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VISION

The vision of the journals is to provide an academic platform to scholars all over the world to publish their novel, original, empirical and high quality research work. It propose to encourage research relating to latest trends and practices in international business, finance, banking, service marketing, human resource management, corporate governance, social responsibility and emerging paradigms in allied areas of management. It intends to reach the researcher's with plethora of knowledge to generate a pool of research content and propose problem solving models to address the current and emerging issues at the national and international level. Further, it aims to share and disseminate the empirical research findings with academia, industry, policy makers, and consultants with an approach to incorporate the research recommendations for the benefit of one and all.



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DIGITALIZATION IN INDIA: CASHLESS, PAPERLESS & FACELESS

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ABSTRACT

Digitalisation is considered as a tool of transformation which extends beyond our usual lifestyle to the way we earn, transact, interact and conduct business. Across all sectors, both public and private, be it communication, media, healthcare, retail and manufacturing, one can increasingly witness the use of digital technology. This is primarily being driven by innovations and up gradation in e-communications, e-commerce and ever increasing use of the internet. It is important to analyse and appreciate the factors that are ushering in such changes and how these are impacting the contemporary day businesses. Moreover, while on one hand we have increased turnover and time – cost effective work environment, we are confronted with various challenges of digitalization in Indian economy. The paper suggests an appraisal of digitalization as a process to promote cashless India and highlights the various modes of digital payments proposed and used in Indian economy.

KEYWORDS: *Digitalization, e-communications, e-commerce, Modes of digital payments*

INTRODUCTION

For an extended time period, we have been relying on printed information sources which we avail by the efficient hard work of publishers, booksellers, librarians and information scientists. But, with the introduction of information technology so many steps have been taken to reduce the efforts in accessing the information in a short span of time. One of the significant application of IT is the digitization of knowledge i.e., to convert the printed information in the digital form and made available for use with the help of computer networks. This has changed the whole scenario of information world.

The impact of digital technologies is prevalent in every spectrum of our lives and consequently the current era is also termed as the “digital age”. The process of digitalisation started some five decades back with the advent of computing technologies and digital electronics. Today digitalisation can be seen as a tool of transformation which extends beyond our lifestyle to the way we transact, interact and conduct business. Across all sectors, be this communication, media, healthcare, retail and manufacturing, we are increasingly seeing the use of digital technology. The landscape of this digital age is increasingly being driven by innovations in e-communications, e-commerce and ever increasing deployment of the internet to create economies based on high technology, massive communication, knowledge, creation and innovation. It is important to understand and appreciate the factors that are ushering in such changes and how these are impacting the modern day business.

VARIOUS DEFINITIONS OF DIGITALIZATION:

“Digital” is an intricate word in the global as well as Indian ambiance. Digital is defined as relating to, using, or storing data or information in the form of digital signals; Involving or relating to the use of computer technology”. Digitalization is defined as “the use of digital technologies to change a business model and provide new revenue and value-producing opportunities; it is the process of moving to a digital business.” According to Gartner, “Digitization is the process of changing from analog to digital form.” Digitalization is different from digitization which means “the action or process of digitizing; the conversion of analogue data into digital form.” Digitalization includes digitization which is the first and foremost step to digitalization.

Digitization of payments helps a person to transfer money from his bank account to the payees for his day to day transactions. Digital payments are a number of instruments under one umbrella which can be used as and when required. The word “digital cash” has been introduced long back but it didn’t gain much attention as E-Commerce has received. The payment system has gained significance once the countries which are into digitization proved to be more effective in financial inclusion measures. India is stepping in to the leadership role in case of internet stage, as it is dominating many other countries like US in case of internet usage and anticipating a growth in such a way people have more access to mobile than that of electricity connections at home. Indian policies are changing to adapt to the new digital world. India is open to innovation and is expecting a large investment in Indian E-commerce industry.

BENEFITS OF DIGITALIZATION

Developing a digital standby of the uncommon, delicate or fragile original documents provides access to users and also prevents the original from damage of handling or display. This is the

incentive behind the digitization of many artefacts. Following are the certain benefits of digitization.

- The documents can be viewed from anywhere & any time.
- The documents can be printed directly from the web
- Users can access things in a precise, prompt and independent manner.
- It can increase images electronically so that they can be viewed with greater legibility.
- Improvement in the distribution of public services.
- Easy facilitation of trade and settlement between countries.
- The documents need not be handled frequently which reduces their wear and tear.

DIGITALISATION AND DEMONETISATION

The biggest and most ambitious move of demonetisation was recently announced by the Prime Minister to curb the black money and move towards the digitisation and the cashless economy. India is thus rapidly moving towards the digital economy which will act as game changer to help in reducing the inflation. Demonetisation is acting as promoter towards digital payment ecosystem. “Ever since Prime Minister demonetization announcement, we have suddenly seen a spike in both app downloads & merchant registrations. This spike is now coming from all cities, big and small, pan-India, consisting of small merchants like vegetable vendors, Kirana shopkeepers [small convenience stores], street vendors, rickshaw drivers, taxi’s etc., who’ve signed onto our Oxigen Wallet app for the merchant payments service,” said Pramod Saxena, the founder and CMD of Oxigen Services.

With the demonetisation, there has been a kick start of cashless economy, where many people have started using internet channels for payment of money. This step was the major foundation base to various e-payment portals and the drive towards the digitization on the nation. Transactions through banking channels have led to moving informal business in to formal business as the transactions are now being recorded in banks as payments are made via them.

BENEFITS OF CASHLESS ECONOMY IN INDIA

- Reduced instances of tax avoidance.
- Curb generation of black money.
- Security and convenience.
- Expenditure incurred in printing and transportation of currency notes is reduced.
- Reduced costs of operating ATMs.
- Less cash decreases crimes.
- Greater efficiency in welfare programmes as money is wired directly into the accounts of recipients.

CHALLENGES IN MAKING INDIA A CASHLESS ECONOMY

India made an ardent effort to move towards a cashless transaction economy by minimising the use of physical cash. As seen in the data given by “Business Today” the volume of the cash transactions is only 2% in India (fig 1).

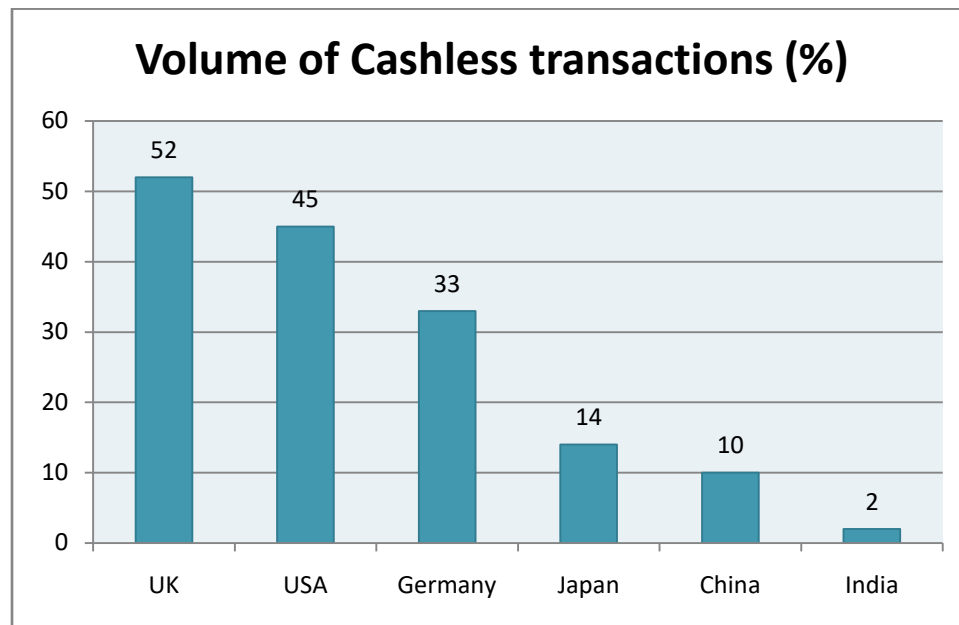


FIG 1 Source – Business Today

With this scenario in comparison to the other countries, there remains ample scope to increase the cashless economy in India. This however has its own challenges which are enumerated in fig 2.

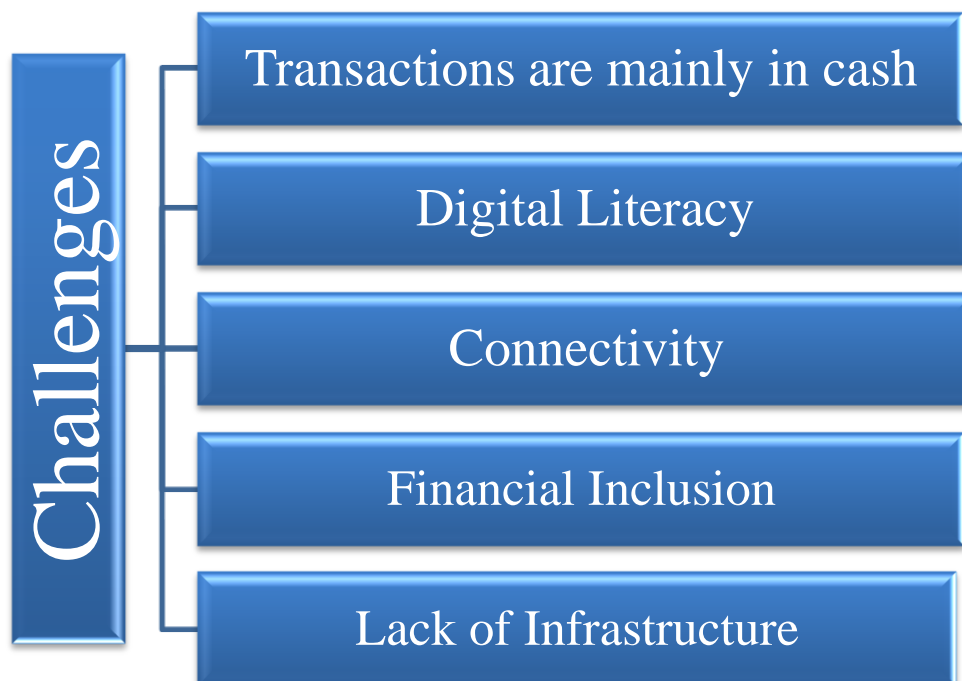


FIG 2

Digitalization of transactions is the best way to step towards the cashless economy. By promoting electronic money instruments, developing the financial infrastructure, spreading the

literacy and inculcating habits of digital transactions among the people will only lead to the cashless economy.

The Digital India programme is a flagship programme of the Government of India with a vision to transform India into a digitally empowered society and knowledge economy.

One of the important pillar of the Digital India is e-Kranti whose vision is "Transforming e-Governance for Transforming Governance". The Mission of the program was to ensure a Government wide transformation by delivering all Government services electronically to citizens through integrated modes and while ensuring efficiency, transparency and reliability of such services at affordable costs.

The e-Governance - Reforming Government through Technology, a pivotal pillar of the Digital India programme, was also executed under e-Kranti by undertaking and reinforcing Government Process Re-engineering, electronic databases, complete workflow automation and IT based Public Grievance Redressal in all the Government Departments. . The major ICT initiatives of the Government included, the major projects such as railway computerization, land record computerization, etc. which focused mainly on the development of information systems. But still the need for a more comprehensive planning and implementation for the infrastructure is required to be put in place, to establish a more connected government. The focus is to bring transformation to realise that Indian talent with Information technology will create India tomorrow. This is depicted in fig 3. For achievement of the same, various modes of digital payments in India are discussed below.

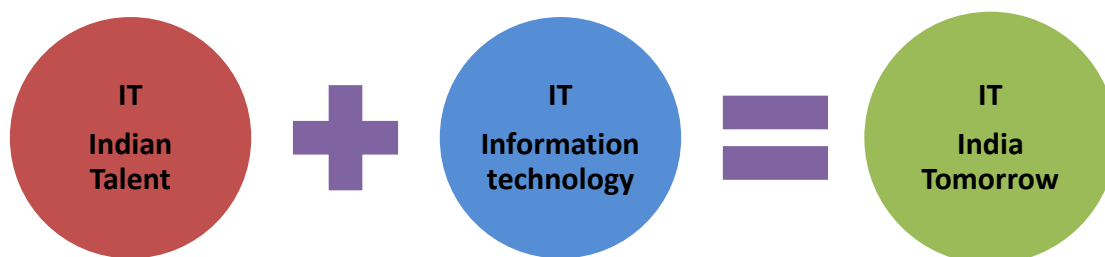


Fig 3

MODES OF DIGITAL PAYMENTS IN INDIA:

As part of promoting cashless transactions and converting India into less-cash society, various modes of digital payments are available.

Various modes used in India are:

1) BANKING CARDS:

Banking cards offer consumers more security, convenience, and control than any other payment method. The wide variety of cards available – including credit, debit and prepaid – offers enormous flexibility, as well. These cards provide 2 factor authentications for secure payments e.g secure PIN and OTP. RuPay, Visa, MasterCard are some of the example of card payment

systems. Payment cards give people the power to purchase items in stores, on the Internet, through mail-order catalogues and over the telephone. They save both customers and merchants' time and money, and thus enable them for ease of transaction.

2) USSD

The innovative payment service works on Unstructured Supplementary Service Data (USSD) channel. This service allows mobile banking transactions using basic feature mobile phone, there is no need to have mobile internet data facility for using USSD based mobile banking. It is envisioned to provide financial deepening and inclusion of underbanked society in the mainstream banking services.

3) AEPS: AADHAR ENABLED

AEPS is a bank led model which allows online interoperable financial transaction at PoS (Point of Sale / Micro ATM) through the Business Correspondent (BC)/Bank Mitra of any bank using the Aadhaar authentication.

4) UPI: UNIFIED PAYEMENT INTERFACE:

Unified Payments Interface (UPI) is a system that powers multiple bank accounts into a single mobile application (of any participating bank), merging several banking features, seamless fund routing & merchant payments into one hood. It also caters to the "Peer to Peer" collect request which can be scheduled and paid as per requirement and convenience. Each Bank provides its own UPI App for Android, Windows and iOS mobile platform(s).

5) MOBILE WALLETS

A **mobile wallet** is a way to carry cash in digital format. You can link your credit card or debit card information in mobile device to mobile wallet application or you can transfer money online to mobile wallet. Instead of using your physical plastic card to make purchases, you can pay with your smartphone, tablet, or smart watch. An individual's account is required to be linked to the **digital wallet** to load money in it. Most banks have their e-wallets and some private companies. e.g. **Paytm, Freecharge, Mobikwik, Oxigen, mRuppee, Airtel Money, Jio Money, SBI Buddy, itz Cash, Citrus Pay, Vodafone M-Pesa, Axis Bank Lime, ICICI Pockets, SpeedPay** etc.

6) BANKS PREPAID CARDS

Prepaid cards work on the theme of pay now and use at your convenience, very similar to prepaid mobile phone cards. All you have to do is buy a card, load it with the desired amount and the card is ready to be used. You do not require any account to use these cards. Prepaid cards are convenient alternatives to cash and cheques and benefit cardholders in a number of ways:- convenience, safety, protection, better financial management and access.

7) POINT OF SALE

A point of sale (PoS) is the place where sales are made. On a macro level, a PoS may be a mall, a market or a city. On a micro level, retailers consider a PoS to be the area where a customer completes a transaction, such as a checkout counter. It is also known as a point of purchase.

8) INTERNET BANKING

Internet banking, also known as online banking, e-banking or virtual banking, is an electronic payment system that enables customers of a bank or other financial institution to conduct a range of financial transactions through the financial institution's website.

DIFFERENT TYPES OF ONLINE FINANCIAL TRANSACTIONS ARE:

NATIONAL ELECTRONIC FUND TRANSFER (NEFT)

National Electronic Funds Transfer (NEFT) is a nation-wide payment system facilitating one-to-one funds transfer. Under this Scheme, individuals, firms and corporates can electronically transfer funds from any bank branch to any individual, firm or corporate having an account with any other bank branch in the country participating in the Scheme. Individuals, firms or corporates maintaining accounts with a bank branch can transfer funds using NEFT. Even such individuals who do not have a bank account (walk-in customers) can also deposit cash at the NEFT-enabled branches with instructions to transfer funds using NEFT. However, such cash remittances will be restricted to a maximum of Rs.50,000/- per transaction. NEFT, thus, facilitates originators or remitters to initiate funds transfer transactions even without having a bank account.

REAL TIME GROSS SETTLEMENT (RTGS)

RTGS is defined as the continuous (real-time) settlement of funds transfers individually on an order by order basis (without netting). 'Real Time' means the processing of instructions at the time they are received rather than at some later time; 'Gross Settlement' means the settlement of funds transfer instructions occurs individually (on an instruction by instruction basis). Considering that the funds settlement takes place in the books of the Reserve Bank of India, the payments are final and irrevocable. The RTGS system is primarily meant for large value transactions. The minimum amount to be remitted through RTGS is 2 lakh. There is no upper ceiling for RTGS transactions.

ELECTRONIC CLEARING SYSTEM (ECS)

ECS is an alternative method for effecting payment transactions in respect of the utility-bill-payments such as telephone bills, electricity bills, insurance premia, card payments and loan repayments, etc., which would obviate the need for issuing and handling paper instruments and thereby facilitate improved customer service by banks / companies / corporations / government departments, etc., collecting / receiving the payments.

IMMEDIATE PAYMENT SERVICE (IMPS)

An IMP offers an instant, 24X7, interbank electronic fund transfer service through mobile phones. IMPS is an emphatic tool to transfer money instantly within banks across India through mobile, internet and ATM which is not only safe but also economical both in financial and non-financial perspectives. The objective is to enable bank customers to use mobile instruments as a channel for accessing their banks accounts and remit funds. The payment process is completed just with the mobile number of the beneficiary. the basic idea is to build the foundation for a full range of mobile banking services.

9) MOBILE BANKING

Mobile banking is a service provided by a bank or other financial institution that allows its customers to conduct different types of financial transactions remotely using a mobile device such as a mobile phone or tablet. It uses software, usually called an app, provided by the banks or financial institution for the purpose. Each Bank provides its own mobile banking App for Android, Windows and iOS mobile platform(s).

10) MICRO ATMS

Micro ATM is a device that is used by a million Business Correspondents (BC) to deliver basic banking services. The platform will enable Business Correspondents (who could be a local kirana shop owner and will act as 'micro ATM') to conduct instant transactions. The micro platform will enable function through low cost devices (micro ATMs) that will be connected to banks across the country. This would enable a person to instantly deposit or withdraw funds regardless of the bank associated with a particular BC. This device is based on a mobile phone connection and would be made available at every BC. Customers would just have to get their identity authenticated and withdraw or put money into their bank accounts. This money will come from the cash drawer of the BC. Essentially, BCs will act as bank for the customers and all they need to do is verify the authenticity of customer using customers' UID. The basic transaction types, to be supported by micro ATM, are Deposit, Withdrawal, Fund transfer and Balance enquiry.

STEPS TAKEN BY RBI AND GOVERNMENT TO PROMOTE DIGITALIZATION

- Licensing of Payment banks
- Government is also promoting mobile wallets. Mobile wallet allows users to instantly send money, pay bills, recharge mobiles, book movie tickets, send physical and e-gifts both online and offline. Recently, the RBI had issued certain guidelines that allow the users to increase their limit to Rs 1,00,000 based on a certain KYC verification
- Promotion of e-commerce by liberalizing the FDI norms for this sector.
- Government has also launched UPI which will make Electronic transaction much simpler and faster.
- Government has also withdrawn surcharge, service charge on cards and digital payment

ADDITIONAL STEPS SUGGESTED:

- Open Bank accounts and ensure they are operationalized.
- Abolishment of government fees on credit card transactions; reduction of interchange fee on card transactions; increase in taxes on ATM withdrawals.
- Tax rebates for consumers and for merchants who adopt electronic payments.

- Making Electronic payment infrastructure completely safe and secure so that incidents of Cyber crimes could be minimized and people develop faith in electronic payment system.
- Create a culture of saving and faith in financial system among the rural poor.
- The Reserve Bank of India too will have to come to terms with a few issues, from figuring out what digital payments across borders means for its capital controls to how the new modes of payment affect key monetary variables such as the velocity of money.
- RBI will also have to shed some of its conservatism, part of which is because it has often seen itself as the protector of banking interests rather than overall financial development.
- The regulators also need to keep a sharp eye on any potential restrictive practices that banks may indulge in to maintain their current dominance over the lucrative payments business.

Though it will take time for moving towards a complete cashless economy, efforts should be made to convert urban areas as cashless areas. As 70% of India's GDP comes from urban areas if government can convert that into cashless it will be a huge gain and then the focus can be towards the rural areas in India.

CONCLUSION

Different trajectories need to be planned for migration to cashless India. We require a surge of digital inclusion to make all the above mentioned efforts more efficient and better targeted toward the envisioned beneficiaries. For example, financial inclusion in rural areas, aided by Web technologies, can help channel government resources directly to the intended beneficiaries without leakage. However, what India requires is a deep-rooted preparation of infrastructure and mind setup conducive to such digital change. Also, internet-based models can intensely increase the productivity of public educational and health care systems. An increase in Internet usage among India's consumers and small enterprises in smaller towns, semi-urban, unorganised sectors and rural areas will lead to additional rapid growth in consumption and efficient access to export markets. There is thus a compelling economic and social rationale for widespread digital enablement in terms of connectivity, devices and applications—to support these inclusion programs. This could also be enabled by accelerating government investments that facilitate mass digital inclusion in projects such as AADHAR, India's Unique Identification Authority, which is creating an estimated 600 million unique identifications for India's citizens, and the National Broadband Plan, which aims to add nearly 100 million broadband connections by 2014. New initiatives such as the use of bit coins used internationally may increase the potential for digital inclusion to enhance rural livelihoods. The paper aims to highlight the benefits, challenges and various modes and uses of digital payments. The road is yet narrow and thus a broad based approach towards adoption of new digital ideas stands imperative for growing India in a cashless manner.

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DEVELOPMENT OF KANNADA HANDWRITING ANALYSIS SCALE

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ABSTRACT

This paper explains the procedure of developing and validating a scale constructed by the authors to measure the Kannada Handwriting of undergraduate students. The sample was selected purposively of Undergraduate students. The scale containing four elements is formulated based on 4 point criteria for each element. The four elements of Kannada Handwriting are Size of the letter, baseline, slant of writing and Space between the lines. Each Handwriting elements have four sub categories. Authors reviewed the previous studies on Handwriting analysis and listed out the personality traits of selected elements of Handwriting. The scoring procedure is prepared based the Graphology principles and previous research findings. The scale with 12 quality levels is formulated based on four elements of handwriting. The newly constructed tool had validity and reliability.

KEYWORDS: Assessment of Handwriting, Handwriting Scale, Kannada writing and Medium of Instruction.

INTRODUCTION

Graphology is the study of handwriting. It is a scientific method of evaluating, and also understanding a person's personality by identifying the strokes and patterns revealed by his handwriting. Handwriting is recognized as being unique to each individual. Irrespective of the fact whether the person has written with his hand, foot or mouth, his handwriting will be the same and unique. The handwriting is done by the brain and not by the hand or by the feet. Hence handwriting is also known as brain writing. Some scientists in the neuromuscular field of research state that some small neuromuscular movements are associated to the person's personality. Each trait of personality is shown by a neurological brain pattern. A unique neuromuscular movement is produced by each neurological brain pattern which is similar for every person who has that personality trait (Abdul Rahiman M et., al 2013). These tiny movements occur unconsciously while writing. Each stroke or written movement reveals a specific personality trait. Graphology is the discipline of identifying these strokes as they appear in handwriting and describe the corresponding personality trait.

The science of graphology is not new to the world. Interest in handwriting started 400 years back. Camillo Baldi is rightly called as the father of graphology as it is he who carried out a systematic observations in the manner of handwriting and in the year 1622, he wrote the first graphological essay. In the year 1897, it was Abb Jean-Hippolyte Michon, who coined the term „graphology“ by merging two Greek words “graphein” (to write), and “logos” (science) (John Antony D. 2008).

Handwriting is one of the analysis tools of personality. Handwriting is very intimately relation to Educational, Psychological aspects and neuropsychology. Handwriting Analysis is very easy to identify the educational skills and personality traits for students, (Girisha T., et.al.2016). Graphology has been a controversial field for more than a century. Although supporters point to the anecdotal evidence of thousands of positive testimonials as a reason to use it for personality evaluation, most empirical studies to show the validity claimed by its supporters. Handwriting Analysis the scientific study of handwriting, especially as a guide to the writer's character (Kale Madhukar Dnyandeo, 2015).

The mastery and automatization of handwriting skills is an important prerequisite to a student's development as a competent writer (Graham, 1982a). In order to insure that handwriting skills develop in an efficient and efficacious manner, evaluation should be included as an integral part of students' handwriting programs. The evaluation process provides teachers with information that can be used to determine proficiency, individualize instruction, and monitor handwriting progress. In addition, appraisal and knowledge of one's handwriting performance can be a powerful motivator that has a potent effect on learning how to print (Graham & Miller, 1980). Traditionally, informal procedures and standardized handwriting scales have been used to evaluate hand writing performance (Graham, 1986; Graham & Miller, 1980). The former generally involves examining a selected sample for particular trends of characteristics, and the latter involves matching a collected specimen with one sample from a series of graded samples. Although both informal procedures and handwriting scales are easy to administer, the degree of confidence that can be placed in their accuracy is questionable. Their reliability, validity, and utility have not been adequately demonstrated (Andersen 1965; Feldt, 1962; Graham, 1982b).

As a result of the growing realization that traditional handwriting assessment procedures are not very useful for instructional purposes (Graham, 1982b), both educational researchers and behavioral psychologists have developed a variety of assessment techniques aimed at improving the precision of handwriting measurement. Increased precision should make it possible for teachers to identify more readily students' hand writing strengths and weaknesses, assess gradual improvement, and evaluate the effectiveness of hand writing instruction. For the most part, the assessment techniques that have been developed can be classified as either holistic rating systems or correct/incorrect measurement techniques. Holistic rating systems typically involve scoring hand writing samples with a Likert-type scale. Collins, Baer, Walls, and Jackson (1980), for example, instructed examiners to rate individual letters on a five-point legibility scale where a zero represented an illegible response and a score of four, a well-formed letter. In an effort to increase reliability, several experimenters have modified this basic format by providing examiners with model letters to use in assigning ratings (Graham, 1983; Niedermeyer, 1973). Consequently, letters that exemplify specific ratings are used as a scoring guide.

