times 0.10$ i.e. \$98.00.

From the above, it is very clear that the 'costs incurred for certification of CERs' at which the inventory of CERs should be valued includes the consultant's fee and the cash payment made under the second levy to the UNFCCC for obtaining the credit of CERs. Other than these two costs no other costs need to be inventoried as cost of CERs.

Net Realisable Value of CERs

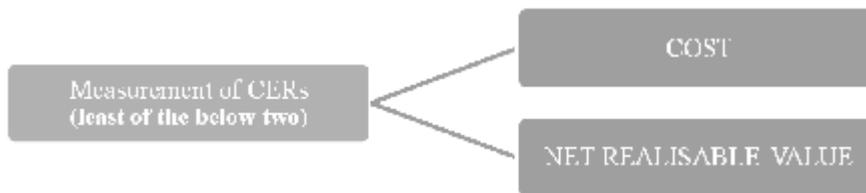
The second part of inventory valuation is the Net Realisable Value. As per AS – 2

“Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.”

Since the CERs are readily traded in stock and commodity exchanges, it is very easy to determine the estimated selling price of CERs. The selling price obtained from the exchanges less any commission that may have to be paid to execute the sale of CERs will constitute the NRV of CERs. The cost of the CERs as previously arrived should be compared with the NRV as determined above. The lower value of the two should be recognised as the value of CERs in the books of accounts of the entity that engages in a CDM project.

Measurement of CERs:

As per AS 2, inventories should be valued at the lower of cost and net realisable value. Accordingly, CERs should be measured at cost or net realisable value, whichever is lower.

Figure 2: Measurement of CER

Income Recognition: Since CERs are recognised as inventories, the entity should apply AS 9 to recognise revenue in respect of sales of CERs .

Conclusion

In India, the ICAI has issued guidance note on accounting for self generated CERs in 2012. As more and more number of entities or companies in India are now generating vital volume of carbon credits and selling those carbon credits to commercial and individual customers. These carbon credits are recorded as inventory in company's final account. In India, most of the companies record carbon credit earnings as income from 'Other Sources'.

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References

1. Bhardwaj, D. B. (2013). Future of carbon Trading: A Business That Works for Global Environment. International Journal Of Science, Environment and Technology, 115-121.
2. ICAI. (2012). Guidance Note on Accounting for Self-Generated Certified Emission Reduction. New Delhi: Institute Of Chartered Accountant Of India.
3. UNFCCC. (n.d.). The Kyoto Protocol. Retrieved 21 Tuesday, 2014, from <http://www.mtholyoke.edu>: <http://www.mtholyoke.edu/~danov20d/site/history.htm> | Verbruggen, A. Annex I.
4. Green,T. (n.d.). Glossary. Retrieved January 24, 2014, from <http://www.tfsgreen.com>: <http://www.tfsgreen.com/glossary.php>
5. (PEDA), P. E. (n.d.). Clean Development Mechanism. Retrieved January 24, 2014, from <http://peda.gov.in>: http://peda.gov.in/eng/clean_dev_mech.html
6. CA (Dr) Satyajit Dhar , "Carbon Emissions trading in India, A study on Accounting & Disclosures Practice", The Chartered Accountant Journal, December 2012, Pg 85-91
7. CA Vineet Raju P, " Carbon Credits-An Accounting Perspective", The Chartered Accountant Journal, November 2012, Pg 64-69.
8. Delloitte Chine Research & Insight Centre- "New Challenges in Carbon Accounting: An Overview"

9. Lucio Pedroni ,Phd & Bruno Locatelli, Phd, "Non Permanence, carbon Accounting & Project Scale", Presented at " First Brazillian Symposium on Carbon Sequestration in Agricultural and Forest Systems", Londrina (PR, Brazil) on 21-24th October 2003, by Agriculture Research & Higher Education Centre.
10. Lucio Pedroni, Bruno Locatelli – " Accounting Methods for carbon credits- Impacts on the Minimum area of Forestry Projects under CDM"
11. CA Sanjay K Agrawal," Accounting & taxation Aspect of carbon trading", The Chartered Accountant Journal, October 2006, Pg 509-513.
12. Deloitte, Energy & Resources, "Accounting For Emission Rights".
13. KPMG LLP UK, Accounting for Carbon: The impact of Carbon trading on Financial Statements.
14. Tulika Sood," Financial Reporting Framework for Carbon Credit Accounting", International Journal for Research in Commerce and Management, Volume 3, (2012), Issue no 6 June.
15. Nidhi Bothra, Carbon Credits – Unravelling Regulatory, Taxation and Accounting Issues.
16. Guidance Notes on Accounting form Self Generated Certified Emission Reductions (CER's).
17. Sharma, P.K., & Verma, C. P. (2013): Carbon Credit Accounting.
18. Haefeli, S., Bosi, M., & Philibert, C. (2004): Carbon dioxide capture and storage issues–Accounting and baselines under the United Nations Framework Convention on Climate Change (UNFCCC), *IEA Information Paper*. IEA, Paris.
19. Maheshwari, M. & Goyal, N. (2015): Carbon Credit Accounting : A Case Study of Delhi Metro Rail Corporation, Vol 8, Issue 3, PP 113-116.
20. https://www.researchgate.net/publication/258122641_Emissions_Trading_and_Carbon_Credit_Accounting_For_Sustainable_Energy_Development_with_Focus_on_India
21. Sharma, D. (2012): Accounting Norms and Carbon Credits in India, Philica entries/
http://philica.com/display_article.php?article_id=353
22. <http://sivanesh.com/?p=294>
23. http://www.investopedia.com/terms/c/carbon_credit.asp
24. http://kthemani.com/?wpfb_dl=278