RATIONALE OF DEVELOPMENT OF HANDWRITING ANALYSIS SCALE

The authors critically reviewed the various methods used to evaluate Handwriting analysis. Abdul Gafoor K & Naseer A.R (2015) Developed of Malayalam Handwriting Scale for School Students in Kerala. The scale with 19 quality levels is formulated based on 10 point criteria viz., Shape of the letter, Size of the letter, Space between the letters, Space between the words, Space between the lines, Proportion, Margin, Slanting, Clarity and speed, and Straightness of lines. Reliability and validity of the scale were verified by ensuring the scaled handwritten scripts being identified by five experts as belonging to a particular scale value. Grade norms in terms of the cumulative percentage of students were provided and gender norms also were indicated.

Nagar, Savaliya & Bhensdadia (2006) constructed a handwriting analysis environment (HAE). This is a framework which extracted a number of properties from an image of an individual character and generated various combinations between characters for analyzing handwriting to reveal the personality and character of a person, built around such a model where components of the framework can be implemented flexibly. HAE is an extension of the previous handwritten recognition framework, and incorporates the study of various handwritten recognition framework for around one year in handwriting analysis as done by graphologist. Proposed HAE framework identified those strokes as they appear in handwriting and described the corresponding personality trait. The ability to identify the handwritten characters is possible with high accuracy. Designing an algorithm for handwriting character recognition with hundred percent accuracy is impossible task as there are enormous varieties in writing styles. But once handwritten characters are identified, one can extract a number of properties from it to explore more than 100 traits of an individual and unlimited number of combinations to decide the type and characteristics of a person.

The Handwriting Scale (AGIF Associazione Italo-Francese Di Grafologia, 2006), the aim of the research was to contribute to the validation of graphology in respect of psychology. The hypothesis to start from is the existence of a significant relationship between the results of a known and consolidated psychological test and the results of handwriting analysis. The work on the 1976 Italian version of Eysenck's EPI test, extrapolating only the items relating to extroversion (therefore without considering items relating to neuroticism and psychoticism). They found a strong positive correlation between the Eysenck score and the synthetic writing

index (0.43), and a significant correlation between Eysenck and most of graphological items. This result is intended to contribute to the scientific legitimization of graphology compared to experimental psychology. It seems that there are sufficient bases to affirm that looking at the handwriting can significantly help understanding people's extroversion meaning, even in a business application. In details, the most significant graphological variables with respect to extroversion were: 1. Large letters 2. Closely spaced lines 3. Pasty or large trait 4. Dominating middle zone 5. Flourishes, elaborations and adorned writing 6. "Ted up letters connection 7. Firm or soft degree of tension and, en passant, they found and confirmed that some species traditionally considered to be signs of extroversion, such as inclination, secondary widening, throwing, are not correlated, while the garland has a low correlation. These results are partly in accordance with some previous researches (Schwartz, 1994); but the main element of innovation that they bring, is in the sense to definitively exceed the doubts and ambiguities related to the possibility of one effective and sturdy correlation between the Eysenck test and graphological analysis.

According to Siegel (1999) handwriting is an expressive movement classified on a contraction-release continuum. Its characteristics can be measured within four dimensions (components)-form, vertical, horizontal and depth. Contracted handwriting is carefully, meticulously executed with a high degree of control. Released handwriting is very loose with a low degree of control.

Ziviani & Elkins (1984) developed an evaluation scale for the manuscript (printing) writing ability of children aged 7-14 years. Handwriting ability was judged based on the evaluation of readability components (letter formation, size, spacing, and straightness) and on writing speed. For each individual letter and symbol form to be written, exact specifications as to readability components were defined in order to enable the most objective measurements possible. The reliability and validity of the scale, comparing its results to defined criteria of readability found in the research and comparing the scale scores to scores assigned by teachers. Inter-rater (.76-.97) and test-retest reliability were found to be moderate to high (.44-.93). Content validity of Ziviani and Elkins's (1984) scale was investigated by the use of a table of specifications examining whether legibility components as found in the research literature, were represented, and by examining its internal consistency. Also found moderate validity coefficient (.52-.76).

Alston Developed the Evaluation Scale (1983), this scale used a novel approach to handwriting assessment. A 20-item questionnaire was constructed to gather information from teachers regarding features defined by the researcher as influencing readability (e.g., letter formation, letter size, spacing, and straightness of the written line). Both inter-rater reliability (.64-.68) and construct validity of the scale were moderate to high (.58-.86). A further study conducted on this scale found that only 15% of the 23 items had a significant relationship with readability as a result of which it was recommended that the scale be redefined (Graham & Weintrub, 1996; Tseng & Cermak, 1991). However, no further study concerning the scale appears in the literature.

The scale of Rubin & Henderson (1982) was developed to enable teachers to identify children with handwriting difficulties. Following a few trials, six assessment criteria were chosen: readability, accuracy of letter formation, unity of letters size and letters tilts, spaces between letters and words, and straightness of the written line. A four-point scale was developed for each of the criteria. The children were asked to copy a paragraph of 57 words on unlined

paper within five minutes. Writing speed was calculated as the number of letters written per minute. Both test-retest (.97) and inter-rater reliability (.95) of the scale were extremely high.

Pillai, Nair & Nair (1967) constructed a scale to measure the handwriting quality of Malayalam language. The term handwriting quality was operationally defined in terms of ten measurable features identified by experts. Each specimen was judged by twelve expert judges for each component feature. The ratings given by single judge were converted into a numerical score. After grouping the scores for standards V to VIII and IX and X, percentile norms were established separately for both the groups. The mean scores of two groups showed significant difference. The reliability of the instrument was investigated through test-retest method on three samples of pupils by testing at intervals of 1 week, 15 days and one month for the three samples. The resulting coefficients were 0.741, 0.683 and 0.657 respectively, which were reasonably stable over short intervals of time. The validity coefficient when the Metropolitan handwriting scale was used as an external criterion came out to be 0.532. A small positive correlation (0.37) was obtained between the handwriting analysis scale and the scores of non-verbal group test of intelligence (Raven's progressive matrices test). The correlation of the scores of handwriting analysis scale with scores in a specially constructed achievement test in Malayalam revealed a marked direct relation ($r=0.407$) between the two variables. There was significant difference between the scores of lower group (standards V to VIII) and higher group (IX to X) indicating slight advantage for the upper group. Lewinson (1944) constructed a scale of handwriting analysis known as Lewinson-Zubin Scale, which was very cumbersome to use and the manual is not in print now. Moreover the source book is also out of print thus minimizing the scope of using the L-Z Scale.

Importance of handwriting in education and development of individuals can never be exaggerated. Handwriting is an image of unique personality. Graphic maturity of a writer develops from childhood and continues throughout lifetime with age despite influence of factors like writing-medium like pen, ink, writing material, writing surface, speed of writing, physiological condition including age and illness, and intoxication. Education among other things is to improve students' ability to express in writing and hence cannot be neglected in instruction (Abdul Gafoor K & Naseer A.R, 2015). Handwriting is an essential skill for both children and adults (Feder & Majnemer, 2007). Even in the age of technology, handwriting remains the primary tool of communication and knowledge assessment for students in the classroom. The demand for good handwriting and its analysis is great, whether in the classroom or beyond.

Hence the authors decided to construct a Handwriting Analysis scale; the newly constructed Kannada Handwriting Analysis scale contains four elements.

METHODOLOGY: Normative Survey was employed for the study.

SAMPLE:

The sample selected for this study consists of 100 undergraduate Students of Kuvempu University, Karnataka state, India. The sample is selected through simple random sampling technique.

INSTRUMENT:

The first part of the scale is captioned with general information which includes the variables like gender and medium of instruction. The second part of the scale was formed after reviewing many related studies in the field of Handwriting Analysis both in India and other countries and also studied Kannada handwriting principles. Finally following Elements were selected.

The scale consisted of four elements of Kannada Handwriting like, Size of the letters, Baseline, slant of writing and spacing between lines. These four elements intern consists of three subcategories of Handwriting.

ELEMENTS OF HANDWRITING

1. **Size of the letters** - Large size, Small size, and Medium size.
2. **Baseline**-Straight baseline, ascending baseline and descending base line.
3. **Slant of writing**- Vertical, right slant and left slant.
4. **Spacing Between Lines**- Stable space, wide space and Narrow Space.

1. SIZE OF THE LETTERS: -

To determine the size of a handwriting sample look principally at the middle zone letters. These should be 1/8th of an inch or 3 millimeters high to fall within the normal, copy-book, and category. Writing in which the middle zone letters rise consistently above 1/8th of an inch is considered larger than normal and anything smaller than 1/8th of an inch is held to be smaller than normal. (Karen amend & Mary S. Ruiz, 1980).

According to Morettian Graphology, handwriting of 5 mm is considered as Large size, handwriting under 2 mm is considered as Small Size and handwriting of 2-3 mm, or above 3 mm is considered as Medium Size. (www.graphology.it). Large size from 3 to 5 mm. Medium size from 2.5 to 3 mm, and Small size smaller than 2.5 mm.(www.handwriting-graphology.com)

To measure the size of letters Researcher used three major scales, i.e., small size, medium size and large size letters. 2-3 mm letters are considered as Small size letters, 3 mm and above letters are considered as medium size letters and 5 mm letters are considered large size letters.

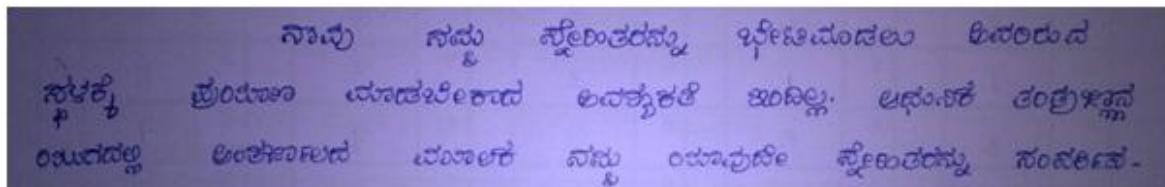
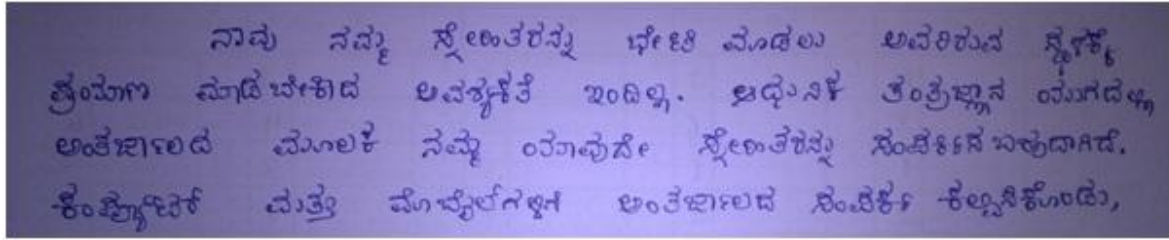
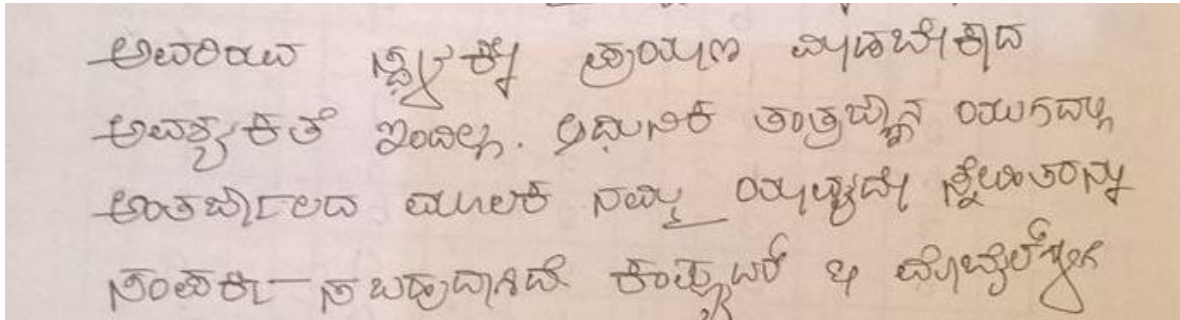
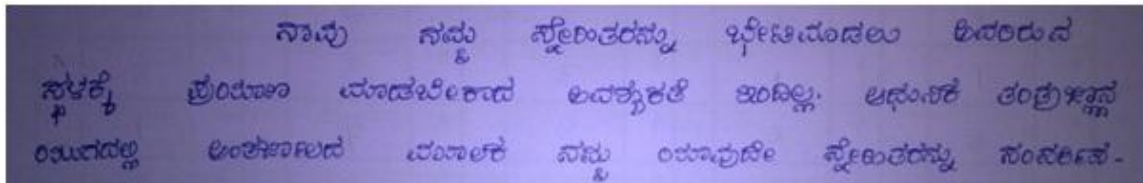
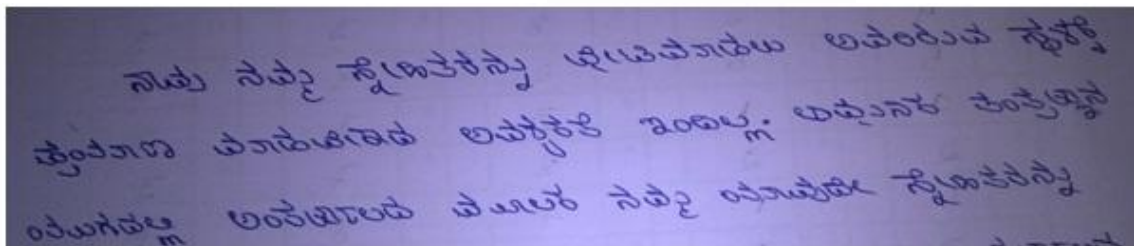
FIGURE 1-SMALL SIZE

FIGURE 2- MEDIUM SIZE**FIGURE 3- LARGE SIZE****1. SLANT OF HANDWRITING:**

Vertical Slant: Handwriting can be just vertical; it stands straight on a baseline as though at 90 degrees. Vertical Slant is considered 90° to 110° degree (John Antony, 2008).

FIGURE 4- VERTICAL SLANT

Leftward Slant: 60 to 70% of the strokes will end up at an angle to the left of 90 degrees. People with this trait may have a hard time expressing their feelings and connecting with and trusting other people.

FIGURE 5- LEFTWARD SLANT

The most natural writing for a left-hander would be from right to left with reversed letter formations and a leftward slope of 35 to 40 degrees. (Karen amend & Mary S. Ruiz, 1980).

Rightward Slant: In writing, the natural swing of the hand produces a slant of 35 to 40 degrees rightward. If one is right-handed, yet slants to the left, it is a sign of contact avoidance and Concentration instead upon the self. (Karen amend & Mary S. Ruiz, 1980).

111° to 150° is Reclined Area; Left word slant. 111° to 150° is Inclined Area; Right word slant.

FIGURE 6- RIGHTWARD SLANT

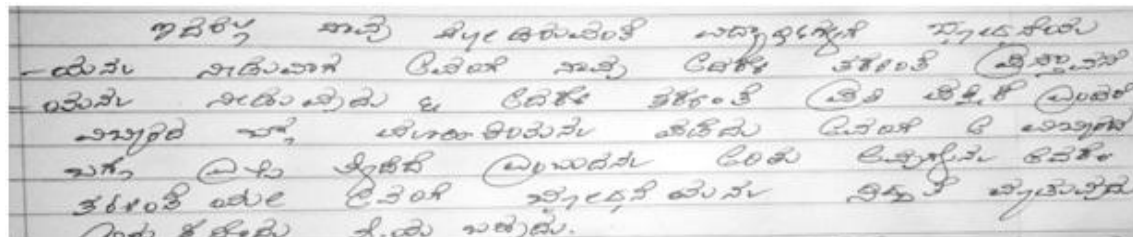
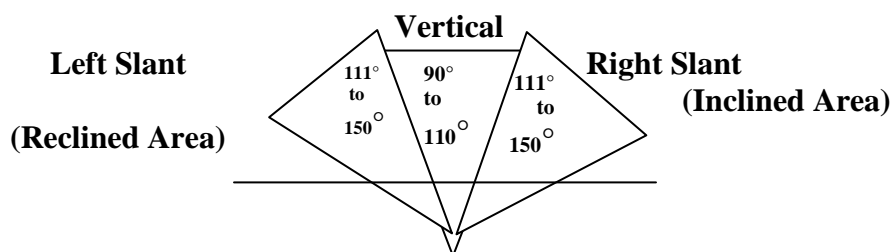


DIAGRAM 1- SLANT OF HANDWRITING



Slant signifies one's emotions. It determines the degree of emotional expression and social behavior. To measure the slant of Handwriting Researcher used three major scales, i.e., vertical, left slant and right slant. 90° to 110° degree letters are considered as Vertical, 111° to 150° slant letters are considered as left slant and 111° to 150° slant letters are considered as Rightward slant letters.

1. BASELINE:

"Baseline" refers to the imaginary line upon which we write on a blank piece of paper. Generally speaking, being able to keep straight-on-the line handwriting-without being supported by a line below – is, first of all, a sign of good health and sufficient physical strength.

To measure the baseline Researcher used three major types, i.e., Ascending, Descending and Stable writing. Writing line width within 1 cm is considered Stable baseline, above 1 cm downward is descending baseline and above 1 cm upward is ascending baseline.

FIGURE 7- ASCENDING BASELINE

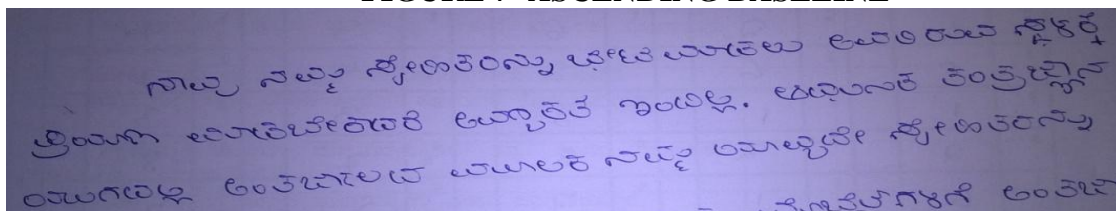
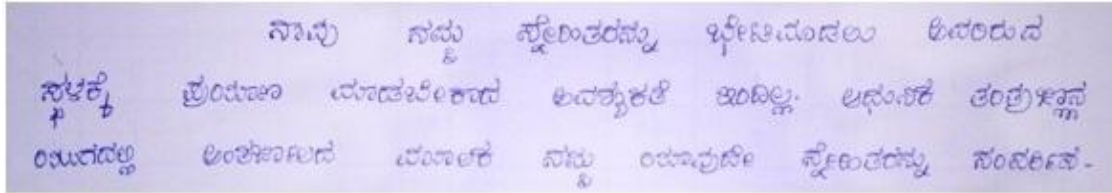
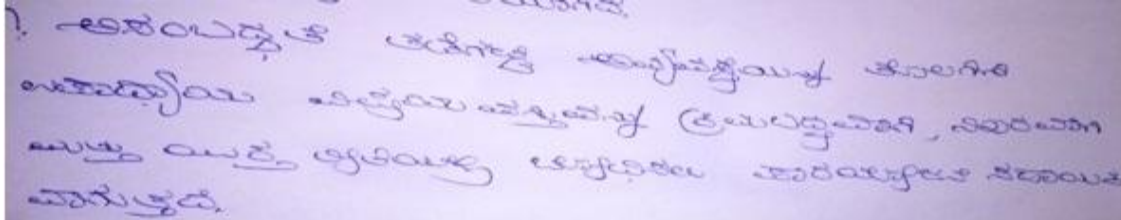


FIGURE 8- STABLE BASELINE**FIGURE 9- DESCENDING BASELINE**

2. SPACING BETWEEN LINES:

Spacing refers to the distance letters, words, and lines of our writing. Spacing tells how the writer feels toward other people, about his social behavior, and whether or not he thinks fluidly-his intelligence. (Andrea McNichol and Jeffrey A Nelson, 1994). What spacing can reveal is how we feel toward other people, about our social behavior and also how fluidly we think, that is our intelligence. (Irene Marcuse, 1971). Closeness to others, Up-tightness and narrow-mindedness, Paranoia, Confusion, Inferior intelligence, and Open-mindedness and generosity of spirit. (John Antony, 2008).

The space left between the written words represents the distance that the writer would like to maintain between himself and society at large. Once again, as with the single letter, the writer is representing himself as he places each word unit on the page; between the words lies the distance he needs for emotional comfort with others, his territorial boundaries. (Karen amend & Mary S. Ruiz, 1980).

To measure the Spacing between Lines Researcher used three major types, i.e., stable space, wide space and narrow space. Writing space between line to line 1 cm is considered Stable space, above 1 cm is wide space and Lesser the spacing is considered narrow space.

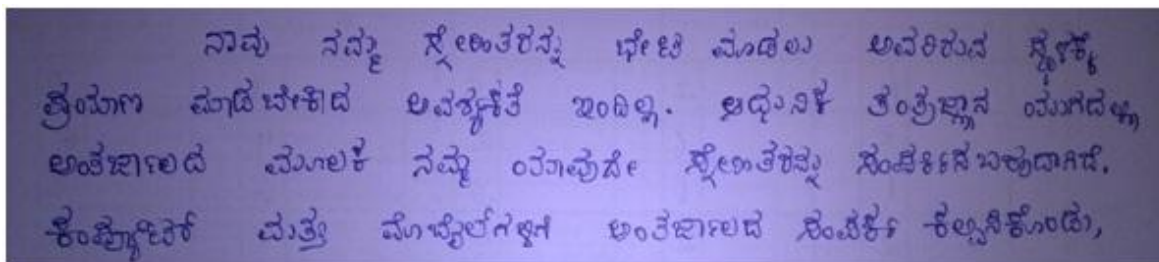
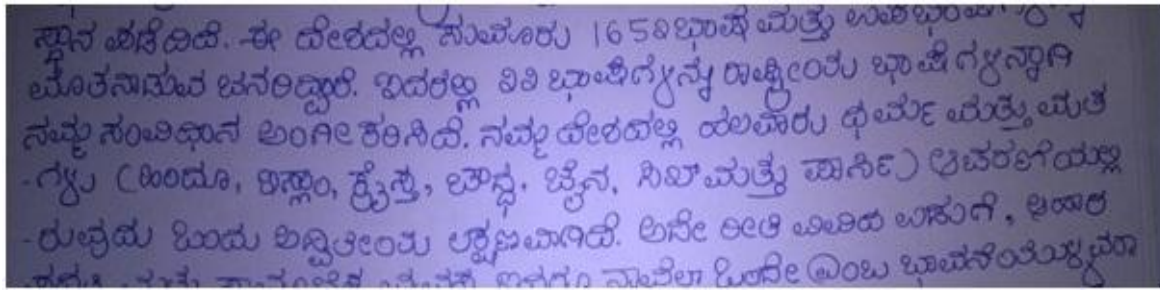
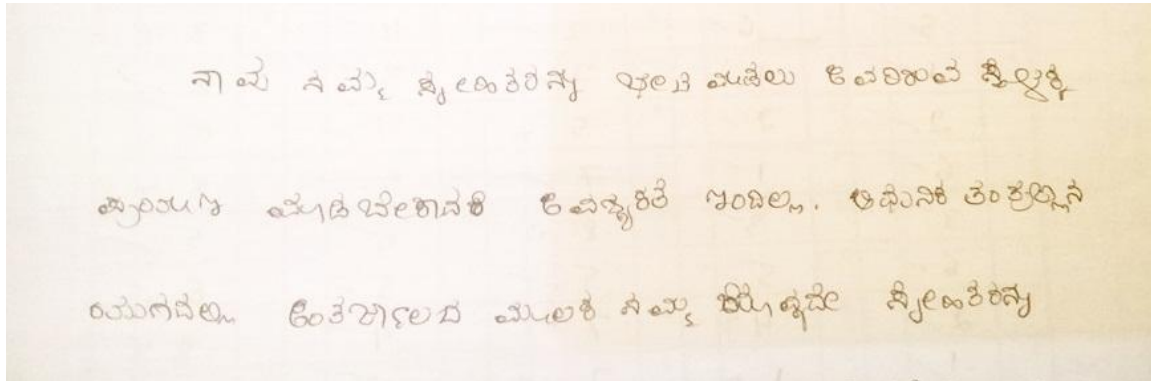
FIGURE 10- STABLE SPACE

FIGURE 11- NARROW SPACE**FIGURE 12- WIDE SPACE**

VALIDITY AND RELIABILITY

Validity: In order to validate the content of the scale, the tool was sent to various Research experts and handwriting analysts. The approval of Research experts and handwriting analysts to use the scale established the content validity of the scale and Construct Validity also found.

Reliability: The coefficients of correlation between the grand total of the scores of the test-retest of the samples was found to be 0.75, this is highly significant at 0.01 level of confidence. Hence, it can be said that the test retest reliability of the scale is established.

SCORING PROCEDURE

Based on Graphology basic principles and previous research findings of graphology studies, Handwriting Analysis scoring procedure was prepared. First previous studies were reviewed on Handwriting analysis and listed out the personality traits of selected elements of Handwriting. In this process which the Handwriting found more positive personality traits has given the highest score, average traits have given medium scores and those found negative traits have given fewer score. The tool containing 4 elements is formulated based on 3 point criteria for each element. The four elements of Handwriting are Size of the letter, baseline, slant, Space between the lines. Each Handwriting elements have three sub categories. For each sub category score of 1, 2, and 3 has given. The lowest quality level is scored 1 and the highest level is scored 3 for each elements. The total score is 12.

An individual score on this scale is the sum total of the scores for all categories of Handwriting. The higher the score on this scale, the greater will be the Handwriting.

CONCLUSION

Handwriting competency is a critical skill of an individual. It is very important for academic success at college age. This complex occupational task has many underlying component skills that may interfere with handwriting performance. Research has proven that there is a positive correlation between better handwriting skills and academic performance. Handwriting is one of the analytical tools of personality. The Scale to Measure Handwriting developed and validated by the authors can be used for Analysis the Handwriting of postgraduate students. It can be used to find and analyze various factors associated, so that necessary steps can be taken to create an environment in which the emphasis can be given to enhance the good Handwriting of the students in using proper way of writing at the college level.

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CONSTRUCTION AND STANDARDIZATION OF INTEREST IN LEARNING MATHEMATICS SCALE FOR SECONDARY SCHOOL STUDENTS

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ABSTRACT

This article makes an attempt to develop the Interest in Learning Mathematics Scale for Secondary School Students. The scale has been constructed with four points 'Likert' type scale for each item, with 63 statements for factor determination with sample of 219 Secondary School Students. Cronbach's Alpha correlation technique was used to determine reliability of Interest in Learning Mathematics Scale by adopting random sampling technique. Six components were identified, and the final form of the tool consists of thirty one (31) items with one third of negative items in each components. Reliability and validity were established for this tool. A general norm by adopting technique of quartiles is used to determine the levels of interest in learning mathematics.

KEYWORDS: Construction, Standardisation, Interest in Learning Mathematics, Components, Reliability and Validity.

INTRODUCTION

Mathematics has become one of the most important subjects in the school curriculum during this century. As modern societies have increased in complexity and as that complexity has accompanied rapid technological development, so the teaching of mathematics has come under increased scrutiny. Mathematics has played a significant role in building our civilization. Education Commission (1964-66), and National Policy on Education (1986) has underlined the importance of Mathematics Education. Therefore, Mathematics is a compulsory subject at school level. If the students take interest in this subject then they can achieve better in Mathematics. But the fact is that there is more failure of students in Mathematics. For many people, mathematics is an enigma. Characterised by the impression of numbers and calculations taught at school, it is often accompanied by feelings of rejection and disinterest, and it is believed to be strictly rational, abstract, cold and soulless.

Interest is an abstraction, a psychological construct, affective in domain that explains the state of being, especially with regard to the well being of an individual. According to Downie (1958) Interests have been defined as one of the main aspect of learning situation. They are motivators of learning, without interest very little learning takes place in many individuals. Several educationists and education psychologists have claimed that individuals tend to do better at things which interest those most. Rammers and others (1965) discussed the bearing of interests on education and revealed that because interest motivates learning, they effect education. When pupils are interested, they work harder, longer and more effectively. Even Charles (1902) stressed the importance of interest in education saying - When students are animated by powerful interests, as for example in professional courses, they submit cheerfully to large amounts of study, but when they are dealing with system of ideas to which no vital interests are attached, they clamour for variety and light work.

For an accurate assessment of interests, it is essential that researchers equip themselves with adequately systematized data and one measurement tool. It is in this sphere that interest inventory plays an important role.

The main aim of this study is to assess the secondary school students' interest in learning mathematics. Hence the researcher made an attempt to construct and validate the 'Interest in Learning Mathematics' scale for secondary school students.

DEVELOPMENT OF THE TOOL

To determine the factors that contribute for Interest in Learning Mathematics as one of the objective of the study, the researcher reviewed many related literature in the field of interest and interest in learning mathematics, some particular dimensions were reported in several studies. From these studies few common components were identified and considered for construction of the rough tool. While selecting and editing the statements, the items were referred to the past, present and future aspects of the individual.

To develop the Interest in Learning Mathematics tool, the researcher has reviewed some studies and books. After reviewing the studies the researcher has found fourteen common components. Later by taking guidance from the experts in the field of education, six major components were finalised, such as Goal Directedness towards mathematics, Motivation towards learning Mathematics, (P.L. Gardner and Siek Toon Khoo), Different teaching styles in Mathematics, Usefulness of subject content (Mihaela Voinea, & Monica Purcaru) and Confidence in

Mathematics, Preference for Understanding Mathematics (Frederick Koon-Shing Leung, Ida Ah-Chee Mok). Based on these components totally 63 items were constructed to measure individual interest in Learning mathematics.

OPERATIONAL DEFINITION

Interest in Learning Mathematics: It is the liking of the students to learn mathematics content and participate in mathematics activities, which is indicated by example solving, studying and getting involved in mathematics activity as a leisure time pursuit (Aiso Heinze, Kristina Reiss & Franziska Rudolph).

OBJECTIVES OF THE STUDY

1. To construct an Interest in Learning Mathematics Scale (ILMS) to assess the Interest in Learning Mathematics of secondary school students.
2. To determine the factors that contributes for Interest in Learning Mathematics
3. To standardize the Interest in Learning Mathematics Scale

METHODOLOGY METHOD

Normative survey method was employed in this study.

SAMPLE AND SAMPLING TECHNIQUE

Data were collected from a sample of 219 of four secondary school students those who are studying in Chikkamagaluru District, by adopting random sampling technique.

FRAMING ITEMS

63 items were framed and included in the rough tool. Repeated items and similar meaning items were rejected by taking experts suggestion. The rough tool was submitted to the five experts in the field of education and psychology. They were requested to check the construction of the items and the representations from the content which is related to Interest in learning mathematics. Based on it six items were deleted and seven items were modified. Finally 50 items were framed with both positive and negative items in each component. All the positive and negative items were randomly presented in the scale.

SCORING PROCEDURE

The scale was constructed by using four points 'Likert' type scale. Each statement consists of responses like strongly agree, agree, disagree and strongly disagree. As the items were both positive and negative thus, if one choose the response of strongly agree in positive statement, the individual will score 3, likewise for agree 2, disagree 1 and strongly disagree 0. In case of negative items the reverse scoring was adopted i.e strongly agree 0, agree 1, disagree 2 and strongly disagree 3. Individual Interest in Learning Mathematics score was calculated by the sum of scores of all the items.

VALIDITY

Content validity: Refers to the degree to which a test covers the content area to be measured. It is based upon the judgment of the subject experts. In the present study the scale was submitted to

the experts and their opinion and suggestions were taken for final form of the tool. The experts agree that the items in the scale are relevant. It ensures the face and content validity.

RELIABILITY

Test- retest method: The Interest in Music scale was administrated to 100 secondary school students and the data were collected. The same test was administrated to the same sample with three weeks interval again the data was collected. The correlation was computed and the result of the test shows that the correlation coefficient was calculated as 0.843 which is highly positively correlated. It indicates that the scale has a high reliability value.

Item analysis: The table shows that the Cronbach's Alpha reliability scores which were above .30 were accepted items and below .30 were rejected items in six major components for the final tool.

TABLE NO. 1
ITEM VICE RELIABILITY VALUES

Sl.No	Item code	Components						Item Accepted / rejected
		I	II	III	IV	V	VI	
1	Item 1	.169						Rejected
2	Item 2	.311						Accepted
3	Item 3	.378						Accepted
4	Item 4	.164						Rejected
5	Item 5	.050						Rejected
6	Item 6	.347						Accepted
7	Item 7	.188						Rejected
8	Item 8	.368						Accepted
9	Item 9		.317					Accepted
10	Item 10		.132					Rejected
11	Item 11		.427					Accepted
12	Item 12		.055					Rejected
13	Item 13		.388					Accepted
14	Item 14		.148					Rejected
15	Item 15		.319					Accepted
16	Item 16		.440					Accepted
17	Item 17		.183					Rejected
18	Item 18		.413					Accepted
19	Item 19		.058					Rejected
20	Item 20		.182					Rejected
21	Item 21		.331					Accepted
22	Item 22		.307					Accepted
23	Item 23			.379				Accepted
24	Item 24			.359				Accepted
25	Item 25			.103				Rejected
26	Item 26			.230				Rejected
27	Item 27			.370				Accepted

28	Item 28			.504				Accepted
29	Item 29			.242				Rejected
30	Item 30			.448				Accepted
31	Item 31			.330				Accepted
32	Item 32			.232				Rejected
33	Item 33				.377			Accepted
34	Item 34				.317			Accepted
35	Item 35				.559			Accepted
36	Item 36				.391			Accepted
37	Item 37				.422			Accepted
38	Item 38				.309			Accepted
39	Item 39					.207		Rejected
40	Item 40					.301		Accepted
41	Item 41					.225		Rejected
42	Item 42					.312		Accepted
43	Item 43					.486		Accepted
44	Item 44					.397		Accepted
45	Item 45						.323	Accepted
46	Item 46						.280	Rejected
47	Item 47						.436	Accepted
48	Item 48						.282	Rejected
49	Item 49						.271	Rejected
50	Item 50						.312	Accepted

Standardisation of the tool: for the final form of the tool 31 items were assigned with six components and each component consists both positive and negative items. The test was administrated to 219 secondary school students. The subjects were included both men and women. The subjects were asked to put tick mark against one response which they agree after reading the each items. The directions were clearly mentioned on the test booklet.

Internal consistency: Refers to the test which measures the degree of which the items consistently measure the underlying latent construct. It estimates the homogeneity or the degree to which the item on test jointly measures the same construct. The six components of Interest in Learning Mathematics show significant positive inter-correlations with each other. So, the internal consistency is adequate for each of the six components. The internal consistency for the six factors ranged from 0.414 to 0.671.

TABLE NO. 2
INTER DIMENSION'S RELIABILITY STATISTICS

Sl. No.	Dimensions related to the scale	Mean	Std. Deviation	Cronbach's Alpha Corrected Item-Correlation	Total Correlation	N
1	Goal Directedness	18.15	3.09	.521		
2	Motivation	21.11	3.78	.671		

3	Confidence	11.08	2.62	.632	.803	219
4	Different Teaching Styles	14.43	3.22	.539		
5	Preference for Understanding	29.08	4.62	.658		
6	Usefulness of the Content	13.35	2.49	.414		

NORMS

General Norms: It is the most common form of norms which represents the simplest method of presenting the data for comparative purposes. In the Interest in Learning Mathematics scale the general norms was established by taking quartiles from the group, such as Q1, Q2 and Q3. The level of Interest in Learning Mathematics scale is interpreted as 'low Interest in Learning Mathematics, Average Interest in Learning Mathematics and high Interest in Learning Mathematics which is indicated in table 2. These interpretations are made irrespective of associated variables.

TABLE NO. 3
NORMS FOR THE LEVEL OF INTEREST IN LEARNING MATHEMATICS SCALE

<i>Score Range</i>	<i>Level of Interest in Learning Mathematics</i>
67-97	Low Interest in Learning Mathematics
98-116	Average Interest in Learning Mathematics
117-138	High Interest in Learning Mathematics

CONCLUSION

The Interest in Learning Mathematics scale was constructed and validated. The scale included 6 components, in each component 1:3 negative items and a total of 50 items. Finally 31 items remained and 19 items were deleted. The reliability, internal consistency and validity of the scale were established. It can be used for secondary school students and also for the students of age group 14 - 15 years.

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CLIMATE CHANGE: GENETICALLY MODIFIED CROPS AS A MITIGATING MEASURE

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ABSTRACT

Agriculture is an essential sector of the Indian economy and delivers food and livelihood activities for most of the Indian population. Indian agricultural is totally depends on climate and climate change is affecting it to a great extent. While the magnitude of impact differs greatly by region, climate change is projected to impact on crops yields, nutritious value of food and shifting cropping patterns. The continuous increase the CO₂ emission leads to increase the temperature of the earth's atmosphere. This results in melting of glaciers, unpredictable rainfall patterns, and extreme weather condition. The accelerating pace of climate change, combined with Indian's population and depletion of agricultural resources threatens food security and livelihood activities in India. Genetically Modified (GM) crops can be used as a mitigating measure for climate change. GM crops for the last 20 years of commercialization have been contributing to the reduction of CO₂ emissions and therefore mitigate climate change. In addition to it GM crops also leads to use less and environmentally friendly energy and fertilizers in agriculture and practice soil carbon sequestration. This informative paper aims to explore the

implications of climate change may have on Indian agriculture and the role of gene technology could play in contributing to climate change solutions.

KEYWORDS: *Climate Change, CO₂ Emission, Environment, Genetically Modified Crops, Indian Agriculture,*

1. INTRODUCTION

Agriculture is an essential sector of the Indian economy and delivers food and livelihood activities for most of the Indian population. While the magnitude of impact differs greatly by region, climate change is projected to impact on crops yields, nutritious value of food and shifting cropping patterns. Over the past two decades the debate on global climate change has moved from scientific circles to policy circles with the world nations more seriously than ever exploring a variety of response strategies to deal with this multifaceted phenomenon that is threatening to have important and far reaching impacts on human society (Kumar, 2009). Indian agriculture is highly dependent on the onset, retreat and magnitude of monsoon precipitation, particularly in the rainfed areas of east, north-east and south India. IPCC documents have projected possibilities of increasing variability in Asian Monsoon circulation in a warmer world. Despite expansion of area under droughts and irrigation caused by insufficient and uneven distribution of rainfall, continue to be the most significant climatic aberrations, which effect the agricultural production in India. The severity of a drought will be strengthened in a warmer world. Strong and frequent floodings due to climate change would be a major problem in the Indian subcontinent (H. Pathak, 2012). This paper takes a broader view and explores the multiple effects that global warming and climate change could have on Indian agriculture and showing the GM crops as mitigating measures of climate change. The study adds to the understanding of the impact of climate change on agriculture and produces a listing of adaptation and mitigation strategies to make agriculture sustainable on the face of global warming and improve livelihoods of farmers (srivastava, 2012). Genetically Modified Crops and Climate Change are the two most contentious ecological issues the world faces today. Application of genetic engineering in agriculture is most debated because of its direct and indirect implications. The future of GMC technology in India will be both challenging as well as exciting. Therefore any decision on this front should be taken with scientific rigor and logic (Amanpreet Kaur, 2013). Most countries of the world, GM crops are subject to debate that is beneficial to sustainability of environment or not. In the developed world, there is clear sign that the use of biotech crops has resulted in important benefits. These benefits are increase crop yields, decline farm costs, increased farm profit and Improvement in health and the environment (James, 2013). The area planted to GM crops increase from 1.7 million hectares in 1996 to 181.5 million hectares in 2014, with a rising proportion developed by developing countries. In 2014, twenty eight countries are cultivating the biotech crops in which 20 countries are developing and eight countries are developed. India only cultivated bt- cotton in 11.6 million hectares land in which 90% farmers are small and marginal (James Clive, 2014).

2. CLIMATE CHANGE

Today at global level climate change is the biggest problem for mankind. Its impacts like rising sea levels, droughts, floods, melting of glaciers, spread of diseases, loss of biodiversity, continue to increase at rates far sharper than the rate of social change (Nelson M. 2010). Climatologists,

scientists, and governments, all over the world are striving to find ways to fight this phenomenon. Among its most distressing aspects is the effect on agriculture (Amanpreet Kaur, 2013). The doubts associated with climate change do not document an exact estimation of its impact on agriculture and food production. Changing seasonal patterns and respective increases in moisture concentrations, temperature, and CO₂ levels is likely to have adverse impacts on ecosystems, agriculture production, livestock, pests and pathogens (Srivastava, 2012). The Intergovernmental Panel on Climate Change has projected the temperature increase between 1.1 °C and 6.4 °C by the end of the 21st Century (IPCC, 2007).

2.1. CLIMATE CHANGE AND INDIAN AGRICULTURE

Climate change for agriculture is clear, direct, and important. Agriculture has important implications for global greenhouse gas emissions. Land clearing and preparation, fossil fuel for farm inputs and equipment, and animal agriculture, are important contributors to GHG emissions. The Intergovernmental Panel on Climate Change (IPCC) has reported that farming is accountable for over a quarter of total global greenhouse gas emissions. Important interlinkages between agriculture and climate have broadened the policy agenda for both (Travis Lybbert, 2015). As the scientific consensus develops that important climate change, in specific increased precipitation and temperatures, is very likely to happen over the 21st century (Christensen and Hewitson, 2007). The average temperature in India is projected to increase by 1.1 to 4.5°C during rabi and 0.4 to 2.0° C during kharif seasons by 2070. Likewise, mean rainfall is predictable not to change by 2015, but to increase by up to 10% during rabi and kharif and by 2070. At the same time, there is an increased possibility of climate excesses, such as the timing of onset of monsoon, strengths and frequencies of floods and drought (Shakeel A. Khan, 2009). Increasing temperature, changing precipitation patterns, and an increasing frequency of extreme weather actions are anticipated to be the main reasons for reducing regional water availability and impacting hydrological cycles of evaporation and precipitation. This will leads to radically affect agriculture production in India, where more than 60 to 70 percent of the agriculture practices depend on monsoon. (srivastava, 2012). The unimpeded growth of greenhouse gas emissions is raising the earth's temperature. The consequences include melting glaciers, extreme weather events, more precipitation and shifting seasons. The accelerating pace of climate change, combined with Indian population and income growth, threatens food security everywhere. Agriculture is extremely vulnerable to climate change. Higher temperatures eventually reduce yields of desirable crops while encouraging weed and pest proliferation. Changes in precipitation patterns increase the likelihood of short-run crop failures and long-run production declines (Ifpri, 2009).

2.2. PARAMETERS OF CLIMATE CHANGE

Detecting the various parameters in turn delivers a better picture of the challenges which Indian agriculture is facing in an era of climate change. These are discussing below:

1. Rises in average temperature will outcome to declined crop productivity in low latitude tropical and subtropical regions where summer heat is already limiting productivity and increased crop productivity in high latitude temperate regions due to the lengthening of the growing season. Productivity is also reduced due to an increase in soil evaporation rates.

2. Change in amount of rainfall patterns will affect soil moisture and soil erosion rates, which are significant for crop yields. Precipitation will increase in high latitudes, and decrease in most subtropical low latitude regions.

3. Increasing atmospheric concentrations of CO₂ will increase the growth of some crops but other aspects of climate change will increase temperature and precipitation may affect the agriculture production indirectly.

4. Pollution levels of tropospheric ozone may increase due to the rise in CO₂ emissions. This may lead to higher temperatures that will offset the increased growth of crops resulting from higher levels of CO₂.

5. Changes in the frequency and harshness of heat waves, floods, drought and hurricanes, continue an uncertain factor that may affect agriculture. Climatic changes may lead to emergence of new pests and diseases and will affect agricultural systems.

Above parameters have some positive impact on Indian agriculture in short term but in long term, these parameters affect the agriculture productivity.

3. GENETICALLY MODIFIED CROPS ADAPTED TO CLIMATE CHANGE

GM crops can be modified faster through biotechnology than conventional crops, thus hastening implementation of strategies to meet rapid and severe climatic changes. Disease and Pest resistant biotech crops have continuously developed as new disease and pests emerge with changes in climate. Herbicide Tolerant and Insect Resistant crops claiming to decrease pesticide practice, that may further decrease the carbon footprint of the whole process. Low pesticide usage leads to less storage, transport, spraying and manufacture which collectively brings down the carbon emissions of the process (Phipps, R.H. and Park, J.R. 2002). Increased yields with lesser pesticide use on the same piece of land, decline the pressure on the system (Qaim, M. and Zilberman, D. 2003). Crops tolerant to various abiotech stresses (drought, temperature etc) have been developed in response to climatic changes. Eco-friendly biotechnology offers a solution to reduction greenhouse gases and therefore mitigates climate change. GM crops for the last 19 years of commercialization have been contributing to the reduction of CO₂ emissions. They allow farmers to use less and environmentally friendly fertilizer and energy, and practice soil carbon sequestration. Advantage of biotech crops which are related to climate change and agriculture are discussing below:

3.1. GM CROPS IN MITIGATING EFFECTS OF CARBON DIOXIDE

Biggest threat of global warming is carbon dioxide. In intensive farming farmers used different farm mechanization activities like tractors, tube-well etc. Due to these emissions of CO₂ increases sharply that is potential threat to the environment as well as human health. GM crops are helpful for declining the CO₂. In 2013, it has reduced CO₂ emission by 28 billion kg that is equivalent to 12.4 million cars on the road for one year. This cost may be able to alleviate poverty of more than 16.5 million small farmers and their families (Barfoot, 2014). Herbicide tolerant GM crops such as soybean and canola facilitate zero or no-till, which significantly decrease the loss of soil carbon (carbon sequestration) and CO₂ emissions, reduce fuel use, and

meaningfully reduce soil erosion. Insect resistant GM crops require low pesticide sprays which results in savings of tractor/fossil fuel and thus less CO₂ emissions (James Clive, 2012).

TABLE-1 SUMMARY OF CARBON SEQUESTRATION IMPACT 1996–2009

Crop/ Trait/ Country	Permanent Fuel Saving (Million Liters)	Potential Additional Carbon-dioxide Saving From Fuel Saving (Million Kg)	Potential Additional Carbon-dioxide Saving From Soil Carbon Sequestration (Million Kg)
US: GM HT soybeans	835	2,295	37,755
Argentina: GM HT soybeans	1,885	5,185	50,707
Other countries: GM HT soybeans	235	646	9,528
Canada: GM HT canola	504	1387	17,188
Global GM IR cotton	137	378	0
Brazil; IR maize	20	56	0
Total	3,616	9,947	115,178

Source: Graham Brookes & Peter Barfoot (2011)

Table-1 shows the different type of GM crops with different traits of different countries. Total saving of fuel by different GM crops is 3,616 million litres that lead to decline the CO₂ from atmosphere by 9,947 million kg in the period of 1996 to 2009. It also helps to save addition of CO₂ from soil carbon sequestration that is equivalent to 115,178 million kg of CO₂ (in the period of 1996 to 2009) that has not released in atmosphere. It contributes to decline the global warming that leads to maintain the environmental sustainability and also improve the human health.

3.2. SALINITY TOLERANT CROPS

GM salt tolerant crops have been developed and some are in the final field trials before commercialization. In Australia, field trials of 1,179 lines of GM barley modified and 1,161 lines of genetically modified (GM) wheat to contain one of 35 genes obtained from wheat, barley, maize, moss or yeasts are in progress since 2010 and have been ran till 2015 (James Clive, 2014). Some of the genes are expected to increase tolerance to a range of abiotic stresses including cold, drought, salt and low phosphorous. Sugarcane that contains transcription factor (OsDREB1A) is

also under field trial from 2009 to 2016 (Tammisola, J. 2010). Dozens of other genes influencing salt tolerance have been found in various plants. Some of these genes may prove feasible in developing salt tolerance in rice⁵, barley, sugarcane, wheat, soybean and tomato (Moghaieb RE, 2011).

3.3. DROUGHT RESISTANT CROPS

GM crops carrying genes for water-stress management have been developed. Structural genes and regulatory genes, including dehydration-responsive and transcription factor genes, are being used. GM crops carrying different drought tolerant genes are being developed in rice, wheat, maize, sugarcane, tobacco, Arabidopsis, groundnut, tomato, potato and papaya¹, Insect-protected

and Drought tolerant varieties developed using both advanced breeding and transgenic approaches could be available to farmers in the later part of the decade². In 2012, a genetically modified drought tolerant maize MON 87460 that expresses cold shock protein B has been approved in the US for release in the market.

3.4. GM CROPS FOR COLD TOLERANCE

Low temperature often affects crop productivity and plant growth, which causes important crop losses (Xin, Z.; Browse, 2001). By using genetic engineering, a number of relevant genes have been identified and new information continually emerges. In which genes are controlling the *CBF* cold-responsive pathway and composed with DREB1 genes, mix several components of the cold acclimation response to tolerance low temperatures (Sanghera, 2013). GM eucalypti, cold tolerant GM crops are being developed, which is currently being field tested in the US by Arborgen LLC since 2010. Thale cress has been improved to contain the DaIRIP4 genes from *Deschampsia antarctica*, a hairgrass that succeeds in frosts down to -30C, and sugarcane are being introgressed with genes from cold tolerant wild varieties (Tammisola, J. 2010).

3.5. GM CROPS FOR HEAT STRESS

Temperature extremes, including heat and cold, can decrease plant growth and productivity (Æ, 2009). Appearance of heat shock proteins (HSPs) has been associated with recovery of plants under heat stress and sometimes, even during drought. HSPs bind and stabilize proteins that have become denatured during stress conditions, and provide protection to prevent protein aggregation. In GM chrysanthemum containing the DREBIA gene from *Arabidopsis thaliana*, the transgene and other heat responsive genes such as the HSP70 were highly expressed when exposed to heat treatment. The GM plants maintained higher photosynthetic capacity and elevated levels of photosynthesis-related enzymes³.

4. CONCLUSION

Agriculture is an essential sector of the Indian economy and delivers food and livelihood activities for most of the Indian population. While the magnitude of impact differs greatly by region, climate change is projected to impact on crops yields, nutritious value of food and shifting cropping patterns. GM research to mitigate global warming should also be started to sustain the utilization of new products. GM crops for the last 19 years of commercialization have been contributing to the decrease of CO₂ emissions and therefore mitigate climate change. Due to quality benefits attached with GM crops such as salinity tolerant, mitigating the CO₂, cold resistant, drought resistant, and heat resistant are factors to change the game of acceptability of

GM crops. These factors provide potential benefits to Indian agriculture with the climate change. There is a need of concentrate efforts from every stakeholder to increase awareness and practicality to induce GM technology with regulated framework. The high level experts' regulatory body is requiring adding GM crop cultivation practices. In the light of such inferences a need to integrate scientists, policymakers, experts and farmers to involve in food production by adopting latest technology to enable agricultural practices more sustainable.

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ROLE OF 'LITERATURE' IN EDUCATION

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ABSTRACT

*Literature is a way in which we can capture and interpret what has happened and is happening to us personally and to the world as a whole. An entire culture exists in the written word, documenting the collective thoughts of everyone who cared to share them with the world. Today we are living in a world without boundaries. Twenty first century is known as the knowledge Era. There is an urgent need to regain the lost glory of Indian Education by bringing about suitable reforms, thereby, contributing to transforming India. Literature serves as a way to enrich our minds, and presents a way to improve the world not only through the beauty of its presence but through the ideas and tangible possibilities it possesses. Education contributes significantly to the higher goals of world peace, universal brotherhood and universal welfare. Emerging contemporary issues related to environment, universal peace and international co-operation have created a need to develop new sets of knowledge and skills to handle them. Literature teaches us how to live. Literature has prompted political and social change in societies and continues to do so to this day. Literature mirrors the society and its mannerisms. Because of Charles Dickens you can experience the **Hard Times** of the Victorian England without going through a detailed historical study. A story can expose readers to different places, time periods, viewpoints and cultures. Readers can gain experiences through literature they would never have access to in ordinary life.*

KEYWORDS: Education, Culture, Literature, Transformation, Human Resource.

INTRODUCTION:

The history of literature follows closely the development of civilization. There have been various attempts to define "literature". Simon and Delyse Ryan begin their attempt to answer the question "What is Literature?" with the observation:

"The quest to discover a definition for "literature" is a road that is much travelled, though the point of arrival, if ever reached, is seldom satisfactory. Most attempted definitions are broad and vague, and they inevitably change over time. In fact, the only thing that is certain about defining literature is that the definition will change. Concepts of what is literature change over time as well."

Literature is an art full of passion and heart; it transcends the ages. Great literature hits on many different levels. Over the years authors have accomplished unfeasible tasks through the use of their words. Literature has prompted political and social change in societies and continues to do so to this day. It can be a battle cry for the proletariat to rise up and make a difference, and it can also provide personal counsel. One way that literature communicates the human condition to readers is that it brings the truths it contains to life.

"India has a very old and rich heritage of providing quality higher education. *Takshashila* and *Nalanda* had been global centers of higher education in ancient India which attracted students from around the world. India has also been the home of some of the earliest discoveries in the areas of mathematics, healthcare and science. Education has been the pillar of India's growth and development.

India also has a long and rich tradition of bonding between teacher and disciple. It is the innate nature of our country to churn out one success story after other of the *Guru Shishya Parampara* from all walks and streams of life. The history of educational thought can be divided into three epochs. The early period of knowledge centered education, the middle period of disciple centered education, and the modern period of life centered education, where information literacy among mass are essential for existence of human being to adjust technological environment. Information literacy is a lifelong learning process information professional have sole responsibility to continue this type of mission.

REVIEW OF LITERATURE:

Literature makes readers visit places, experience events, meet people, listen to them, feel their joys and sufferings. It takes years to acquire so much wisdom that a single book of literary merit instills in a reader. Literature mirrors the society and its mannerisms. Because of Charles Dickens you can experience the ***Hard Times*** of the Victorian England without going through a detailed historical study. The fact-based education system, the fractured human relationships, the Smokey polluted towns, the ill-effects of Industrial Revolution, the misery of laborers, the mercenary instincts of men and the flawed legal system of the land....this single book will give you an entire picture of the Victorian English Society.

Wordsworth's poetry makes you feel his aesthetic pleasure on the sight of ***Daffodils*** and the tranquility of the song sung by a ***Solitary Reaper***. Similarly, Eliot makes you pity the spiritual barrenness of the world that has turned into ***Wasteland***. Wilfred Owen forces you to think about the ***Insensibility*** of the state and people who glorify wars. Literature is a storehouse of all knowledge and wisdom. History, Political Studies, Philosophy, Science and all other forms of

learning are part of literature. It has the potential to bring revolutions (the way Marx and Engels' *The Communist Manifesto* did. The great **Leo Tolstoy** wrote a book titled *What is Art* in which he has explained the importance of all art to human society.

A good education is a process by which character is improved and by which one will be able to use one's intelligence and sharpen one's mind so as to distinguish right from wrong. Good character is the precious jewel of human life. It is only when the contents of education are closely linked with ideals of sacrifice, forbearance, truth, and love that the youth will get the benefit of education. Education does not end with the accumulation of information. It must result in transformation.

METHODOLOGY

The study is basically based on secondary data. This gives everyone the advantage of making a cross check of the result.

India is one of the top ranking countries in the field of English literature, communication skills and basic research. Literature has regarded as one of the most powerful instruments of growth and development, especially in the emerging scenario. The social and economic development of a nation hinges upon the higher education system and it is invariably linked with school education.

Literature is important for many reasons, including its ability to provide pleasure to readers, to help build experience, to help readers empathize with others and to develop thinking skills. While literature's educational importance is often downplayed in favor of business and technical education, the study of books offers many positive benefits to readers.

Reading literature is a pleasurable, entertaining activity that offers readers the potential to escape from the troubles of daily life. Above all else, literature survives because of its capacity to entertain readers. Literature also has the power to provoke thought in readers, making it a leisure activity that is also intellectually productive. Literature also has the power to impart a wide variety of experiences to readers. A story can expose readers to different places, time periods, viewpoints and cultures. Readers can gain experiences through literature they would never have access to in ordinary life.

Presently India has one of the largest education systems in the world. Globalization has created a world which is networked, in order to be important disciple in the global arena, Indian higher education needs to adopt a truly global outlook in terms of its appearance and actions. It involves a serious rethinking towards restructuring of higher education to render supreme importance to quality, innovative ideas, realistic and result oriented teaching, and learning practices, research training along with faculty, student exchange program should be a high priority. Our curriculum also needs to be matched with the global standards. It is human capital theory that explains and provides a strong support for the investment in education. One undergoes education and training through the passage of time to acquire skill, knowledge that enhances one's capacity to be more productive. Such initiatives will play a major role in boosting the image and position of India on the world map.

University is a place where new ideas germinate, strike roots and grow tall and sturdy. It is a unique space, which covers the entire universe of knowledge. It is a place where creative minds converge. Interact with each other and construct visions of new realities by fostering a culture of excellence. Literature's ability to capture the imagination and depict the lives of others also

increases readers' ability to empathize with others. A study published in the journal *Science* found that readers of literary fiction demonstrated an increased ability to infer other people's thoughts and emotions. Finally, literature helps develop critical-thinking skills. Readings and discussions of literature force readers to make reasoned judgments about character motivations, cause and effect, critical analysis of plot and more.

The Former President of India, Dr. A.P.J. Abdul Kalam has given great emphasis on excellence. He said that "Excellence in thinking and action is the foundation for any mission. Excellence is not by accident. It is a process, where an individual or organization or nation continuously strives to better oneself." These attributes can be imbibed through discipline and determination.

Literature serves as an enormous information base. Research works by famous inventors and literary works by notable scientists often narrate stories of their groundbreaking discoveries and inferences. Research is considered as third pillar of the architecture of higher education system. It is a higher level of endeavor. One who is engaged in the arena of research process is often called as 'scholar' by university. Research perspective is a scientific temper that makes a person more rational strives for reason and cause than accepting things the way simply they are. National growth is highly dependent upon the inventions and discoveries. Research and Innovation are the central component of higher education. It is the first and foremost responsibility of all the educational institutions to inculcate values and build the character of students to derive their society and the Nation.

However, during the 20th century economic and social changes transformed higher education into a primary gateway to the middle class and women and ethnic minorities' inroads against longstanding exclusion from mainstream higher education. Higher education responded by broadening access. Higher education has been engaged in a process that is, expanding to serve students from all walks of life. Motivating this effort is a widespread belief in the power of education to create social and economic mobility and in the morality and social value of making higher education accessible to everyone. It is because of the liberalization, privatization and globalization policy of government that has adopted in the last decade of 20th century. Higher Education provides people with an opportunity to reflect on the critical social economic, cultural moral and political issues facing humanity. It contributes to national development through dissemination of specialized knowledge and skills.

Consequently, India is the second largest higher educational system in the world. As the privatization of higher education has also played a key role in the expansion of higher education this growth although necessary, has placed many problematic issues regarding aim, access, infrastructure, partnership, government and leadership, funding and quality of higher education, being imparted to the youth of the country. Another parameter of the size of the Indian higher education system is reflected in the current enrolment of students in the institutions of higher learning. "Literature adds to reality, it does not simply describe it. It enriches the necessary competencies that daily life requires and provides; and in this respect, it irrigates the deserts that our lives have already become." ~ C.S. Lewis, a British scholar and novelist. If people lacked this capacity to receive the thoughts conceived by the men who preceded them and to pass on to others their own thoughts, men would be like wild beasts...

The Government of India, Ministry of Human Resource Development is in the process of bringing out a New Education Policy to meet the changing dynamics of the requirement of population with regards to equity, access, quality education, innovation and research,

internationalization, employability, governance, ranking and accreditation, social connect and many other issues. The four major dimensions for the successful transformation of India which can be improved through Indian education system are: economic, social, political and cultural transformation through higher education

FINDINGS:

Literature teaches us about laughter and love, about remembering and forgetting. It can create emotion and warn us against our many human faults. It can attempt to disprove other ideas or attempt to find truth. I think we are all looking to find truth in some form or another. Oftentimes, the uncertainty of a specific meaning of a piece allows for its interpretation to be for the reader to decide. What is certain, however, is that there are things to be learned from literature that are specific to it, that cannot be attained through any other medium. To gather this knowledge and to experience its beauty all pertain to the importance of literature

True, languages are the building blocks of literature. But the study of literature cannot be restricted to only studying languages. In fact, literature cannot be confined to an educational curriculum. A degree in language and literature is perhaps not able to provide one with everything that literature can offer. Its scope is so deep and wide that even a lifetime may not be enough to really 'study' literature'. Literature is Important.

For the breadth of knowledge it gives, the moral values it carries, and the enjoyment it provides, literature is important. An exposure to good literary works is essential at every phase of life as it enriches us in more ways than one. Knowledge is the foundation of a man's life. Education is required to promote harmonious relationship between the individual, environment and cosmos. We have to realize that harmony and unity can come in the outer space only when our inner space is purified and perfected through right education.

CONCLUSION:

The hall mark of academic excellence is the high standards of teaching an environment conducive to learning and a culture of single minded pursuit of knowledge and passion for achievement of excellence. In order to strengthen our education systems and firmly place ourselves on the global educational map as a prominent nation, we need to refocus and promote the literary culture in India. Literary values have always been at the core of human survival, growth and development. Our country is known for providing value orientation to the world. Literature is definitely much more than its literary meaning, which defines it as 'an acquaintance to letters'. In fact, it lays the foundation of a fulfilling life. It adds 'life' to 'living'.

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PRICE DISCOVERY AND VOLATILITY SPILLOVERS IN INDIAN METAL COMMODITY MARKETS

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ABSTRACT

Commodity markets have an imperative role in the price stabilization of commodities and contribute incalculably to the economic development of the country. The present study examines the price discovery process and volatility spillover in Indian metals commodity market using Johansen cointegration, Vector Error Correction Model (VECM) and the bivariate EGARCH model. The study uses the data of two bullion commodities i.e. Gold and Silver and five metal commodities i.e. Aluminium, Copper, Lead, Nickel and Zinc taken from MCX India over a period of 2006 to 2016. Results of Johansen cointegration tests confirmed a long-run equilibrium relationship between spot and futures prices for all sample commodities. The results of VECM reveal a bidirectional error correction in all sample commodities with the fact that future market leads the spot market in price discovery mechanism. Gold is the only exception where spot price leads in price discovery process. Granger causality results exhibit bidirectional causality in the spot and futures prices for all the commodities under investigation, thus, confirming that price information flows both ways and hence the bullion and metal commodity market in India is informational efficient. EGARCH results confirm that although bidirectional volatility spillover persists, the volatility spillovers from spot to the futures market are dominant. Overall, the price discovery results are heartening given the emerging character of Indian commodity market. However, the results for volatility spillover are weak, signifying that the efficient risk transfer system is yet to progress for most of the sample commodities.

KEYWORDS: Education, Culture, Literature, Transformation, Human Resource.

INTRODUCTION

The evolution and growth of the commodities derivatives market in India has shown an impressive picture. When compared to the US and UK markets, Indian commodities derivatives trading has a long but turbulent history extending over a century. Beginning from the cotton futures in 1875, it has grown incredibly over the years. The regulatory reforms have led to the growth of commodity markets with the Securities Exchange Board of India (SEBI) as a regulator, playing a valuable role in the market. Commodity markets have an imperative role in the price stabilization of commodities and add incalculably to the economic development of the country. Development and growth of a vibrant, active and liquid commodity derivatives market in a country helps the investors hedge their commodity risk, take speculative positions in commodities and exploit arbitrage opportunities in the market.

Commodity derivatives market includes commodities from various segments viz. agriculture, energy, bullion and metals. Commodities can be transacted in spot as well as in the future markets. The spot price of a commodity means the current price of a spot contract, at which a particular commodity could be bought or sold at a specified place for immediate delivery and payment on the spot date. On the contrary, commodities' futures price is quoted for a financial transaction that will occur on a future date and is the settlement price of the futures contract. Futures contracts are mostly offset before their maturity and therefore, scarcely end in deliveries. Futures contracts are primarily used for price discovery and risk management (hedging) on commodity purchases and sales. The proponents of the commodity futures trading emphasize that these markets help in the price discovery of underlying physical commodities. The price discovery is the process of determining the price of an asset in the marketplace through the interactions of buyers and sellers. An efficient price discovery process is characterized by the speedy adjustment of market prices from the old equilibrium to the new equilibrium with the onset of new information. Also, it is asserted that the futures trading provides a platform for hedgers such as farmers, industrial units, exporters and importers who have price risk exposure to hedge the risk. Speculators also use these futures contracts to benefit from changes in prices and are hardly interested in either taking or receiving deliveries of goods. From their point of view, commodity futures trading is looked upon as a risk management activity.

The volatility lying in the commodity prices is also a major concern for the market participants. 'Volatility' refers to variations in asset prices. This may be computed on a day-to-day or monthly or yearly basis. The future market of the commodities is characterized with high volume of trade and more liquidity due to low margin requirements and the existence of big number of participants like traders, arbitrageurs and speculators. Due to this reason the future markets of the commodities are supposed to be more efficient as compared to spot market and hence, can also intensify volatility in the underlying spot market.

Bullion commodities, also known as precious metals include mainly Gold and Silver. India is the world's largest consumer of physical gold. Even though an active market for gold buying and selling has been in existence in India for a long time, the use of gold as a financial product is a modern experience. The introduction of gold futures trading allows integration of demand and supply of market participants, i.e. gold and jewellery manufacturers, exporters and importers, and investors, in organized markets. Gold prices are highly volatile, driven by large flows of speculative money. Investors generally buy gold as a hedge against economic, political or social crises such as decline in investment market, national debt, currency failure, inflation, war and

social unrest. Changes in the supply of gold, hedging interest of producers and miners, macroeconomic factors like dollar rate, interest rates, economic events etc. affect gold prices. Silver prices follow gold price trends and serves as another effective investment. Silver prices are also affected by other factors such as supply constraints and mine strikes, global financial crisis, industrial growth, recession, inflation etc. Metal commodities, also known as Base Metals include commodities like Aluminum, Copper, Lead, Nickel, Zinc etc. India's penetration levels in metal commodities are substantially lower, not only when compared to mature markets, but also countries like China. Base metal prices are affected mainly by changes in inventory level, global growth and demand in major consuming industries, including the construction, packaging, and transportation industries, and prices of alternative metals & alloys, political unrest in the producing countries, trade policies set by the government. Any new production also takes years to commission as the scale of mining is large and it takes massive financing and requires never-ending environmental permissions and needs broad infrastructure as well. Nevertheless, the metals sector is quite competitive, and presents attractive growth opportunities as well. In this backdrop, the research seeks to explore the future-spot relationships and volatility in the prices of selected bullion and metal commodities in India. The sample of commodities under investigation include two bullion commodities i.e. Gold & Silver and five metal commodities i.e. Aluminium, Copper, Lead, Nickel and Zinc.

OBJECTIVES OF THE STUDY

The study seeks to examine the inter-relationship between the spot and the futures prices of selected bullion and metal commodities in the Indian commodity market. The objectives of the study have been framed as follows:

- 1) To investigate the existence of long term equilibrium relationships between the spot and future prices of the selected metal commodities.
- 2) To examine the causal relationship between spot and futures prices for these commodities.
- 3) To analyze the information efficiency of spot and future market of selected commodities.
- 4) To examine the volatility of returns in spot and futures market for these commodities.

REVIEW OF LITERATURE

The literature on price discovery in context of bullion and metal commodities is thin both at national and international level. An attempt has been made to review the existing literature on the concerned topic:

Several studies have examined whether the futures prices lead the spot prices, whether there exists long-run equilibrium relationship in the prices and which price cause the other one. Koontz et al. (1990) documented that the price discovery process is dynamic and the structure of the market influences it. Brockman & Tse (1995); Booth & Ciner (2001); Moosa (2002); Zapata et al. (2005); Fu & Qing (2006); Hernandez et al. (2010); Baldi et al. (2011); examined the price discovery mechanism and found that for the underlying commodities the futures market leads the spot market and thus futures market dominates the price discovery process. Ferretti, Figuerola, Isabel, & Gonzalo, Jesus (2006) in their study on LME traded metals aluminum, copper, nickel, lead and zinc by applying econometric techniques on the data, concluded that in case of aluminum, copper, nickel and zinc, futures price is the most efficient in reflecting the balance of supply and demand whereas in case of lead spot price is the main contributor. Srinivasan and Deo (2009) examined the temporal lead lag and causality between Mini gold spot and futures

market by taking daily closing values for both the indices. The findings revealed that both the markets are cointegrated and there exists a causal relationship between these two markets in the long run. Unidirectional causality was running from spot to futures market in long-run dynamics and spot market served as a primary market for price discovery. Kumar & Pandey (2011) investigated the cross market linkages of Indian commodity futures for nine commodities with futures markets outside India. Using Bivariate GARCH model (BEKK), it is found that world markets have bigger (unidirectional) causality on Indian markets. In bivariate model, the results indicate volatility spillover also takes place from Indian futures to CBOT futures. Bidirectional volatility spillover between Indian and NYMEX is also observed for Gold futures. In case of industrial metal futures, volatility spills from LME to Indian market except for Copper futures whereas Indian market also impacts LME futures. Thus, results prove that US market plays an important leading role in information transmission to the Indian market and LME leads the Indian markets for industrial metals. Sridhar & Sathish (2011) examined the precious metal gold and silver (from NCDEX) futures and spot market co-movement. The results of cointegration revealed that gold and silver futures and spot prices are cointegrated. The Error Correction model and Granger Causality test illustrated that the spot price serves as a price discovery tool for Gold. Chaarlas et al., (2012) examined the volatility of prices of six base metals and found that the commodity: aluminium, had suffered less volatility when compared to other base metals. From the analysis of the volatility of the prices of base metals, aluminium has been considered to be the safest metal to invest in. Therefore, it was suggested that the investors who trade in Multi Commodity Exchange were advised to invest in this commodity. Nicolau et. al. (2013) aimed to validate the dynamic links between spot and futures prices and to identify the direction of causality with respect to three different commodity markets i.e. crude oil, natural gas and gold. The results put forth that there exist some interactions between spot and futures prices which largely depend on market type and futures contract's maturity. In practice, there is no univocal direction in causality that might be generally valid, as every commodity market and the spot-futures under study present their own peculiarities. Sehgal et. al. (2013) examined the price discovery and volatility spill-over relationship for Indian commodity markets covering 4 commodity indices as well as a 12 actively traded individual commodities. Using co-integration, error correction models, exogeneity test and bivariate EGARCH framework, the authors proved that price discovery is confirmed for eight commodities and three indices signifying long run equilibrium relationship with a greater role for futures markets in the price discovery process. Also, there is bi-directional Granger lead relationships between spot and futures in the MCX-Energy Index, Chana, Zinc, Lead, Copper, Crude oil and single Granger lead relationship from futures to spot in the Comdex Index. Sinha & Mathur (2013) examined the linkages in price, return and volatility behaviour for the five base metals (aluminium, copper, nickel, lead and zinc) across the two markets i.e. Multi Commodity Exchange (MCX), India and London Metal Exchange (LME), U.K. using Price Co-integration methodology, Error Correction Mechanism Model, Modified GARCH model and ARMA-GARCH in mean model. The findings of the paper suggested that a strong linkage across the price, return and volatility of futures contracts under study exists. There is mean spillover effect of innovation from futures contracts traded on LME towards the futures contracts traded on MCX for all the metals when lagged standardized residuals are included in the mean equation.

A number of international and Indian studies exist that analyze the characteristic of volatility spillover across the different markets. Xu & Fung (2005) examined the patterns of cross market

information flows for gold, platinum, and silver futures contracts traded in both the U.S. and Japan markets using a bivariate asymmetric GARCH model. Results proved that there is a strong linkage between these markets regarding the price transmissions, but U.S. market leads the Japanese market regarding the information flow. This suggested the significance of the U.S. as a worldwide leader in the financial market. Also, there are enough volatility spillover feedback effecting across these markets, and their impacts also appear to be similar. Studies such as Azizan et al. (2007); Morales (2008); Lien & Yang (2009); Liu & An (2011); Singh et. al. (2011) investigated the nature of volatility spillovers between more than two commodity markets using GARCH models and explained that there exists volatility spillovers running in a bidirectional way in general in almost all the cases. Morales (2008) investigated the nature of volatility spillovers between precious metals i.e. gold, platinum, palladium and silver returns so as to examine the behaviour of the precious metals markets by using GARCH and EGARCH modelling. The results illustrated that there exists volatility spillovers running in a bidirectional way in almost all the cases, excepting gold, that tend to generate effects in all the markets, but with small evidence in the case of the other precious metals influencing the gold market. Finally, the results from asymmetric spillover effects demonstrated that negative news impact these markets much more than the positive news. Dash et. al. (2012) analyzed twelve commodities that are traded on MCX in terms of price discovery of the spot and futures markets using GARCH model. They also examined the impact of trading volume, inflation and other macroeconomic factors on spot and futures price movements. The GARCH modelling of commodity price volatility yielded some mixed results. This suggested that the GARCH formulation used may not be appropriate for Indian commodity markets. While trading volume was found to have significant impact on volatility, inflation was found to have significant impact on crude oil price volatility only. Srinivasan & Ibrahim (2012) interrogated the price discovery process and volatility spillovers in Gold futures and spot markets of National Commodity Derivatives Exchange (NCDEX) by employing Johansen's Vector Error Correction Model (VECM) and the Bivariate ECM-EGARCH(1,1) model. The empirical result confirmed that the spot market of Gold plays a dominant role and serves as effective price discovery vehicle. Further, the results proved that the spillovers of certain information take place from spot market to futures market and so, the spot market of gold have the capability to depict all new information through the channel of its novel innovation. Berlia & Sehgal (2013) investigated the information transmission process in futures prices of bullion (gold and silver) and metals (aluminum, copper, and zinc) between India, represented by MCX, and other international counterparts like COMEX, LME, and SHFE. The results of price discovery proved that there is a long-term equilibrium relationship among the futures prices of each commodity series, with the exception of aluminum, suggesting the informational efficiency across sample markets. The MGARCH results of volatility spillovers confirmed that, MCX seems to be more dominant than COMEX, in the case of bullion, signifying that it is no longer a satellite market, while LME seems to dominate followed by MCX and SHFE in case of metals. Saranya (2015) examined the volatility and price discovery process focusing on non-agricultural commodities i.e. energy, base metals and precious metals. The results showed that there is a unidirectional causality in selected commodities like Tin and Silver which indicated that the spot returns lead the futures returns. There is a case of bi-directional causality in copper, where the futures returns lead the spot returns and vice versa. For other commodities like aluminium, copper, lead, zinc, nickel, gold and silver the coefficient of trade volume is positive and open interest is negative. The study confirmed the existence of volatility in selected non-agricultural commodities.

To sum up, the common methodology adopted in these studies are found to be tests of market efficiency, cointegration analysis, lead–lag relationship and GARCH models.

GAP ANALYSIS

There are numerous studies in the past focusing on agricultural commodities and the markets in the developed economies. But, very limited studies exist in India in context of metal commodities exploring the price discovery and volatility spillover in the spot and future market. Therefore, the current research addresses the issues of causality, cointegration and volatility in the context of bullion and metal commodities. This study contributes to the present literature and gives the deep insights about the Indian bullion and metals market and its role on Indian commodity market in price discovery and information spill over. Also, the study covers fairly longer period compared to prior research undertaken on the subject.

DATA & METHODOLOGY

Sample: The study uses a sample of 7 commodities traded on Multi Commodity Exchange of India, (MCX) comprising of two bullion commodities i.e. Gold and Silver and five metals i.e. Aluminium, Copper, Lead, Nickel and Zinc. The data comprises of daily closing spot and futures prices of these commodities. The data period ranges from the year 2006 to 2016. However, data period differs across commodities due to their late introduction on trading exchanges and ban on trading on certain commodities for a certain period due to several reasons. This study has considered one of the leading player, namely, Multi Commodity Exchange of India Limited (MCX), for the purpose of collection of data. It is India's largest commodity futures exchange that offers trading in commodity futures contracts across segments, including bullion, ferrous and non-ferrous metals, energy and agricultural commodities. Earlier MCX was regulated by the Forward Markets Commission (FMC), which got merged with the SEBI on September 28, 2015. As per 2015 FIA Annual Volume Survey, the futures contracts on Gold, Silver, Copper, Crude Oil offered by MCX ranked among the top 20 global futures contracts in their respective segments in 2015.

TESTS OF PRICE DISCOVERY AND CAUSALITY

In the first step, the descriptive statistics of the time series data has been examined in terms of measures of central tendency, measures of variability, kurtosis and skewness to present the data in a more meaningful way. While working on a time-series data, first of all it is important to test the stationarity of the data. Here, Augmented Dickey Fuller and Phillips & Perron Test have been used to test the time series stationarity which takes the existence of a unit root as the null hypothesis. Generally economic time series appear to be non-stationary in levels and stationary after differencing. After the metal commodity spot and futures prices are integrated of the same order, co-integration techniques are used to establish the existence of a long-run relationship between the price pairs. The co-integration analysis suggests as to how two markets (such as futures and spot commodity markets) expose pricing information that are identified through the price difference between the respective markets. To test the price linkage between futures market and spot market, Johansen's Co-integration Test (1991) is used that is more responsive to the lag length employed. In our analysis, Schwarz Information (SIC) criteria is used to determine the optimal lag length. Moreover, unsuitable lag length may lead to problems of either over parameterization or under parameterization. The objective of the estimation is to ensure that

there is no serial correlation in the residuals. There are two types of Johansen test, either with trace or with eigenvalue. The trace test tests the null hypothesis of r cointegrating vectors against the alternative hypothesis of n cointegrating vectors. The maximum eigenvalue test, on the other hand, tests the null hypothesis of r cointegrating vectors against the alternative hypothesis of $r + 1$ cointegrating vectors.

If the results of the co-integration confirm that the variables are cointegrated, the Vector Error Correction Method (VECM) can be used to determine the number of co-integrating equations. The rule behind using VECM is that there often exists a long-run equilibrium relationship between two economic variables. In the short run, though, there may be disequilibrium. With the error correction mechanism, a share of the disequilibrium in one period is corrected in the next period. Thus, the error correction process is a means to reconcile the short-run and long-run behavior. The model helps to know not only the degree of disequilibrium from one period that is corrected in the next, but also the relative magnitude of adjustment that occurs in both markets in achieving equilibrium. Hence, the error correction model is:

$$\Delta F_t = \delta_f + \alpha_f e_{t-1}^{\wedge} + \beta_f \Delta F_{t-1} + Y_f \Delta S_{t-1} + \varepsilon_{ft}$$

$$\Delta S_t = \delta_s + \alpha_s e_{t-1}^{\wedge} + \beta_s \Delta S_{t-1} + Y_s \Delta F_{t-1} + \varepsilon_{st}$$

In the above equations F_t and S_t are futures and spot prices of a commodity in the respective market at time t . Both α and β are intercept and coefficient terms, where as e_{t-1}^{\wedge} is the equilibrium error which measures how the dependent variable in one equation adjusts to the previous period's deviation that arises from long run equilibrium. The remaining part of the equation is lagged first difference which is the effect of previous period's change in price on current period's deviation in the short run. The coefficients of the equilibrium error, α_f and α_s , signify the speed of adjustment coefficients in future and spot commodity markets that claim significant implication in an error correction model. At least one coefficient must be non zero for the model to be an error correction model (ECM). The coefficient acts as evidence of direction of casual relation and shows the speed at which discrepancy from equilibrium is corrected or minimized.

Lastly, Granger Causality Test has been performed on the commodities to find the short run lead-lag relationship between futures and spot prices. The test finds the short run lead-lag relationship between futures and spot prices. It tests whether one variable is significantly explained by the other variable. A variable x is said to Granger cause another variable y if past values of x help predict the current level of y given all other appropriate information. To reconfirm the empirical results of which market have the ability of price discovery, Variance Decomposition Analysis has been done which measures the percentage of the forecast error of a variable that is explained by another variable. It indicates the relative impact that one variable has upon another variable within the VECM system. It determines how much of the forecast error variance of each of the variables can be explained by exogenous shocks to the other variables.

Volatility Analysis -- EGARCH Model:

The volatility spillover between the spot and futures returns of the commodities is analyzed using Bivariate EGARCH model. Bollerslev's (1986) generalize autoregressive conditional

heteroscedasticity (GARCH) model, which was developed in a simplified form cannot be used as it assumes that positive and error terms have a symmetric effect on the volatility, meaning thereby, good news (market advances) and bad news (market retreats) have the equivalent effect on the volatility in this model. This means that the leverage effect i.e. price rise and fall is neutralized in this model. Also, the model assumes that all coefficients need to be positive to ensure that the conditional variance (i.e. measure of risk) is never negative. In response to the weakness of symmetric assumption, Nelson (1991) brought out Exponential GARCH (EGARCH) models based on a logarithmic expression of the conditional variance formulation that successfully captured asymmetric impacts of shocks or innovations on volatilities. EGARCH models had been demonstrated to be superior compared to other competing asymmetric conditional variance in many studies (e.g. Koutmos and Booth (1995), Alexander (2009)).

The study uses the estimation process based on the direct spillover between volatility of futures and spot markets. The empirical analysis involves two-stage estimation. The first step is to use VECM and the second step is to use the residuals of VECM in the bivariate EGARCH model. This EC-EGARCH model allows the conditional volatilities and covariance to adjust to deviations from long-run price disequilibria, whereas traditional EGARCH models do not. As such, the model is useful for the testing of both short run and long run volatility spillovers hypotheses. Following EGARCH Model is used in the study:

$$\ln(\sigma^2_{ft}) = \beta_{ff}(e^2_{ft-1}) + \beta_{fs}(e^2_{st-1}) + \lambda_f(\sigma^2_{ft-1})$$

$$\ln(\sigma^2_{st}) = \beta_{ss}(e^2_{st-1}) + \beta_{sf}(e^2_{ft-1}) + \lambda_s(\sigma^2_{st-1})$$

The unrelated residuals e_{ft} and e_{st} are obtained from the equations specified in VECM above. This two step approach (the first step for the VECM and the second step for the bivariate EGARCH model) is asymptotically equal to a joint estimation for the VECM and EGARCH models (Greene, 1997).

RESEARCH HYPOTHESES

The following are the hypothesis of the present research:

H1: There is no cointegration between spot and future prices of the selected commodities.

H2: There is no lead-lag relationship between spot and future price in price discovery mechanism.

H3: There is no Granger causality in the spot and future prices for the commodities.

H4: There does not exist volatility spillover from one market (spot or future) to the other (future or spot).

ANALYSIS OF RESULTS & DISCUSSION

As a first step, the descriptive statistics of the future and spot price series of two bullion commodities i.e. Gold and Silver and five metal commodities i.e. Aluminium, Copper, Lead, Nickel and Zinc commodities has been presented in the Table 1:

TABLE 1: DESCRIPTIVE STATISTICS OF COMMODITIES

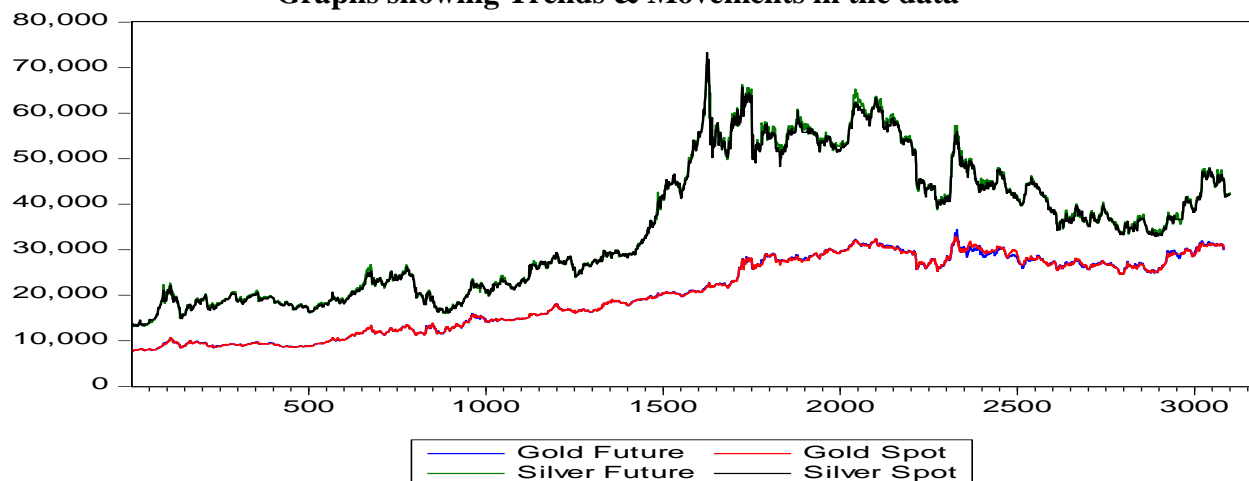
Price Series	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis	Jarque-Bera	Probability	Sum	Sum Sq. Dev.	Observations
GOLD(F)	2027 7.15	204 82	3443 9	7658	8108 .095	- 0.12 127	1.44 4495	318. 477	0	6253 4727	2.03 E+11	308 4
GOLD(S)	2026 4.72	203 70	3294 3	7640	8116 .365	- 0.12 135	1.44 3213	318. 9995	0	6249 6385	2.03 E+11	308 4
SILVER(F)	3510 8.65	347 94	7155 4	1308 7	1462 0.47	0.31 5842	1.82 2299	230. 7669	0	1.09 E+08	6.63 E+11	310 1
SILVER(S)	3485 2.75	347 51	7328 8	1320 0	1444 7.59	0.30 2897	1.80 8199	230. 944	0	1.08 E+08	6.47 E+11	310 1
ALUMINIUM(F)	106. 9152	108. 25	148.7	62.6	13.1 1447	- 0.90 058	4.57 849	741. 5928	0	3317 57.8	5335 11.1	310 3
ALUMINIUM(S)	106. 1374	107. 4	147.5	62.55	13.0 2425	- 0.93 104	4.60 2444	780. 2923	0	3293 44.5	5261 95.6	310 3
COPPER (F)	350. 8456	347. 7	509.9 5	141.3 5	72.1 2083	- 0.56 437	2.85 0472	170. 8044	0	1109 374	1644 1669	316 2
COPPER (S)	348. 7296	346. 85	497.5 5	135.6 5	71.9 0401	- 0.59 297	2.89 7276	186. 6903	0	1102 683	1634 2959	316 2
LEAD(F)	107. 539	111. 55	152.5	42.05	21.7 2423	- 0.99 465	3.66 2245	513. 0361	0	3012 17.9	1321 439	280 1
LEAD(S)	107. 0806	110. 95	156.3 5	41.5	21.9 4169	- 9.80 539	3.66 7221	500. 7972	0	2999 32.7	1348 026	280 1
NICKEL(F)	966. 2026	931. 4	2240	455	301. 1845	1.49 5353	6.64 5956	2814 .874	0	2935 323	2.75 E+08	303 8
NICKEL(S)	963. 2288	924. 5	2259. 9	336.5	306. 8698	1.54 7362	6.85 2014	3090 .573	0	2926 289	2.86 E+08	303 8
ZINC(F)	113. 4215	108. 075	205.9	51	27.7 241	0.45 6401	3.48 2151	137. 2949	0	3506 99.2	2375 821	309 2
ZINC(S)	112. 6827	107. 625	207.2 5	49.45	27.8 4394	0.46 1398	3.53 579	146. 6928	0	3484 14.9	2396 406	309 2

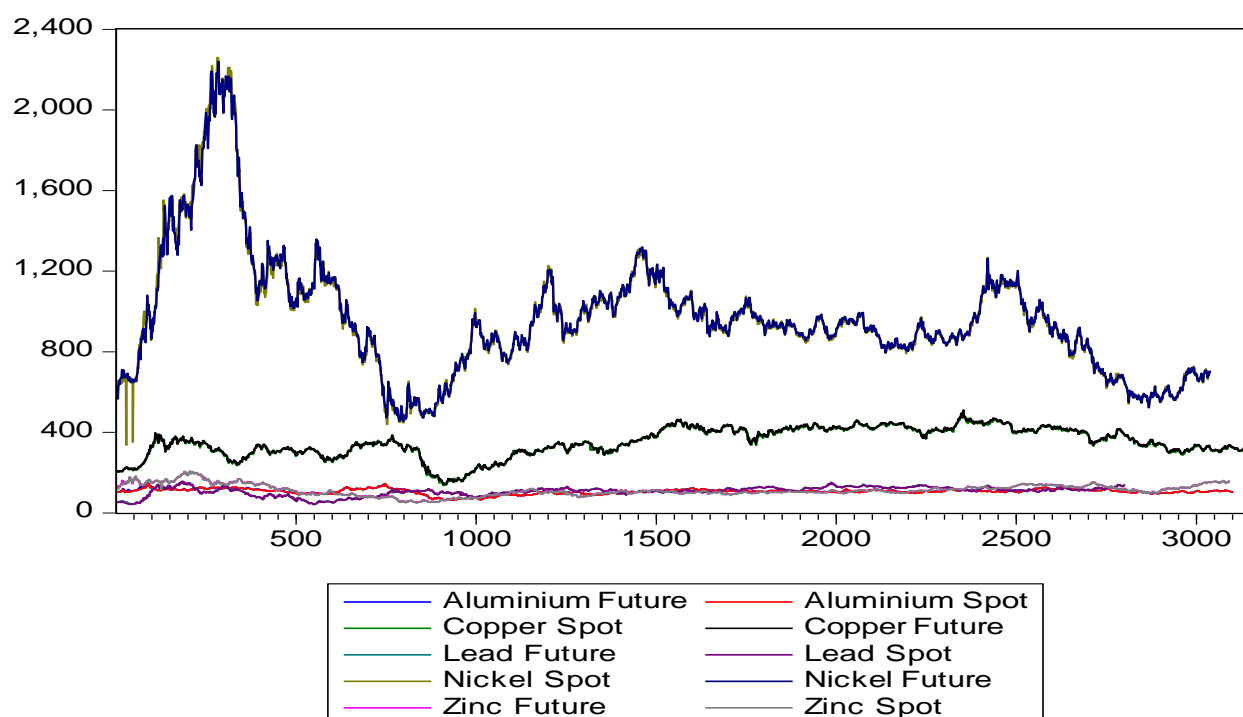
The descriptive statistics of the price series show that the value of kurtosis for Aluminium, Lead, Nickel and Zinc (both future and spot prices) have leptokurtic distribution (i.e., >3) with values

concentrated around the mean and thicker tails. This means high probability for extreme values which is observed from the above table. The kurtosis value of other commodities indicates Platykurtic distribution (i.e., < 3) and the values are wider spread around the mean. Skewness is positive in case of Silver, Nickel and Zinc. It is negative in case of Gold, Aluminium, Copper and Lead. Jarque-Bera test statistic measures the difference of the skewness and kurtosis of the data series with those from the normal distribution. The probability values indicate the probability that a Jarque-Bera statistic exceeds (in absolute value) the observed value and a small probability value leads to the rejection of the null hypothesis of a normal distribution. Hence we can conclude that the data is non normal with high standard deviation, high skewness and kurtosis.

In the next step, the Graphs of all the commodities future and spot prices are exhibited below to have an idea about the trend and movements in the price series over time. The graphs present a glimpse of the data with the fact that the price series are highly volatile in their movement. This serves as a base to test the co-movements in the price series both in the long-run as well as in the short-run for these commodities.

Graphs showing Trends & Movements in the data





To begin the empirical investigations concerning price discovery and lead-lag relationships, firstly, Augmented Dickey-Fuller (ADF) test is employed to test the stationarity of the price pairs of spot and futures series of the commodities and the results are presented in Table 2. The results show that the price series of the commodities are non stationary at levels and after first difference all the price series exhibit stationarity that is the property of the time series data i.e. the price series are integrated to order of one, $I(1)$. To add value to the results, Phillip and Perron (PP) test has also been performed on the price series. The results of PP test validate and cross check the results of ADF test.

TABLE 2: RESULTS OF STATIONARITY TESTS

Price Series	ADF Test		PP Test	
	Levels	1st Difference	Levels	1st Difference
	t-statistic	t-statistic	t-statistic	t-statistic
GOLD(F)	-1.908408	-58.72486	-2.011960	-58.64747
GOLD(S)	-1.747867	-56.72643	-1.847619	-56.75832
SILVER(F)	-1.584001	-60.98001	-1.670641	-60.76967
SILVER(S)	-1.556539	-59.25767	-1.668553	-59.14157
ALUMINI(F)	-3.018314	-56.08401	-3.032574	-56.08439
ALUMINI(S)	-2.980513	-59.13056	-3.033939	-59.14992
COPPER(F)	-2.241116	-58.39117	-2.204487	-58.39117
COPPER(S)	-2.294327	-62.35001	-2.341469	-62.39821
LEAD(F)	-3.168149	-34.77431	-3.196230	-51.97176
LEAD(S)	-3.264726	-57.77627	-3.345625	-57.77653
NICKEL(F)	-2.772403	-54.32008	-2.784536	-54.31502
NICKEL(S)	-2.885615	-61.17010	-2.708833	-61.23258
ZINC(F)	-1.752708	-55.05454	-1.759856	-55.05242

ZINC(S)	-1.899178	-64.45331	-1.872092	-64.85345
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Non-stationarity of the price series is a precondition to use co-integration test. Before employing co-integration test, it is important to find out optimum lag length. Lag length for all the commodities has been selected using VAR Lag Order Selection Criteria using appropriate information criterion and all related calculations have been done using that lag length. The Lags lengths are shown in Table 3. The futures and spot market price linkages of all commodities are tested using Johansen's cointegration analysis which expose the extent to which two markets have moved together towards long run equilibrium. The results of Johansen's co-integration test are reported in Table 3. The results show that the null hypothesis (H1) is rejected in case of all the 7 commodities under study i.e. Gold, Silver, Aluminium, Copper, Lead, Nickel and Zinc. It reveals that at least one cointegration relationship exists between spot and futures prices of all these 7 commodities. Thus, spot and futures prices of these bullion and metal commodities share common long-run information. The cointegration results confirm that in general there is a price discovery process in the spot and futures commodity markets.

The inference of this cointegration relationship is that the commodities in two separate markets respond disproportionately to the pricing information in the short run, but they converge to equilibrium in the long run under the condition that both markets are innovative and efficient. Thus, price change in one market (futures or spot commodity market) generates price change in the other market (spot or commodity futures) with a view to bring a long run equilibrium relation. As for forecasting, cointegration between two prices implied that each market contains information on the common stochastic trends binding prices together, and therefore the predictability of each market can be improved by using information contained in the other market (Caporale et. al. 2010). The results of the study are consistent with the previous studies such as Schwarz & Szakmary (1994); Srinivasan & Deo (2009); Caporale et. al. (2010); Sridhar & Sathish (2011); Srinivasan (2012); Sehgal et. al. (2013) etc.

TABLE 3: RESULTS OF COINTEGRATION TEST

Commodities	Lag Length (SIC)	Hypothesized No. of CE(s)	Eigen Value	Trace Statistic	Critical Value	Prob.**
Gold	4	None*	0.030193	95.37274	15.49471	0.0000
		At the most 1	0.000317	0.97593	3.841466	0.3250
Silver	4	None*	0.075038	244.0816	15.49471	0.0001
		At the most 1	0.000860	2.663843	3.841466	0.1027
Aluminium	4	None*	0.073781	246.5144	15.49471	0.0001
		At the most 1	0.002949	9.145618	3.841466	0.0025
Copper	4	None*	0.069778	234.6921	15.49471	0.0001
		At the most 1	0.002006	6.338450	3.841466	0.0118
Lead	3	None*	0.138094	424.1383	15.49471	0.0001
		At the most 1	0.003026	8.477505	3.841466	0.0036
Nickel	3	None*	0.116872	381.2826	15.49471	0.0001
		At the most 1	0.001425	4.324854	3.841466	0.0375
Zinc	4	None*	0.110846	366.1784	15.49471	0.0001
		At the most 1	0.001134	3.503844	3.841466	0.0612

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level for Gold, Silver and Zinc; 2 cointegrating eqn(s) for Aluminium, Copper, Lead and Nickel. * denotes rejection of the hypothesis at the 0.05 level **MacKinnon-Haug-Michelis (1999) p-values

Our cointegration result confirm that in general there is a price discovery process in the spot and future commodity markets. We can, therefore, proceed with the estimation of a VECM. The VECM can be estimated by incorporating the error correction terms (ECT). The coefficients of the ECTs provide some insight into the adjustment process of spot and futures prices towards equilibrium in all types of contracts. The results of VECM are reported in Table 4:

TABLE 4: RESULTS OF VECM

Commodities	Gold		Silver		Aluminium		Copper	
CointEq1	ΔF	ΔS	ΔF	ΔS	ΔF	ΔS	ΔF	ΔS
Error Correction	-0.089	0.054	-0.197	0.209	-0.130	0.204	-0.121	0.291
std error()	(-0.01)	(-0.01)	(-0.03)	(-0.02)	(-0.023)	(-0.021)	(-0.036)	(-0.019)
t-stat[]	[-4.87]	[3.96]	[-5.90]	[8.23]	[-5.46]	[9.26]	[-3.27]	[14.79]
$\Delta F(-1)$	-0.035	0.579	0.041	0.521	0.039	0.383	0.078	0.677
std error()	(-0.02)	(-0.01)	(-0.03)	(-0.03)	(-0.028)	(-0.026)	(-0.039)	(-0.021)
t-stat[]	[-1.29]	[29.39]	[1.14]	[19.12]	[1.38]	[14.68]	[1.96]	[32.03]
$\Delta F(-2)$	-0.025	0.269	0.063	0.330	-0.026	0.152	0.109	0.374
std error()	(-0.03)	(-0.02)	(-0.03)	(-0.03)	(-0.028)	(-0.026)	(-0.043)	(-0.023)
t-stat[]	[-0.80]	[11.45]	[1.69]	[11.72]	[-0.91]	[5.84]	[2.53]	[16.19]
$\Delta S(-1)$	0.045	-0.441	-0.070	-0.429	0.010	-0.241	-0.091	-0.344
std error()	(-0.03)	(-0.02)	(-0.03)	(-0.03)	(-0.028)	(-0.026)	(-0.041)	(-0.022)
t-stat[]	[1.37]	[- 18.11]	[-1.81]	[- 14.70]	[0.35]	[-9.13]	[-2.19]	[- 15.49]
$\Delta S(-2)$	0.053	-0.183	-0.042	-0.251	0.061	-0.082	0.029	-0.209
std error()	(-0.03)	(-0.02)	(-0.03)	(-0.03)	(-0.027)	(-0.025)	(-0.039)	(-0.021)
t-stat[]	[1.50]	[-7.03]	[-1.10]	[-8.74]	[2.21]	[-3.22]	[0.72]	[-9.88]
C	6.912	5.290	8.681	6.861	0.000	0.000	0.033	0.009
std error()	(-4.08)	(-3.01)	(-12.41)	(-9.46)	(-0.025)	(-0.023)	(-0.089)	(-0.047)
t-stat[]	[1.69]	[1.75]	[0.70]	[0.725]	[0.01]	[- 0.002]	[0.36]	[0.18]
Commodities	Lead		Nickel		Zinc			
CointEq1	ΔF	ΔS	ΔF	ΔS	ΔF	ΔS		
Error	-0.179	0.429	-0.219	0.265	-0.107	0.467		

Correction								
std error()	(-0.03)	(-0.03)	(-0.02)	(-0.02)	(-0.033)	(-0.034)		
t-stat[]	[-5.31]	[13.15]	[-8.60]	[10.24]	[-3.22]	[13.65]		
$\Delta F(-1)$	0.129	0.342	0.121	0.364	0.084	0.318		
std error()	(-0.03)	(-0.03)	(-0.02)	(-0.03)	(-0.034)	(-0.035)		
t-stat[]	[3.70]	[10.17]	[4.37]	[12.94]	[2.41]	[8.85]		
$\Delta F(-2)$	0.128	0.183	0.018	0.153	0.052	0.211		
std error()	(-0.03)	(-0.03)	(-0.02)	(-0.028)	(-0.033)	(-0.034)		
t-stat[]	[3.93]	[5.82]	[0.67]	[5.68]	[1.58]	[6.19]		
$\Delta S(-1)$	-0.072	-0.221	-0.050	-0.234	-0.059	-0.257		
std error()	(-0.03)	(-0.03)	(-0.03)	(-0.027)	(-0.032)	(-0.033)		
t-stat[]	[-2.21]	[-6.98]	[-1.87]	[-8.58]	[-1.84]	[-7.79]		
$\Delta S(-2)$	-0.058	-0.115	-0.049	-0.092	-0.054	-0.177		
std error()	(-0.02)	(-0.02)	(-0.02)	(-0.025)	(-0.029)	(-0.030)		
t-stat[]	[-1.90]	[-4.10]	[-2.00]	[-3.68]	[-1.81]	[-5.84]		
C	0.025	0.024	0.035	0.008	0.008	0.012		
std error()	(-0.03)	(-0.03)	(-0.39)	(-0.395)	(-0.036)	(-0.037)		
t-stat[]	[0.67]	[0.67]	[0.08]	[0.021]	[0.22]	[0.32]		

The empirical results show that in the VECM model, error correction coefficients are significant in both the equations of spot and future markets with correct signs, signifying a bidirectional error correction in all sample commodities. Coefficients of the ECTs are statistically significant for the entire period in both the equations as suggested by appropriate lag length criteria. This shows that once the price relationship of spot and futures market deviates away from the long-run cointegrated equilibrium, both the markets will make adjustments to re-establish the equilibrium during the next period except with little drifts of the sample commodities. The results highlight that error correction term of spot market in six out of seven commodities is larger in magnitude than that of future market which implies that spot price makes greater adjustment in order to re-establish the equilibrium. In other words, future price leads the spot market in price discovery mechanism. Gold is the only exception where error correction coefficient is greater for futures than for the spot market indicating that spot price leads in price discovery process. Hence, we can reject second null hypothesis (H2) that there is no lead-lag relationships between spot and future market of these commodities.

It is customary to produce the residuals diagnostic checking while estimating the ECM model. The residual diagnostics test reveal the existence of Heteroscedasticity, in most of the sample

commodities which exhibit cointegration. In verifying the Residual Serial Correlation LM Tests it was found that in all seven sample series no serial correlation was present. Results of Histogram-Normality Test show that residuals are not normally distributed. Stability Diagnostics through Recursive Estimates (CUSUM Test) show that the data is stable for all the commodities under investigation. Therefore, it leads to take us to the position that our model fulfills the adequacy criterion for almost all commodities.

As a next step in empirical scrutiny, Granger causality test is performed to find the short run lead-lag relationship between futures and spot prices of the commodities. The futures returns Granger cause spot returns if some of the coefficients of lagged futures returns are nonzero and/or the error correcting term is significant at conventional levels and vice versa. The results of Granger causality tests are reported in Table 5:

TABLE 5: RESULTS OF GRANGER CAUSALITY TEST

Null Hypothesis:	Obs	F-Statistic	Prob.
GOLD_SPOT does not Granger Cause GOLD_FUTURE	3079	10.2483	3.00E-08
GOLD_FUTURE does not Granger Cause GOLD_SPOT		368.369	2.00E-259
SILVER_SPOT does not Granger Cause SILVER_FUTURE	3096	10.6555	1.00E-08
SILVER_FUTURE does not Granger Cause SILVER_SPOT		451.715	8.00E-307
ALUM_SPOT does not Granger Cause ALUM_FUTURE	3098	17.0185	8.00E-14
ALUM_FUTURE does not Granger Cause ALUM_SPOT		220.589	1.00E-166
COPPER_SPOT does not Granger Cause COPPER_FUTURE	3158	6.5414	3.00E-05
COPPER_FUTURE does not Granger Cause COPPER_SPOT		2717.02	0
LEAD_SPOT does not Granger Cause LEAD_FUTURE	2798	9.6624	2.00E-06
LEAD_FUTURE does not Granger Cause LEAD_SPOT		392.197	1.00E-212
NICKEL_SPOT does not Granger Cause NICKEL_FUTURE	3034	36.964	2.00E-23
NICKEL_FUTURE does not Granger Cause NICKEL_SPOT		274.901	9.00E-158
ZINC_SPOT does not Granger Cause ZINC_FUTURE	3088	2.83769	0.0231
ZINC_FUTURE does not Granger Cause ZINC_SPOT		321.881	1.00E-231

The results of Granger causality exhibit bidirectional causality in the spot and futures prices for all the commodities under investigation, thus, confirming that price information flows both ways

and hence the bullion and metal commodity market in India is informational efficient. Thus, we can reject third null hypothesis (H3) that there is no Granger causality between spot and future price of these commodities. These results are also corroborated in previous studies such as Ryoo & Smith (2004); Ge et. al. (2008); Sehgal et. al. (2013); Shakeel & Purnakar (2014) etc. To reconfirm the dominant role of the futures market in price discovery and to know which market whether spot or futures have the ability of price discovery, Variance Decomposition Analysis is done, the results of which are shown in Table 6.

TABLE 6: RESULTS OF VARIANCE DECOMPOSITION ANALYSIS

Commodities		VDEC of Future Price Series	VDEC of Spot Price Series
Gold	Future Price	28.710886	27.869888
	Spot Price	71.2891135	72.130112
Silver	Future Price	98.492215	78.591656
	Spot Price	1.5077844	21.408344
Aluminium	Future Price	97.104308	68.710533
	Spot Price	2.8956918	31.289467
Copper	Future Price	99.118685	79.5556309
	Spot Price	0.881315	20.4443677
Lead	Future Price	98.258317	78.217728
	Spot Price	1.7416825	21.782272
Nickel	Future Price	94.503419	67.253648
	Spot Price	5.4965799	32.746352
Zinc	Future Price	99.49979	78.374462
	Spot Price	0.500209	21.6255381

The results indicate that in case of commodities excluding gold, the sample commodities the forecasting error in spot prices is mainly explained by the variations in the lagged values of future series whereas the forecasting error in future prices is mainly explained by the variations in its own lagged values. In case of gold, the forecasting error in spot prices as well as the forecasting error in future prices is mainly explained by the variations in the lagged values of spot series. The results of information share also reveal that for metals other than gold, most of the price changes of spot and futures are because of futures market and more information flows from futures to spot. Only in case of gold, more information flows from spot to futures. These results are in conformity with the price discovery results.

In sum, the results confirm a price discovery process with a dominant role of futures market for most of the commodities. The findings are in conformity with prior research (Thomas & Karande (2002); Mahalik et. al. (2009); Iyer & Pillai (2010); Sehgal et. al. (2012); Yaganti & Kamaiah (2012)). In case of gold, spot market dominates the futures market which is the clear indication that spot market of gold is more information efficient in India. This is due to the fact of efficient transmission of information among Gold traders in spot market as they tend to trade more frequently. These results are in conformity with the previous research (Sridhar & Sathish (2011); Srinivasan & Ibrahim (2012); Joshy & Ganesh (2015)).

The results of Volatility spillover relationships between futures and spot market for sample commodities series using bivariate E-GARCH model are reported in Table 7 and Table 8. Table

7 shows the volatility dynamics taking spot prices as dependent variable and table 8 shows the volatility relationships for select bullion and metal commodities taking futures prices as dependent variable. The coefficient β_{sf} indicates the volatility spillover from futures to spot and β_{fs} means reverse direction. The coefficients β_{ss} and β_{ff} show the volatility clustering, while the coefficients λ_s and λ_f measure the degree of volatility persistence.

TABLE 7: VOLATILITY RELATIONSHIPS: DEPENDENT VARIABLE - SPOT

Commodities	Coefficient	Std. Error	z-Statistic	Prob.
Gold				
β_{ss} (volatility clustering)	-1.897565	10.0164	-0.18945	0.8497
β_{sf} (volatility spillover)	-1.189886	10.01597	-0.1188	0.9054
λ_s (volatility persistence)	0.010554	0.082936	0.127254	0.8987
Silver				
β_{ss} (volatility clustering)	-1.90325	10.66464	-0.17846	0.8584
β_{sf} (volatility spillover)	-1.174513	10.6642	-0.11014	0.9123
λ_s (volatility persistence)	0.010579	0.082614	0.128051	0.8981
Aluminium				
β_{ss} (volatility clustering)	11.37662	0.028629	397.3789	0
β_{sf} (volatility spillover)	11.62682	0.028908	402.1976	0
λ_s (volatility persistence)	0.980172	6.17E-05	15883.44	0
Copper				
β_{ss} (volatility clustering)	-20.40038	2.531574	-8.05838	0
β_{sf} (volatility spillover)	-19.93323	2.530791	-7.87629	0
λ_s (volatility persistence)	0.194932	0.06333	3.078014	0.0021
Lead				
β_{ss} (volatility clustering)	-2.919715	0.187463	-15.5749	0
β_{sf} (volatility spillover)	-2.4946	0.186698	-13.3617	0
λ_s (volatility persistence)	0.91431	0.002488	367.4775	0
Nickel				
β_{ss} (volatility clustering)	-5.446988	0.013748	-396.2	0
β_{sf} (volatility spillover)	-4.947656	0.01377	-359.31	0
λ_s (volatility persistence)	0.928082	8.33E-07	1113564	0
Zinc				
β_{ss} (volatility clustering)	-8.061251	3.013844	-2.67474	0.0075
β_{sf} (volatility spillover)	-7.400399	3.013388	-2.45584	0.0141
λ_s (volatility persistence)	0.011682	0.061933	0.188614	0.8504

The Table 7 explains volatility spillover, volatility persistence, and volatility clustering from the future to spot market. The market-specific volatility clustering coefficients are significant at 5% level in case of 5 out of 7 commodities i.e. Aluminium, Copper, Lead, Nickel and Zinc. Volatility spillover is observed in 5 out of 7 commodities i.e. Aluminium, Copper, Lead, Nickel and Zinc. Volatility persistence is significant for 4 out of 7 commodities i.e. Aluminium, Copper, Lead and Nickel. In case of bullion commodities Gold and Silver, the existence of volatility clustering, volatility spillover and volatility persistence from future to spot market is not significant whereas it is found significant for most metal commodities under study.

TABLE 8: VOLATILITY RELATIONSHIPS: DEPENDENT VARIABLE - FUTURE

Commodities	Coefficient	Std. Error	z-Statistic	Prob.
Gold				
β_{ff} (volatility clustering)	-6.840252	2.900661	-2.35817	0.0184
β_{fs} (volatility spillover)	-6.146823	2.900465	-2.119254	0.0341
λ_f (volatility persistence)	0.012633	0.058984	0.21417	0.8304
Silver				
β_{ff} (volatility clustering)	-18.11905	2.900952	-6.245898	0
β_{fs} (volatility spillover)	-17.56819	2.899426	-6.059194	0
λ_f (volatility persistence)	0.080579	0.064054	1.257987	0.2084
Aluminium				
β_{ff} (volatility clustering)	11.36473	0.028653	396.6333	0
β_{fs} (volatility spillover)	11.6148	0.02894	401.3387	0
λ_f (volatility persistence)	0.980148	6.24E-05	15708.02	0
Copper				
β_{ff} (volatility clustering)	-20.40075	2.5318	-8.057805	0
β_{fs} (volatility spillover)	-19.93423	2.531017	-7.875976	0
λ_f (volatility persistence)	0.194932	0.063331	3.078008	0.0021
Lead				
β_{ff} (volatility clustering)	-9.565856	8.095596	-1.181612	0.2374
β_{fs} (volatility spillover)	-9.117008	8.09318	-1.126505	0.26
λ_f (volatility persistence)	0.120912	0.088695	1.363226	0.1728
Nickel				
β_{ff} (volatility clustering)	-5.62421	0.001484	-3789.6	0
β_{fs} (volatility spillover)	-5.119766	0.001797	-2849.507	0
λ_f (volatility persistence)	0.938932	3.69E-06	254234.9	0
Zinc				
β_{ff} (volatility clustering)	-8.061251	3.013845	-2.674739	0.0075
β_{fs} (volatility spillover)	-7.400399	3.01339	-2.455839	0.0141
λ_f (volatility persistence)	0.011682	0.061933	0.188614	0.8504

The table 8 reports volatility clustering, volatility spillover and volatility persistence from the spot to future. The market-specific volatility clustering coefficients are all positively significant at 5% level in case of all commodities except Lead. Volatility spillover is also observed for 6 out of 7 commodities, with an exception of Lead. Volatility persistence is significant for 2 out of 7 commodities i.e. Copper and Nickel. Hence, we can reject fourth null hypothesis (H4) that there is no volatility spillover from one market to the other.

Thus, the Bivariate EGARCH model indicates that past innovations in futures significantly influence spot volatility, but the volatility spillovers from spot to futures are relatively weaker. EGARCH results confirm volatility spillover from future to spot for 5 commodities: Aluminium, Copper, Lead, Nickel and Zinc and volatility spillover from spot to future for 6 out of 7 commodities: Gold, Silver, Aluminium, Copper, Nickel and Zinc with a stronger spillover from spot to future market.

Validation of Hypotheses

The results are summarized in the Table 9:

TABLE 9: VALIDATION OF HYPOTHESES

Hypotheses	Decision	Conclusion
H1: There is no cointegration between spot and future prices of all the commodities.	Rejected	There exists at least one cointegration relationship between spot and futures prices of all the 7 commodities.
H2: There is no lead-lag relationship between spot and future price in price discovery mechanism.	Rejected	Futures price leads the spot price in price discovery mechanism for all the commodities except Gold where spot price leads the futures price.
H3: There is no Granger causality in the spot and future prices for the commodities.	Rejected	There exists bidirectional Granger causality in the spot and futures prices for all the commodities.
H4: There does not exist volatility spillover from one market (spot or future) to the other (future or spot).	Rejected	There exists volatility spillover from future to spot for 6 out of 7 commodities and volatility spillover from spot to future for 6 out of 7 commodities.

SUMMARY AND CONCLUSIONS

The present study is an attempt to investigate the issues of co-movement, causality and the volatility of bullion and metal commodities in the Indian commodities market. The study covers 7 commodities data taken from MCX India over the period of 2006 to 2016. Results of Unit Root test indicate that the price series are non stationarity at levels but after first difference all the price series exhibit stationarity. Results of Johansen cointegration tests for each of the sample commodities confirmed a long-run equilibrium relationship between spot and futures prices.

One aspects of the research was to find out which market i.e. spot or future exerts a stronger influence on the other market. The results of VECM model reveal a bidirectional error correction in all sample commodities with the fact that future market leads the spot market in price discovery mechanism in case of six metals. Gold is the only exception where spot price leads in price discovery process signifying that spot market of gold is information efficient in India. Granger causality results exhibit bidirectional causality in the spot and futures prices for all the commodities under investigation, thus, confirming that price information flows both ways and hence the bullion and metal commodity market in India is informational efficient. This implies that both markets assimilate new information and contribute to price discovery. The results of Variance Decomposition Analysis reiterate the dominant role of futures market in price discovery process in case of the same six metals. The futures commodity markets in India are more innovative and involve electronic trading system experiencing high trading volumes that enables them to expose all available new information with respect to the price of the commodities and investors' behaviour in the market. This implies that all the investors are able to realize their expected future price of the commodity due to the efficiency of the future market. Spot markets, on the other hand, are physical in nature and generally not automated. They also do not experience high trading volumes which in turn are seasonal in character for some

commodities. This makes futures market more informational efficient and cost competitive thus ensuring their lead role in price discovery.

This study tested the volatility of returns of spot and futures prices by applying Bivariate EGARCH model to examine whether any risk transfer mechanism can work between spot and futures market. EGARCH results confirm volatility spillover from future to spot for 5 commodities: Aluminium, Copper, Lead, Nickel and Zinc and volatility spillover from spot to future for 6 out of 7 commodities: Gold, Silver, Aluminium, Copper, Nickel and Zinc with a stronger spillover from spot to futures market. The results indicate that although bidirectional volatility spillover persists, the volatility spillovers from spot to the futures market are dominant. This makes clear that whenever there is high volatility in the commodity market it will transmit to futures market. An investor who is trading in commodity futures market should constantly observe the volatility in the commodity spot market. Also, from regulators' viewpoint, they should take required measures to control the volatility in spot market, otherwise the surplus volatility in the spot market will spill over to futures market, thus making the futures market unstable.

On the whole, the price discovery results are heartening given the emerging character of Indian commodity market. However, the results for volatility spillover are weak, signifying that Indian commodities market is still not perfectly competitive for some commodities and an efficient risk transfer system is yet to progress for most of the sample commodities.

IMPLICATIONS OF THE STUDY

This study demonstrates the relationship between the spot and futures prices of bullion and metal commodities. The findings of this study have important implications to investors and portfolio managers who are involved in developing valuable trading and hedging strategies between the spot and futures markets. It would help the individual investors to understand the movements of spot and future prices and directions of returns of these commodities. Knowledge of these interrelationships would enable the investors to take important decisions of buying and selling these commodities. For example, the recent demonetization of old Rs 500 and Rs 1,000 notes is expected to have a positive impact on the economy in medium to long term, however it has led to heightened short-term market volatility. As a matter of sudden impact, gold price spiked on the announcement of demonetization move. The event has led to increase the volatility in the gold prices as gold has been among the most seriously impacted asset classes. This move has reinforced Indians' belief in gold as a safe haven asset.

The present research would facilitate commodity producers, consumers, processors, traders and financial institutions to design an efficient asset allocation strategy. Besides, the findings are useful to regulators to formulate policy and implement control measures to enhance the integrity and stability of the commodity exchange. To strengthen the commodity market structure, certain important steps that the policy makers should undertake to support these trading platforms are: availability of necessary transport and storage infrastructure facility, economic incentives, product innovation, necessary reforms and sufficient clarity in the concerned acts, cohesion in diverse regulatory bodies (like FMC, RBI, SEBI), investor education etc. Thus, in a developing economy like India which is having a successful history of futures trading, a proper regulatory framework is the utmost need to develop the underlying commodity market.

LIMITATIONS OF THE STUDY

The data for this study is collected from the website of Multi-Commodity Exchange Ltd (MCX) as MCX is a major player in the commodities market in India. Though a comparative data exist in the other competing exchanges like NCDEX, NMCE and ICEX, this study has not made any endeavor to cross check or solicit those quotations for the current research. Also, this study has narrowed down to selected bullion and metals. The study includes in its scope only a subset of the broader commodities market in India.

SCOPE OF FURTHER STUDY

The current study offers enough scope for undertaking further research on the related issues. A comparison of future spot relationships across different commodity exchanges in India can be performed. Study of impact of trading volume and open interest on the prices can be explored. Volatility comparisons across the Indian commodity exchanges and other international markets of comparable magnitude or activity can be undertaken. Similar researches can be done in context of agricultural, energy and other commodities to test their price discovery and volatility spill over.

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BETI BACHAO- BETI PADAHO: AN INTROSEPTION

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ABSTRACT

*This paper is about Beti Bachao- Beti Padhao scheme that aims to generate awareness and improving the efficiency of welfare services meant for women. Today the society as a whole needs to change the attitude towards the girl child to end female feticide. The practice is prevalent among every strata of the society. Although there was a healthy sex ratio in the north-eastern region and tribal areas, in many parts of the country the incidence of female feticide is high. The Government has initiated this innovative scheme to save the lots of the girl children. The 'Beti Bachao, Beti Padhao,' campaign has been launched to achieve this objective, of bringing about the awareness and the change. As, Haryana Chief Minister Manohar Lal Khattar has asserted that Khap Panchayats have been part of old traditions and playing & resolving social issues as 'Beti Bachao-Beti Padhao' government programme for the girl child. Further, to engage with the nation, **Beti Bachao Beti Padhao** Group has been launched on my Gov platform in order to seek active participation, engagement and whole hearted support in making this initiative of the Government a grand success. All previous programmers of govt. was only concern to save girl, not related to enable & educate girl. This scheme will have vital & curial role playing in sex-ratio, female- feticide, skill girl, empower girl & sustain women. The access to various entitlements, changes in patriarchal mind-set etc. are to be addressed in order to ensure equal value, care for and survival of the infant and young girl child.*

KEYWORDS: Female feticide, Beti-Bachao & Beti- Padhao.

INTRODUCTION

After the successful implementation of innovative schemes like the 'Jan Dhan Yojana,' 'Make in India' and Swachh Bharat Abhiyan, Prime Minister Narendra Modi now launched one more scheme, 'Beti Bachao, Beti Padhao' (save the girl child, educate the girl child), on January 22 in Panipat in Haryana. With an initial corpus of Rs 100 crore, the scheme has been launched in a hundred districts across the country. In Haryana where the **child sex ratio** (CSR) has been dismally low, 12 districts have been chosen: Rewari, Mahendergarh, Bhiwani, Jhajjar, Ambala, Kurukshetra, Sonapat, Rohtak, Karnal, Kaithal, Panipat and Yamuna Nagar. The scheme aims at making girls independent both socially as also financially through education. This approach of the Government can facilitate in generating awareness and improving the efficiency of delivery of welfare services meant for the women.

NEED OF THE SCHEME

The latest census of 2011 reveals a declining trend in CSR in the age group of 0 to 6 years, the figure for girls having gone down to 919 per 1,000 boys, from what it was in the 2001 census – 927. The practice of aborting female foetus has become more rampant with the availability of modern diagnostic tools for sex determination of the unborn. With the social biases favoring the male child on consideration of economic advantages and the deep-rooted attitude of labeling the girl child as more of a liability, the sex ratio in the country has been skewed.

The process of elimination continues even after birth in various forms of discrimination in matters of health, nutritional and educational needs of the girl child. The 'Beti Bachao, Beti Padhao,' campaign has been launched to achieve this objective, of bringing about the awareness and the change.

SCHEME IS BOON NOT ONLY FOR GIRLS BUT ALSO FOR SOCIETY

In this scheme, the Ministry of Women and Child Development is functioning in collaboration with various other Ministries like Education Ministry and Health Ministry.

It can be a boon not just for the girl children but also for the whole society. Moreover, 'Beti Bachao, Beti Padhao' yojana comes at a time when the nation is confronted with problems associated with women's safety like rape and other forms of assault.

The Union budget has also allocated to the Ministry of Road Transport and Highways Rs 50 crore for pilot schemes to safeguard the safety of women on public road transport. That may be a welcome step as this can facilitate to restore women's faith in the system.

OVERALL GOAL-

“Celebrate the Girl Child & Enable her Education”

DISTRICTS IDENTIFIED

The 100 districts have been identified on the basis of low Child Sex Ratio as per Census 2011 covering all States/UTs as a pilot with at least one district in each state. The three criteria for selection of districts namely are:-

- 1) Districts below the national average (87 districts/23 states);
- 2) Districts above national average but shown declining trend (8 districts/8 states)

- 3) Districts above national average and shown increasing trend (5 districts/5 states- selected so that these CSR levels can be maintained and other districts can emulate and learn from their experiences).

OBJECTIVES

The objectives of the Scheme are as under :

- i) **To prevent Gender biased sex selective elimination:** Focussed intervention targeting enforcement of all existing Legislations and Acts, especially to Strengthen the implementation of Pre-Conception & Pre-Natal Diagnostic Techniques (Prohibition of Sex Selection) Act, 1994 (PC&PNDT Act) with stringent punishments for violations of the law.
- ii) **To ensure survival& protection of the girl child:** Article 21 of the Constitution defines „protection of life and liberty“ as a legitimate right of its citizens. The difference in mortality rates of girls and boys indicates the difference in access to various health care and nutrition services as well as the preferential care and treatment given to boys. The access to various entitlements, changes in patriarchal mind-set etc. are to be addressed in order to ensure equal value, care for and survival of the infant and young girl child. Further implementation of various legislative provisions for the protection of the girl child and women has to be ensured to create a nurturing and safe environment for the girl child.
- iii) **To ensure education & participation of the girl child:** The access and availability of services and entitlements during the various phases of the life cycle of the Girl Child has a bearing on her development. Essential requirements related to Nutrition, Health Care, Education and Protection have to be fulfilled to enable every girl child to develop to her full potential-especially the right to quality early childhood care, elementary and secondary education. Right To Education (RTE) Act, 2010 provides children the right to free and compulsory education till completion of elementary education in a neighborhood school. Further, Sarva Shiksha Abhiyan (SSA) is a flagship programme for achievement of universalization of Elementary Education (UEE) in a time bound manner, as mandated by 86th amendment to the Constitution of India making free and compulsory Education to the Children of 6-14 years age group, a Fundamental Right. Denial of these entitlements is a violation of children's rights, which will have a lasting lifelong negative impact. This will also adversely impact upon future human development.

STRATEGIES

- 1) Implement a sustained Social Mobilization and Communication Campaign to create equal value for the girl child & promote her education.
- 2) Place the issue of decline in CSR/SRB in public discourse, improvement of which would be a indicator for good governance.
- 3) Focus on Gender Critical Districts and Cities low on CSR for intensive & integrated action.
- 4) Mobilize & Train Panchayati Raj Institutions/Urban local bodies/ Grassroot workers as catalysts for social change, in partnership with local community/women's/youth groups.
- 5) Ensure service delivery structures/schemes & programmes are sufficiently responsive to issues of gender and children's rights.
- 6) Enable Inter-sectoral and inter-institutional convergence at District/Block/Grassroot levels.

SCHEME IMPLEMENTATION

The formidable project can embrace a number of the most effective practices for better initiation and implementation. For example, West Bengal has a system for enabling money transfers at periodic intervals for the child's education. In Punjab, pregnant girls are registered in their first trimester in order that the authorities may follow up and monitor cases of feticide. Another example is Tamil Nadu's Amma Baby Care Kit.

However, the initiative although sensible has been for the most part criticized by many people. It's not enough to allot funds and formulate schemes, it is said. There is need to amend the laws and penalize those who harm the girl children. There's also need to educate the grass roots about the rights of the girl child to exist.

The Ministry of Women and Child Development would be responsible for budgetary control and administration of the scheme from the Centre. At the State level, the Secretary, Department of Women and Child Development will be responsible for overall direction and implementation of the scheme. The Structure of the proposed Scheme may be seen as follows:

AT THE NATIONAL LEVEL

A National Task Force for ***Beti Bachao, Beti Padhao*** headed by Secretary, WCD with representation from concerned ministries namely Ministry of Health & Family Welfare, Ministry of Human Resource Development, National Legal Services Authority, Department of Disability Affairs and Ministry of Information & Broadcasting; Gender Experts and Civil Society representatives. The Task Force will provide guidance and support; finalize training content; review state plans and monitor effective implementation.

At the State level

The States shall form a State Task Force (STF) with representation of concerned Departments (Health & Family Welfare; Education; Panchayati Raj/ Rural Development) including State Level Services Authority and Department of Disability Affairs for ***Beti Bachao, Beti Padhao*** to coordinate the implementation of the Scheme. As the issue requires convergence & coordination between Departments, the Task Force would be headed by the Chief Secretary. In UTs the Task Force would be headed by Administrator, UT Administration. Some States/UTs have their own mechanism at the State/UT level for Women's Empowerment, Gender and Child related issues which may be considered and/or strengthened as State/UT Task Force. Principal Secretary, WCD/Social Welfare will be the convener of this body. Department of Women & Child Development will have the responsibility of coordinating all the activities related to implementation of the Plan in the State/UTs through the Directorate of ICDS.

AT THE DISTRICT LEVEL

A District Task Force (DTF) led by the District Collector/Deputy Commissioner with representation of concerned departments (Health & Family Welfare; Appropriate Authority (PC&PNDT); Education; Panchayati Raj/ Rural Development, Police) including District legal Services Authority (DLSA) will be responsible for effective implementation, monitoring & supervision of the District Action Plan. Technical support and guidance for the implementation of Action Plan in the district would be provided by District Programme Officer (DPO) in the District ICDS Office for formulation of District Action Plan using the Block level Action Plans. A Gender expert/CSO member may also be included in the task force.

AT THE BLOCK LEVEL

A Block level Committee would be set up under the Chairpersonship of the Sub Divisional Magistrate/Sub Divisional Officer/Block Development Officer (as may be decided by the concerned State Governments) to provide support in effective implementation, monitoring & supervision of the Block Action Plan.

AT THE GRAM PANCHAYAT/WARD LEVEL

The respective Panchayat Samiti/Ward Samiti (as may be decided by concerned State Governments) having jurisdiction over the concerned Gram Panchayat/Ward would be responsible for the overall coordination & supervision for effectively carrying out activities under the Plan.

AT VILLAGE LEVEL

Village Health Sanitation and Nutrition Committees, (recognized as sub committees of panchayats) will guide and support village level implementation and monitoring of the plan. Frontline workers (AWWs, ASHAs & ANMs) will catalyze action on ground by creating awareness on the issue of CSR, collecting data, dissemination of information about schemes/programmes related to girl child & their families etc. The plan shall be implemented under the overall guidance & leadership of Municipal Corporations.

Participation for implementation of the scheme by Civil Society

This scheme is not only implemented by Govt Institutions but also Civil society plays a vital role for efficient implementation this scheme as CBOs/NGOs and khap Panchayats.

NGOs: The NGOs have vital role for any scheme of social issues which is implemented by national & state Govt. As, many NGOs have been curicial role playing in 'Beti-Bachao-Beti Padhao' scheme & programmer at national, state level & district level. In this program me, PM Modi has already invited not only govt. mechanism but also invited to civil society for implementation this scheme. As NGOs have been two part of this scheme but corresponding. One is to save girl as 'Beti- Bachao' like awareness of PNDT act, Govt. scheme & programmers, role of girl in society, achievements of women, reserativion of women & girl in govt. & private field. Not only help NGOs to Beti-Bachao but also empower & crucial role playing in the issue on 'Beti-Padhao' like awareness of school education to higher education, self school, skill development & awareness for jobs & carriers. NGOs have already vital role regarding this scheme in case of 'Nirbha Scam' in New Delhi.

Khap Panchayats: PM Modi has implemented this scheme through Haryana state because there is lowest sex ration in india. Modi has called to all khap panchyat for implementaion of this scheme. As, Haryana Chief Minister Manohar Lal Khattar has asserted that Khap Panchayats have been part of old traditions and playing & resolving social issues as 'Beti Bachao-Beti Padhao' government programme for the girl child. He thanked the Khap Panchayats for their cooperation and playing a leading role in the Beti Bachao-Beti Padhao programme. All Khap panchyat have crucial role playing in this scheme regarding femal-foticie, education of girls, safety & securty of girls in society & esteem of girls.

Media: Media have been boost role in this scheme regarding the awarensee of whole scheme like images of scheme, rule & regulation for save girl as PNDT act, editorial news, group discussion on the scheme at TV channel, scheme for education & any curicial event.

SOCIAL MEDIA

A YouTube channel on BBBP has been launched for all to access relevant videos on the issue of declining child sex ratio. Videos are being uploaded continuously and shared through this platform for generating awareness and for easy access and dissemination.

Further, to engage with the nation, **Beti Bachao Beti Padhao** Group has been launched on my Gov platform in order to seek active participation, engagement and whole hearted support in making this initiative of the Government a grand success. We urge you to subscribe to this group and enrich it with your valuable suggestions, feedback and comments. To subscribe the BBBP Group on MyGov portal is please click on Image.

BUDGET

A budgetary allocation of 100 Cr. has been made under the budget announcement for **Beti Bachao, Beti Padhao** campaign and 100 Cr. will be mobilized from Plan Outlay of the Planned scheme 'Care and Protection of Girl Child - A Multi Sectoral Action Plan' for the 12th Plan. Additional resources can be mobilized through Corporate Social Responsibility at National & State levels. The estimated cost of the Scheme is 200 cr. Out of 200 cr., 115 cr. is proposed to be released during the current year i.e. 2014-15 (for six month). 45 Cr. and 40 cr. will be released during 2015-16 and 2016-17 respectively.

MONITORING MECHANISMS

A Monitoring System will be put in place right from National, State, District, Block and Village levels to track progress on monitor able targets, outcomes and process indicators. At the national level, a National Task Force headed by Secretary MWCD will monitor quarterly progress on a regular basis. At state level, a State Task Force headed by the Chief Secretary will monitor progress. At the district level, the District Collectors (DC) will lead and coordinate action of all Departments through District-level officials. They shall also undertake monthly review of the progress on the activities listed in the Department Plans of action at the district level. DC will have the overall responsibility for validating the measurable changes in identified indicator related to CSR.

EVALUATION

The Scheme would be evaluated at the end of the 12th Five Year Plan to assess its impact and take corrective measures. Mapping of ultra-so nography machines, baseline survey of concurrent assessment of % age of births of male & female child, reporting of complaints under PC & PNDT act will also help in assessing the impact or outcome.

CONCLUSION

This scheme will have inclusive & sustainable approach regarding girl to women like to save girl & to enable & educate girl-women. All previous programmers of govt. was only concern to save

girl, not related to enable & educate girl. This scheme will have vital & curial role playing in sex-ratio, female- feticide, skill girl, empower girl & sustain women. Therefore scheme will have present to long goals like women reservation in centre & state legislature. Its promote balance of men-women and again men society to women society in 21th century.

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8. PM to Launch 'Beti Bachao, Beti Padhao' Programme from Haryana
9. PM Narendra Modi to launch 'Beti Bachao, Beti Padhao' programme from Haryana



JOB SATISFACTION AMONG NURSES: THEORETICAL MODELS

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ABSTRACT

The initial use of scientific management by industries greatly increased productivity because workers were forced to work at a faster pace. This theory explains that people seek to satisfy five specific needs in life – physiological needs, safety needs, social needs, self-esteem needs, and self-actualization. The way employees are rewarded or remunerated for the job they have performed. This approach became a notable explanation of job satisfaction in light of evidence that job satisfaction tends to be stable over time and across careers and jobs. Research also indicates that identical twins have similar levels of job satisfaction. Events that seem negative in manner will give rise to the feelings of stress or anxiety. Events that are positive give rise to the feeling of content or relaxation. According to this theory, all individuals will learn what their obligations and responsibilities for a particular function, over a time period, and if they fail to fulfill those obligations then they are punished. This theory also explains that if achievement of the obligations is obtained then the reward can be praise, approval, or love. These achievements and aspirations also form an abstracted set of principles, referred to as the ideal self guide. In the 21st century, it is common without satisfaction not job as well as not outstanding work at job place. Hence, needed, how to create & increase satisfaction level in job place in especially nurses in health institution.

KEYWORDS: Satisfaction, Profession, Management & Jobs

INTRODUCTION

Job satisfaction, a worker's sense of achievement and success, is generally perceived to be directly linked to productivity as well as to personal wellbeing. Job satisfaction implies doing a job one enjoys, doing it well and being suitably rewarded for one's work. The Harvard Professional Group (1988) sees job satisfaction as the keying radiant that leads to recognition, income, promotion, and the achievement of other goals that lead to general feeling of fulfillment. If job satisfaction is a worker benefit, surely the worker must be able to contribute to his or her won satisfaction and well-being on the job.

HISTORY OF JOB SATISFACTION

One of the biggest preludes to the study of job satisfaction was the Hawthorne studies. These studies (1924–1933), primarily credited to Elton Mayo of the Harvard Business School, sought to find the effects of various conditions (most notably illumination) on workers' productivity. These studies ultimately showed that novel changes in work conditions temporarily increase productivity (called the Hawthorne Effect). It was later found that this increase resulted, not from the new conditions, but from the knowledge of being observed. This finding provided strong evidence that people work for purposes other than pay, which paved the way for researchers to investigate other factors in job satisfaction.

Scientific management (aka Taylorism) also had a significant impact on the study of job satisfaction. Frederick Winslow Taylor's book, *Principles of Scientific Management* (1911), argued that there was a single best way to perform any given work task. This book contributed to a change in industrial production philosophies, causing a shift from skilled labor and piecework towards the more modern of assembly lines and hourly wages. The initial use of scientific management by industries greatly increased productivity because workers were forced to work at a faster pace. However, workers became exhausted and dissatisfied, thus leaving researchers with new questions to answer regarding job satisfaction. It should also be noted that the work of W.L. Bryan, Walter Dill Scott, and Hugo Munsterberg set the tone for Taylor's work.

Some argue that Maslow's hierarchy of needs theory, a motivation theory, laid the foundation for job satisfaction theory. This theory explains that people seek to satisfy five specific needs in life – physiological needs, safety needs, social needs, self-esteem needs, and self-actualization. This model served as a good basis from which early researchers could develop job satisfaction theories. Job satisfaction can also be seen within the broader context of the range of issues which affect an individual's experience of work, or their quality of working life. Job satisfaction can be understood in terms of its relationships with other key factors, such as general well-being, stress at work, control at work, home-work interface, and working conditions.

IMPORTANCE OF JOB SATISFACTION

The organization need to take note that a happy employee is a happy customer. 'The importance of human resources management in an organization, still pay less attention to the importance of job satisfaction. The way employees are rewarded or remunerated for the job they have performed: If the wages are according to their expectation, then it means that there is a sense of the job satisfaction: if wages is less then what the employees expect for the work they have performed, it result in job dissatisfaction.

MEASURES OF JOB SATISFACTION

The following are measures of job satisfaction as outlined by Fields (2002):

- **Overall Job Satisfaction** - Cammann, Fichman, Jenkins, and Klesh (1983) developed this measure as part of the Michigan Organizational Assessment Questionnaire (OAQ). In this measure three items are used to describe an employee's subjective response to working in the specific job and organization. (Fields, 2002, p. 20)
- **Job Descriptive Index (JDI)** - This was originally developed by Smith, Kendall, and Hulin (1969). There are 72 items on this index which assess five facets of job satisfaction which includes: the work, pay, promotions, supervision, and coworkers. Through the combination of ratings of satisfaction with the facets, a composite measure of job satisfaction is determined. Roznowski (1989) updated the JDI to include work atmosphere, job content and work technology. A shorter, 30-item version, was developed by Gregson (1990) based on 6 items which included work, pay, promotions, supervision and co-workers. (Fields, 2002, p. 23)
- **Global Job Satisfaction** - Warr, Cook, and Wall (1979) developed this measure which includes 15 items to determine overall job satisfaction. Two subscales are used for extrinsic and intrinsic aspects of the job. The extrinsic section has eight items and the intrinsic has seven items. (Fields, 2002, p. 27)
- **Job Satisfaction Relative to Expectations** - Bacharach, Bamberger, and Conley (1991) developed this measure. It assesses the degree "of agreement between the perceived quality of broad aspects of a job and employee expectations". It is most effective to determine how job stresses, role conflicts, or role ambiguities can hinder an employee from meeting job expectations. (Fields, 2002, p. 6)
- **Minnesota Satisfaction Questionnaire** - The long form of this survey is made up of 100 questions based on 20 sub scales which measure satisfaction with "ability, utilization, achievement, activity, advancement, authority, company policies and practices, compensation, co-workers, creativity, independence, moral values, recognition, responsibility, security, social service, social status, supervision-human relations, supervision-technical variety, and working conditions". There is a short version of the MSQ which consists of 20 items. This can also be separated into two subscales for intrinsic and extrinsic satisfaction. (Fields, 2002, p. 7)
- **Job in General Scale** - This measure was developed by Ironson, Smith, Brannick, Gibson, and Paul (1989). It consists of 18 items which describe global job satisfaction and can be used in conjunction with the JDI, which assesses satisfaction with five job facets. This was developed to "assess global satisfaction independent from satisfaction with facets". (Fields, 2002, p. 9)
- **Job Satisfaction Survey** - This was developed by Spector (1985) and contains 36 items based on nine job facets. The job facets include pay, promotion, supervision, benefits, contingent rewards, operating procedures, co-workers, nature of work and

communication. When it was initially developed, it was specific to job satisfaction in human service, nonprofit and public organizations. (Fields, 2002, p. 14)

- **Job Satisfaction Index** - Schriesheim and Tsue (1980) developed this measure. It consists of six items that form an index which determines overall job satisfaction. The items are the work, supervision, co-workers, pay, promotion opportunities, and the job in general. (Fields, 2002, p. 16)
- **Job Diagnostic Survey** - Hackman and Oldham (1976) developed this survey which measures both overall and specific facets of job satisfaction. There are three dimensions of overall job satisfaction which include general satisfaction, internal work motivation, and growth satisfaction, which are combined into a single measure. The facets which are measured on the survey include security, compensation, co-workers, and supervision. (Fields, 2002, p. 20)
- **Career Satisfaction** - Greenhaus, Parasuraman, and Wormley (1990) developed this measure. This is a measure of career success, as opposed to job satisfaction. It assesses general satisfaction with career outcome, but also satisfaction with career progress. (Fields, 2002, p. 29) Fields outlines specific types of employee satisfaction measures which describe an employee's satisfaction with one or more aspects of their job. These include the following (Fields, 2002):
- **Employee Satisfaction with Influence and Ownership** developed by Rosen, Klein, and Young (1986).
- **Satisfaction with Work Schedule Flexibility** developed by Rothausen (1994).
- **Satisfaction with My Supervisor** developed by Scarpello and Vandenberg (1987).¹

AFFECT THEORY

Edwin A. Locke's Range of Affect Theory (1976) is arguably the most famous job satisfaction model. The main premise of this theory is that satisfaction is determined by a discrepancy between what one wants in a job and what one has in a job. Further, the theory states that how much one values a given facet of work (e.g. the degree of autonomy in a position) moderates how satisfied/dissatisfied one becomes when expectations are/aren't met. When a person values a particular facet of a job, his satisfaction is more greatly impacted both positively (when expectations are met) and negatively (when expectations are not met), compared to one who doesn't value that facet. To illustrate, if Employee A values autonomy in the workplace and Employee B is indifferent about autonomy, then Employee A would be more satisfied in a position that offers a high degree of autonomy and less satisfied in a position with little or no autonomy compared to Employee B. This theory also states that too much of a particular facet will produce stronger feelings of dissatisfaction the more a worker values that facet.²

Dispositional theory

Another well-known job satisfaction theory is the Dispositional Theory. It is a very general theory that suggests that people have innate dispositions that cause them to have tendencies toward a certain level of satisfaction, regardless of one's job. This approach became a notable explanation of job satisfaction in light of evidence that job satisfaction tends to be stable over

time and across careers and jobs. Research also indicates that identical twins have similar levels of job satisfaction.

A significant model that narrowed the scope of the Dispositional Theory was the Core Self-evaluations Model, proposed by Timothy A. Judge, Edwin A. Locke, and Cathy C. Durham in 1997. Judge et al. argued that there are four Core Self-evaluations that determine one's disposition towards job satisfaction: self-esteem, general self-efficacy, locus of control, and neuroticism. This model states that higher levels of self-esteem (the value one places on his/her self) and general self-efficacy (the belief in one's own competence) lead to higher work satisfaction. Having an internal locus of control (believing one has control over her/his own life, as opposed to outside forces having control) leads to higher job satisfaction. Finally, lower levels of neuroticism lead to higher job satisfaction.³

OPPONENT PROCESS THEORY

According to opponent process theory, emotional events, such as criticisms or rewards, elicits two sets of processes. Primary processes give way to emotions that are steady with the event in question. Events that seem negative in manner will give rise to the feelings of stress or anxiety. Events that are positive give rise to the feeling of content or relaxation. The other process is the opponent process, which induces feelings that contradict the feelings in the primary processes. Events that are negative give rise to feelings of relaxation while events that are positive give rise to feelings of anxiety. A variety of explanations have been suggested to explain the uniformity of mood or satisfaction. This theory shows that if you try to enhance the mood of individual it will more likely fail in doing so. The opponent process theory was formulated to explain these patterns of observations.⁴

EQUITY THEORY

Equity Theory shows how a person views fairness in regard to social relationships. During a social exchange, a person identifies the amount of input gained from a relationship compared to the output, as well as how much effort another person's puts forth.⁵

Equity Theory suggests that if an individual thinks there is an inequality between two social groups or individuals, the person is likely to be distressed because the ratio between the input and the output are not equal.⁶

For example, consider two employees who work the same job and receive the same benefits. If one individual gets a pay raise for doing the same or less work than the other, then the less benefited individual will become distressed in his workplace. If, on the other hand, one individual gets a pay raise and new responsibilities, then the feeling of inequality is reduced.

DISCREPANCY THEORY

The concept of self-discrepancy theory explains the ultimate source of anxiety and dejection. An individual, who has not fulfilled his responsibility feels the sense of anxiety and regret for not performing well, they will also feel dejection due to not being able to achieve their hopes and aspirations. According to this theory, all individuals will learn what their obligations and responsibilities for a particular function, over a time period, and if they fail to fulfill those obligations then they are punished. Over time, these duties and obligations consolidate to form an abstracted set of principles, designated as a self-guide.⁷

Agitation and anxiety are the main responses when an individual fails to achieve the obligation or responsibility. This theory also explains that if achievement of the obligations is obtained then

the reward can be praise, approval, or love. These achievements and aspirations also form an abstracted set of principles, referred to as the ideal self guide. When the individual fails to obtain these rewards, they begin to have feelings of dejection, disappointment, or even depression.⁸

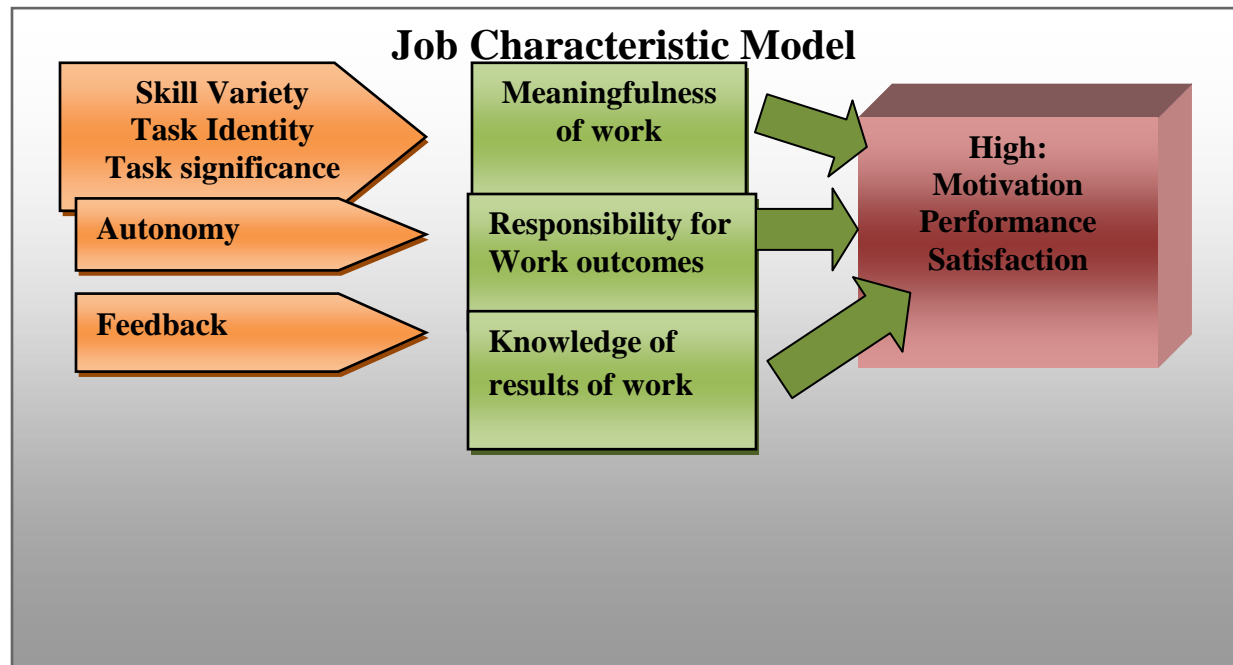
Two-factor theory (motivator-hygiene theory)

Frederick Herzberg's Two-factor theory (also known as Motivator Hygiene Theory) attempts to explain satisfaction and motivation in the workplace. This theory states that satisfaction and dissatisfaction are driven by different factors – motivation and hygiene factors, respectively. An employee's motivation to work is continually related to job satisfaction of a subordinate. Motivation can be seen as an inner force that drives individuals to attain personal and organizational goals.

Motivating factors are those aspects of the job that make people want to perform, and provide people with satisfaction, for example achievement in work, recognition, promotion opportunities. These motivating factors are considered to be intrinsic to the job, or the work carried out. Hygiene factors include aspects of the working environment such as pay, company policies, supervisory practices, and other working conditions.

While Hertzberg's model has stimulated much research, researchers have been unable to reliably empirically prove the model, with Hackman & Oldham suggesting that Hertzberg's original formulation of the model may have been a methodological artifact. Furthermore, the theory does not consider individual differences, conversely predicting all employees will react in an identical manner to changes in motivating/hygiene factors. Finally, the model has been criticized in that it does not specify how motivating/hygiene factors are to be measured.⁹

JOB CHARACTERISTICS MODEL



Hackman & Oldham proposed the Job Characteristics Model, which is widely used as a framework to study how particular job characteristics impact on job outcomes, including job satisfaction. The model states that there are five core job characteristics (skill variety, task

identity, task significance, autonomy, and feedback) which impact three critical psychological states (experienced meaningfulness, experienced responsibility for outcomes, and knowledge of the actual results), in turn influencing work outcomes (job satisfaction, absenteeism, work motivation, etc.).¹⁰ The five core job characteristics can be combined to form a motivating potential score (MPS) for a job, which can be used as an index of how likely a job is to affect an employee's attitudes and behaviors. A meta-analysis of studies that assess the framework of the model provides some support for the validity of the JCM.¹¹

Motivating Potential Score

The motivating potential score (MPS) can be calculated, using the core dimensions discussed above, as follows;

$\text{MPS} = \frac{\text{Skill Variety} + \text{Task identity} + \text{Task significant}}{3} \times \text{Autonomy} \times \text{Feedback}$
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Jobs that are high in motivating potential must be high on at least one of the three factors that lead to experienced meaningfulness, and also must be high on both Autonomy and Feedback. If a job has a high MPS, the job characteristics model predicts that motivation, performance and job satisfaction will be positively affected and the likelihood of negative outcomes, such as absenteeism and turnover, will be reduced.¹²

MEASURING JOB SATISFACTION

There are many methods for measuring job satisfaction. By far, the most common method for collecting data regarding job satisfaction is the Likert scale (named after Rensis Likert). Other less common methods of for gauging job satisfaction include: Yes/No questions, True/False questions, point systems, checklists, and forced choice answers. This data is sometimes collected using an Enterprise Feedback Management (EFM) system.

The **Job Descriptive Index** (JDI) is a specific questionnaire of job satisfaction that has been widely used. It measures one's satisfaction in five facets: pay, promotions and promotion opportunities, coworkers, supervision, and the work itself. The scale is simple, participants answer either yes, no, or can't decide (indicated by '?') in response to whether given statements accurately describe one's job.¹³

A related scale is the **Job in general index**, which asks employees how satisfying their job is in a broad overall sense. In certain situations, it can be more useful than the JDI because rather than focusing on individual facets, it asks about work satisfaction in general.

Other job satisfaction questionnaires include: the Minnesota Satisfaction Questionnaire (MSQ), the Job Satisfaction Survey (JSS), and the Faces Scale. The MSQ measures job satisfaction in 20 facets and has a long form with 100 questions (five items from each facet) and a short form with 20 questions (one item from each facet). The JSS is a 36 item questionnaire that measures nine facets of job satisfaction. Finally, the Faces Scale of job satisfaction, one of the first scales used widely, measured overall job satisfaction with just one item which participants respond to by choosing a face.

CONCLUSION:

We draw attention through this paper, Job satisfaction is prevalent issue throughout world in the field of health care especially Nurses. Most of institutions at world level to local level promoting

job satisfaction through various factors which specially specified in cited models in different era or place. In the 21st century, it is common without satisfaction not job as well as not outstanding work at job place. Hence, needed, how to create & increase satisfaction level in job place in especially nurses in health institution.

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PARTICIPATION OF SUBALTERN IN QUIT INDIA IN ORISSA WITH REFERENCE TO CUTTACK DISTRICT

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ABSTRACT

Orissa, situated in the eastern coast of India has been the linkage amongst the north and south. It was renowned for naval trade having a vast region of the country as hinterland. East India Company made its presence felt in Orissa when it came to Hariharpur and obtained consent from the ruler for free trade. Due to firm native hostility they went out to a port site at Pipili on Balasore. There also they faced the same local antagonism which bound them to procurement the present site of Calcutta. Thereafter, the East India Company occupied Oriya speaking tracts and it was tri-sected to append to the then Bengal, Madras and Central province territories by 1803. In the early nineteenth century, the first generation of English educated Oriyas participated in the British administration. Ruling Chiefs of the princely States and landed aristocrats patronized art and literature and for amalgamation of all Oriya-speaking tracts under a single administration. Thus, started the Utkal Union Conference in 1903 under the able leadership of lawyer Madhusudan Das Liberals, having lost their faith in the Congress, concentrated in the Oriya movement to translate their dreams for a united Oriya speaking tract. Gopabandhu Das started an open-air school, as a residential institution, to teach boys in modern education with patriotic commitment. Besides education, the students were to undertake relief work and other social reform ventures. Gopabandhu and his associates linked the mainstream of struggle under the guidance of Gandhiji in 1920 at the Nagpur session of the Indian National Congress when it decided in principle for linguistic reorganisation of provinces. During Second World War in the coalition Government of Orissa, poet-patriot Godavarish Mishra spread higher education in Orissa. People in princely States revolted alongside the inhuman oppression to suppress peoples' democratic aspirations. The freedom fighter Hare Krushna Mahatab who was a maker of modern Orissa and became the Prime Minister of Orissa in 1946

KEYWORDS: Hostility, aristocrats, oriya, coalition, freedom struggle, princely states etc.

INTRODUCTION

The freedom movement of India forms an important epoch in the annals of history. After the failure of the Cripps Mission, Mahatma Gandhi got his famous 'Quit-India Resolution' passed in the Wardha session of the Indian National Congress, which was finally approved by the All India Congress Committee in Bombay on 8th August, 1942, which gave authority to Gandhi to start a non-violence mass movement asking the British to refrain from India forth with. In no time the movement spread the wildfire in every nook and corner of the country including in those of Orissa.

Following Gandhiji's declaration, hundreds and thousands came out in procession, defying the police authorities. Each man, women and child began dreaming of a liberated India. The government's response to the movement was quick and Congress was banned and most of its leaders were arrested before they could start off mobilizing the people. British Government could not keep give up and they decided that a few hundred few people should be killed, so that others would be frightened and their moral will break up. Actually this heinous plan was put into action and a few hundred innocent people were shot down. Hundreds were huddled together inside jails and began to be tortured. Some of them died inside the prisons. The administration was naturally afraid that when this sorry state of affairs would be known outside Orissa, the Government would be condemned. So to justify their action they started a conspiracy case which said that to overthrow the legally constituted Government of the land, the people of Koraput started violent agitation under the leadership of Laxman Naik. In a certain place a forest guard was murdered and a false case was started against Laxman Naik, with a charge of murder. There was a security prisoner. In this connection it will not be out of place to mention that through hundreds of fighters were shot down during the Quit India movement, only two persons were hanged. One was Laxman Naik, an Adivasi of Koraput and the other one is Himu Kalyani, a College student of Sindh who was charged with removing a fish plate from the railway track.¹ Koraput it is a tribal dominated area, where peoples living standards too much backward also they are uneducated. In 1942 nobody ever expected that the tribal of Koraput would be so enthused that they would declare 'Independence' in that area.²

Women in Orissa, like their male counterparts, took active part in the Quit India movement. Along with other prominent leaders of the Congress, Rama Devi was taken into custody on 9th August at Cuttack. The other leading personality of the period was Malati Choudhury, who attained the AICC conference at Bombay on 8th August. She was a close associate of Surendranath Dwivedy and a founder member of the underground movement in Orissa. There, it was decided to launch the under ground movement against the British by hoodwinking the police. Malati Choudhury, who was present in the meeting, also endorsed the proposal. But it was considered desirable for Malati Choudhury to court arrest in Orissa, as the confinement of a lady of her stature was sure to incite public opinion against the British. Malati Choudhury and Surendranath Dwivedy left Bombay for Orissa on the evening of 9th August 1942. To avoid arrest at Cuttack railway station, they got down from the train Madras Mail, which they boarded at Vijaynagaram to Bhubaneswar. They could manage to reach in disguise the residence the residence of Bhubanananda Das, who was then a noted political figure of Orissa. There they took shelter at night. But it is not considered safe to prolong their stay at Bhubaneswar because of heavy police surveillance, the next day both of them set out for Cuttack secretly, river Kathjori was in spate then at night both of them crossed the same in a small country boat. It was a daring

adventure. The furious sound of the gushing water of the river during the nocturnal escape did not dampen the spirit of the freedom fighter.

“Durgama Giri Kantare Maru Dustar

Parabare hae, Laghita Habae hae

Ratri Nishite

Jatrira Husiar³

It's meaning inaccessible mountain, jungle, desert and the indomitable ocean are to be crossed over at the dead of the night, Adventurist! Be aware!!

This particular stanza reflects her courage and unflinching conviction. She identified herself with the adventurer committed to overcome the hurdles for the nationalist cause. She became a perfect role model of bravery and dedication. Malati Devi reached her Bakhrabad residence in Cuttack district and the very next day morning she was arrested while proceeding to address a public meeting at the college square, Cuttack. When the police came to arrest her, she bluntly refused to court arrest and demanded lady police personnel. It was a departure from the usual practice that the satyagrahis believing in Gandhian creed, never hesitated to court arrest. But here a different drama was enacted and finally she was taken into custody. This incident created a tremor. The arrest of a lady of her stature created a great deal of excitement in the town and inflamed the public opinion in Orissa against the British. She was the chief guiding spirit in most of the revolutionary movements in Orissa. With her arrest, there had been augmentation of the August Revolution in this province. Nandini Devi, firebrand schoolgirl of twelve years (born in 1931) entered into the fray of the Quit India Movement. It was the natural impulse, the call from within that prompted her to work for the emancipation of the motherland from the shackles of the imperialist bondage. Finding her on the forefront of an anti-British procession during the August Revolution, police arrested her along with other activists at Cuttack and dropped them in the thick of the Chandaka jungle, which was then a dense forest. The courageous young revolutionary could walk down the distance to Cuttack in the evening. The Congress ashram at Bari, which had developed into a prominent centre of their activities in the district of Cuttack, was declared unlawful and attacked by the women workers and trainees, who were associated with the ashram; they were arrested on their refusal to relinquish the place. Those taken into custody were Godavari Devi, Usha Devi, Priyambada Devi, Harmani Devi, Harapriya Devi, Susila Devi, Malati Devi, Kiran Devi and others. On 16th August, when the effort was made to reoccupy the ashram, Mangala Devi and some other women Congress workers were arrested for their active participation in the incident. In an attempt to free the ashram, the lady activists were taken into custody while setting fire to the seized properties and the police uniforms. On 21st August, Priyambada Devi and Godabari Devi were arrested.⁴

Annapurna Moharana undertook extensive tours in the interior of the Cuttack district and addressed a number of public meetings with the intention of mobilizing the masses against the British. On 26th August, at Kaipada, thousands of people became aggressive and tried to overpower the police party to release their arrested leaders. The police opened fire and four persons lost their lives on the spot. Kaliamatia and many more were injured. In Jagatasinghpur, Balikuda and Tirtol areas, the movement took a violent form largely because of her involvement.

Finally she was arrested and was confined to Cuttack jail. In Ersama area, a lady activist's Bela Dei among others was arrested for inciting the people against the Government. Sashibala Devi, wife of the noted freedom fighter Binod Kanungo helped in the distribution of secret bulletins, pamphlets, and instructions issued by the underground organization from Cuttack.

During the Quit India Movement in Orissa, many women satyagrahis courted arrest and were lodged in different jails. At that time, the Cuttack jail hosted women freedom fighters like Rama Devi, Malati Devi, Sunamani Devi, Priyambada Devi, Harapriya Devi, Sushila Devi, Mangala Devi, Godavari Devi, Sobharani Panda, Sashibala Kanungo, Khetramani Devi, Usha Devi, Haramani Devi, Bimala Devi, Bilasi Devi, Bela Devi, Kiran Lekha Roy, Sakuntala Mohanty, Uttara Choudhury and others. The women contributed to the freedom struggle not only by directly participating in it, but by giving strong moral support to their family members who took part in the movement. In the absence of the activists from their families either to render some service in a far off place or abscond to avoiding arrest, the entire responsibility of managing the family used to fall on the womenfolk. Their plight was all the more irritating because of the frequent visit of the police to ascertain the whereabouts of the activists. They had to muster sufficient courage to endure the atrocities of dreaded police personnel during the process of bizarre interrogation. The suppression of truth and facts was certainly a very difficult proposition and this unpleasant work had to be rendered by our women folk. Many a time, they were subjected to the harassment of physical, mental or financial nature by the police. It is interesting to note that the women participation had increased gradually during the course of the freedom struggle. The women folk in tribal and rural areas along with their urban counterparts were also mobilized to action during the August Revolution. Women in Orissa, though illiterate and backward, made valuable contribution for the success of the movement. It was a saga of bravery and dedication⁵.

The nationalists of Bengal corresponded with their counter parts in Orissa. A few lines from a letter may well speak of it; "Dear Revolutionary and Congress agitating boy and girl students, it is certainly your desire to achieve independence in future. Such a vast country will gain independence as Mahatma Gandhi started this movement and dared to bring a revolution depending entirely on you. This is the Golden opportunity for you... Hold meeting daily in every village and invite the mass to the extreme a result of which the blood in them will boil and simultaneously they will be thirsty for British blood. Then only you will get independence. In doing this if few women are killed it will give a stimulus to the excitement. This will be your advantage. Try your best to pursue the police, the Indian Army, the ARP coolies and the railway employees to go on strike ... So we are not afraid of death or going to jail and try to keep up the prestige of the Congress. If this movement ends in failure the whole world will laugh and spite at us. Begin your terrible oppression as a result of which entire India will shiver in your name.

"Do or Die

Do or Die

Yours,

One determined to do and die."⁶

On 16th August 1942 Mangala Devi was arrested along with twelve women while burning the uniforms of choudidars and police officers. Afterwards, Priyambada Devi and Godavari Devi were arrested on 21st August 1942. In the district of Cuttack there was a case of firing at Kaipada. The post office was burnt by the mob. The Deputy Superintendent of police Sri Laxman Mishra reached at Kaipada to arrest the leader. Since the crowd stood adamant without heeding the order of the police party, the firing was ordered. The result was that four person's fall victim to it and 25 persons were injured. The names of the deceased were Mayadhar Bhuyan, Shanti Malik, Sananda Bhuyan and Hadibandhu Pahidi Samal. Then, the Additional District Magistrate with the help of some anti-socials forcibly took out ornaments from the women and realized a collective penalty of Rs.5000/-. He demolished the Seba house, Khadi store and many other houses at Bari. The people fled out of the village due to the atrocities committed by these goons.

A mob of concerning five hundred set fires to the barracks attached to the Ersama Police Station and also set fire to the records in the Police Station itself (Which is a pucca building). The same crowd burnt the Post Office at Ersama collectively with its records. The Public Working Department (P.W.D) Rest House, the Canal Revenue Tahsil Office and the Quarters of the Canal Revenue Tahsildar and patrol at village Sahrura (Police Station Tirtol) were gutted down. Apparently, five rails were removed from the railways track between Meramandoli and Talcher on the night of the 6th September resulting in the derailment of the engine of a goods train, also nine telegraphs posts were also pulled down at the same spot.⁷ On 8th September afternoon, a batch of about 200 to 300 students, including a few girl students took out a procession in the Cuttack General Hospital campus, mobbed a professor and the Superintendent of the Hospital that resulted in trespassing the nursing sisters hostel with a view to persuading the lady students to join them. The assembly had to be dispersed by a mild lathi charge after the refusal of the boys to leave the place. The students of some of the institutions including Ravenshaw College were trying their best to augment troubles for the administration but with little success. Several hand written posters were pasted in different parts of the town containing exhortations to Government officers to resign their posts and thus helped the Quit India Movement. The town Inspector was reported to have received an anonymous threat that he would be killed by some revolutionaries in broad day light. The District Magistrate in this connection writes "I understand he is not the first public servant to receive such a threat, and I do not think he is in any greater danger than other recipients of similar threats." During this period, the Jail of Cuttack was filled with women satyagrahis like; Rama Devi, Malati Devi, Sunamani Devi, Priyamabada Devi, Mangala Devi, Godavari Devi, Susila Devi, Kshetramani Devi, Usha Devi, Uttara Choudhury, Haramani Devi, Basant Kumari Parida, Bimala Dutta, and Radhamani Devi Rajiha Mallick, Rajiha Routm, Sashibala Dei and Subhadra Devi.⁸

Incidentally, in the early hours of 9th August in a single sweep all the top leaders of the Congress were arrested and taken to unknown destinations. This marked the beginning of the Quit India Movement with spontaneous outburst of the leaderless masses. As in other parts of India, the tremors of the movement were also felt all over Orissa. Top leaders of the province were rounded up. By an announcement in an extraordinary issue of the gazette on 9th August, the Orissa Government declared the Congress organizations at various levels within the province as unlawful and took possession of their respective offices. The sweeping government actions left the leaders unprepared and surprised the leaderless masses whose initial reaction was mild. During the first phase the movement erupted in Cuttack, Puri, Balasore, Koraput and Sambalpur

districts. It was urban-based and hartals, strikes, burning and protest marches comprised the main form of activities. There were a few acts of violence as the clashes with the police were few. The students of Ravenshaw College led by Bhagirathi Mishra, Upendra Mohanty, Narasingha Tripathy, Biren Mitra, Durgacharan Mohanty and Manmohan Mishra organised public meetings to condemn the Government's arrest of the Congress leaders and exhorted the students to lend whole-hearted support to the Congress movement. On 10th, 11th and 13th there were public meetings outside the premises of Ravenshaw College and most of the prominent leaders were arrested for making objectionable speeches. On 15th August 1942, agitated by the arrest of their leaders, the students forcibly entered the college offices and laboratories and burnt the records and furniture. The prominent leaders were arrested and most of the educational institutions in the town were closed.

Giving his evaluation of the political situation in Orissa for the week ending 15th August 1942, the Superintendent of Police, Special Branch Orissa wrote; "The Government measures against the Congress have so far had no serious repercussions in this province. With their leaders arrested unexpectedly local Congress workers are uncertain about the policy to adopt and some time will be sent on deliberation before any concerted programme is developed and put into action. There have naturally been demonstrations such as partial strikes in schools hastily arranged protest meetings at which some abhorrent speeches have been made, temporary and partial hartals at one or two places and threatening posters passed on the walls surreptitiously, but all have been on a small scale and confined to the larger towns. The people in the interior districts have not grasped what is going on". But roughly from 15th August onwards the focus of political activities started shifting towards the countryside and smaller towns. In order to avoid arrests the students escaped to the countryside. Moreover, the Government itself had shut down all schools and colleges as a part of precautionary step because it was expecting further spread of the movement with the schools and colleges as hostile centers.⁹ The Quit India movement was most widespread in the district of Cuttack. The masses were so stirred that in Jajpur Sub-division alone there were Seventy one revolutionary cases in one week during the month of August and these included twenty-six cases of burning of police uniforms, six cases of arson in Canal Revenue Offices, four Post Offices, five Excise Shops, six *Zamindari Kutcheries* and four P.W.D. Bungalows respectively.

The Congress *ashram* at Bari which had been the centre of intense activity during the Non-Cooperation and the Civil Disobedience movements had been declared illegal and its properties attached by the government immediately after the passing of the Quit India Resolution. On 16th August, some Congress volunteers attacked the policemen kept in charge of the *ashram* and set fire to the properties captured by the police. More than 600 licensed guns were seized and Muslims from Cuttack and Puri were appointed in the police department to deal with the agitators. The Post offices in Kaipara (17th August), Kuanpal and Balichandrapur (22nd August) were attacked by mobs often numbering hundreds and the records and furniture were burnt. The Canal Revenue Offices at Bari (16th August), Dharmasala (20th August) Neulpur and Dasarathapur (22nd August) were set on fire and the P.W.D. Bungalows in Rampa (18th August) and Gopalpur (21st August) also met the same fate. On 22nd August the records of the Tahsil Office at Balichandrapur and Arai were burnt and the embankments of canals in Akhuapada, Cuttack. Telegraph and telephone wires were disconnected at several places and electric poles were uprooted subsequently in Zobra and Hadisahi on 27th August, Barang on 22nd August and Jenapur on 28th August.

On 26th August, a police party escorting prisoners in Binjiharpur Police Station jurisdiction was attacked by a mob of three thousand. One among the crowd is reported to have struck the Deputy Superintendent of Police with a lathi. The DSP fired a revolver shot at the man who dropped down dead. Firing was ordered soon after. In all 21 rounds were fired. The causally according to the police report amounted to one dead and 12 injured.¹⁰ Defence organisations were started by the people in different places in the district with the objective of self-protection against police oppression. A batch of youngmen of the village Bagalpur in Govindpur Police station led by Gourang Charan Das trained themselves in lathi in order to fight the police in the event of the arrest of the Congressmen. Organisations like '*Rakta Bahini*' (Blood sacrificers) and '*Marana Bahini*' (Death squads) were formed by the young men of Batimura village with the object of combating the police and to organise cutting of roads, telegraph and telephone wires and demolition of bridges. On 27th August, the prohibition against processions and assemblies by the defiance of administration, Congress leader led by Padmanav Ray proceeded from the Jajpur town towards the police station in order to capture the S.D.O.'s office. The police party was taken aback at the sight of 30,000 strong crowds. Since telegraph wires had been cut there was no hope of any reserve forces coming to their assistance. Luckily for the police, an aero plane flew a little over the scene and started machine gunning from the air. The crowd was dispersed, but nearly half of them reassembled again and on their way back burnt all government buildings. A punitive tax of rupees six thousand was imposed on the neighboring villages.¹¹ During the first week of September, the post offices and police stations at Ersama, Tirtol and Jagatsinghpur were burnt down. Some of the Congress workers also moved about in the coastal areas telling the people that the Japanese would attack India from that side and that they would like men who would kill officials and government properties destroy by fire.

In the Angul Sub-Division of Cuttack on 7th September, a group of people attacked a police party, rescued the arrested Congress leaders and injured the Magistrate and some police men. Elsewhere, in Kendrapara Sub-Division Post Offices, Canal Revenue Offices and PWD bungalows were burnt. Armed with *lathi* a horde of three thousand attacked a police party, as a consequence, the police opened fire and in the commotion one person was killed on 26th August. In Orissa, they organizing the underground activities and coordinating the branch offices in different districts, Surendra Nath Dwivedy, who evaded arrest while coming back from Bombay on 9th August, played a conspicuous role. Making his friend Mathura Nanda Sahu's home in Alisabazar the central office for providing directions and bringing out Congress bulletins, Dwivedy till his arrest on 13th October 1942 had set up a well-established network of underground organization even linking it with the underground organizations in Bihar and Bengal.¹²

The bulletins circulated mostly by the students were issued to let the people know about what all was happening in and outside the province and to exhort the students, policemen, merchants and the general public to play their part in this supreme effort to achieve independence. Appeals were made to the Government servants to give up slavery (often with threatening letters to their person) and to the villagers to establish *panchayats* and to refrain from paying fines. Directions were also provided in the bulletins on how to disarm and overwhelm the police parties. Giving a brief description of happening in other parts of India, a bulletin 'The Final Revolution for Independence of India' read;

“...Dear friends, let us not spare the British who have sucked our blood so long, and let their blood be dropped at least one day in India. There is no time, let us awake. Let all the government offices be burnt. Let telephone and electric wires be cut. Let treasuries be looted and poor paid the money. Then thousands of people will follow. Then we will get rid of the Government. Let cars be detained and sahibs (Europeans) be assaulted by night. There is none to order you to work. If anybody wants to do well to his motherland, let him die. Only Goddess Bhagavati can help us. Long live this revolution. If anyone is asked to leave his job for the sake of his motherland and he does not obey then let him be killed...”¹³

Another bulletin addressed to the people of Cuttack read:

“The population of Cuttack, will you keep aside from this great sacrifice? Don’t delay and plunge into this high tide with firmness and courage. Paralyse government administration. Burn records of police stations, courts and other offices. Sabotage telegraph, telephone and railway communications, uproot the posts. Demolish railway stations and drag your brothers – Police, Deputy Magistrates and Clerks from the slavery of the enemy. Don’t sell anything to those who are helping the Government. Let the atmosphere created by you spread to the muffasil...”¹⁴ To the fellow countrymen in the Government services an appeal read:

“Comrades! The zero hour has struck. You have heard Mahatma Gandhi’s call. The liberation of our motherland is at hand and Mahatma Gandhi wants you to play a heroic role... will you not respond to this call? Your interests lie entirely with you own men not with a few English masters who will leave you as soon as their interest is gone. The posterity will not forgive you when it will know that a tottering foreign administration survived only with the support of a few Indian officers if it survives at all! ... In the name of India and its teeming millions who bravely face bullets today for the cause of our own liberation. I appeal to you to play a noble part. Decline to obey immoral orders. Resign Government service at once. Declare yourselves free. Recognise no other authority except the Indian people.”¹⁵ Although the Government records mention about the wide circulation of these bulletins and the existence of a widespread network of underground organization in Cuttack and Balasore districts, it does not mention any direct involvement of the underground leaders in the subversive activities. However, as evident from the letters of the B.O.’s (Branch Offices) to the C.O.s (Central Office) the leaders actively participated in the destructive activities atleast at places like Basudevpur, Govindpur, Ersama, Tirtol and Jajpur etc.

The basic objective of this movement was to bring pressure on the British Government to Quit India. Therefore, the masses disrupted the communication network as an effective step to handicapped the government. The crowd made a bonfire of furniture, forms and records of the post offices and in some cases cut the telephone lines and looted cash and stamps. However, no harm was done to the staff working in the offices. The attempts to destroy the public buildings and government offices and to hoist the Congress flag on them sometimes resulted in police-mob scuffles and firings. As in other parts of the country, the students of Orissa in general, of the Ravenshaw College in Cuttack in particular took the leading part in the 1942 uprising. With the senior Congress leaders behind the bars the students of Ravenshaw College and Academy School assisted Surendranath Dwivedy in organizing the underground activities in the province. The importance of the role of the students was also admitted by the government. The students were

influenced to a great extent by an appeal of the local Congress through a leaflet which read as follows:

“Live dangerously’ ought to be the motto of every young man of India. Live a life to the fullest and best effect. The nearer the bone, the sweeter the meat, apparently the best of live lies nearest to the edge of death, so be up and doing, and the Congress has sent its clarion call. Mahatmaji is jail rotting in a British dungeon. It is up to you young sons of India to take up arms and march abreast. No young man is worth his salt, who hesitates and falters. Remember the battle of Balasore and the hour has struck to leap the parapet.

Rise like lions after slumber

In unvanquishable number”¹⁶

Industrially backward, there were not many labour strikes in the province. However, the labour was sympathetic towards the Congress cause. On 12th August, about 300 labourers working on the aerodrome at Choudwar struck work for few hours as a protest against the arrest of the Congress leaders. The women’s participation was evident in the initial phase of the movement confined to the urban areas. But as the movement started shifting towards the countryside active women’s participation ceased to exist due to the eruption of violence. Their activities remained limited to the constructive programmes of the Congress.¹⁷

There is no doubt that the Quit India Movement of 1942 had tremendously contributed the India’s independence. The movement certainly failed to end the British Rule in India; but it did reflect, on the other hand, the anger of the people and their capacity to strike a severe blow at the government and exposed the limitations of the government forces in handling such a popular upsurge. It became clear that the government would not be able to suppress another movement of such magnitude with the forces available to it. In a sense it was a clear indicator for the British to look for an honorable withdrawal. Further, the Quit India Movement involved unprecedented and unparalleled mass participation. It marked the culmination of the nationalist movement. It was fought on the principles of Gandhian non-violence but at the same time witnessed mass violence. Such a shift from non-violence to violence has been elaborately explained by Maulana Azad. It was primarily due to the arrest of Gandhiji and other Congress leaders which allowed the people free to adopt any method to oppose the violence of the government in every possible way. Otherwise, the movement would have developed strictly according to Gandhiji’s instruction.¹⁸ In the Quit India Movement, Koraput, Sambalpur, Puri, Balasore districts played a significant role. Eram in Balasore district became a historic place in the Quit India Movement is called Mini Jalianwala Bagh Massacre.

Quit India Movement in Cuttack District

Quit India movement is a most remarkable event in India’s struggle for freedom. There is no doubt that it makes most prominent impact on the Orissa. A look at these crucial years not only reveals the widening of the gulf between the colonial state and Indian People but also an awareness of agency that was infused by the revolutionary spirit of the times. The Quit India Movement was not confined to urban centre and the elite. It reached the rural areas and the common people. Quit India Movement began all over the country in August 1942. People spontaneously joined hands to give a final blow to the British imperialism.

The Quit India Movement in Cuttack district assumed a proportion of great magnitude. In this district, the Satyagrahi participated in the movement and attained success in varying degree. If the movement was of remarkable success in Cuttack district, behind it also lay certain factors. There were many causes and attributes, which led to Quit India Movement. The British government without consulting the Indians declared India as warring nation on behalf of the British. It was realized that the presence of Britishers in India was an open invitation to the Japanese to invade India. It was in Bombay session of the AICC on August 8, 1942 the famous Quit India resolution was passed¹⁹. This struggle was a heroic tale of unarmed combat of the common people of India against the mighty British Empire. In this movement, the people of Orissa demonstrated an unequalled heroism. Moreover the repression they faced was the most brutal. The British Government had taken the draconian measures and suppressed even the basic liberties. Linlithgow in December 31, 1942 described the Quit India Movement as by far the most serious rebellion since that of 1857.

The Quit India Movement in Cuttack District and that of Balasore assumed a great significance. Here too some Satyagrahis died in police firing. If the movement was of remarkable success in Cuttack district, behind it lay several factors contributing to its success. One such was the measure adopted by the British Government to repulse the possible attack of Japan. Cuttack being a coastal district, the government adopted all precautionary measures such as removal of all types of vehicles 20 miles inland from the coast. This measure plunged the people into immense suffering. There was yet another factor Cuttack city had been the capital of Orissa from age to age and as such it had been the beehive of political activities. Especially it was during the freedom struggle that it figured prominently as by and large all the programme and policies were circulated from here. Furthermore, most of the leaders of All-India Congress Committee had come to Cuttack to preach the messages of Mahatma Gandhi in the wake of the movement. Another factor also worked for giving the Quit India Movement a great push in Cuttack district. That was the initiative of the student mass. When the people could not decide the course of action due to unexpected arrest of the front-line leaders, the students came forward to inspire the people and give them the guidance at that critical juncture. As Cuttack was the administrative Head Quarters of the British Government in Orissa, a number of Educational institutions sprang up in Cuttack city. And the students of all such institutions indeed played momentous role in creating enthusiasm and zeal among the people of Orissa in general and Cuttack district in particular.

It was on 9th August, 1942 at 12 noon, the leaders i.e., Gopabandhu Choudhary, Nabakrushna Choudhary, Rama Devi, Bhagirathi Mohapatra and Nityananda Kanungo were arrested at Cuttack town by the town police. Somewhere else in Cuttack district, Monmohan Choudhury, Surendranath Pattanaik, Muhammad Atahar, Baikunthanath Mohanty, Sudhir Chandra Ghosh and Krupasindhu Panda were arrested on that day. The Congress institutions were declared unlawful by the Home Department of Orissa institutions like Provincial Congress Committee office, Swaraj Ashram of Cuttack, the district Congress committee office, Bari Sevashram of Binjhar police station, Angul Congress office, Chauliaganj Congress office, Budhapankha Congress office, Angul, Rahama Ashram, Tirtol, Paniola Ashram, Angul, Taramadan Ashram, Jaipur, Alaka Ashram, Jagatinghpur, Kendupatna spinning centre, at the residence of Harekrushna Mahatab in Cuttack town were seized and sealed by the police on 9th August, 1942. All those actions of the British Government to combat the Congress Propaganda shocked the

people of Cuttack district. So from next day that is from 10th August, 1942 the storm of the movement burst with all force and fury.²⁰

COMMOTION IN CUTTACK TOWN

In a sense the Quit India Movement in Orissa was unfolded by the students of Cuttack town on 10th August, 1942 with a meeting held at 1 p.m. just outside the gate of Ravenshaw College. Bhagirathi Mishra and Upendra Mohanty addressed the meeting. There they criticised the government strongly for arresting the leaders and urged upon the students to join hands with the people in the movement. They were asked to boycott the schools and colleges. The first meeting of the Quit India Movement in Orissa was a tremendous success. Meanwhile on 11th August, 1942, Surendranath Dwivedy coming from Bombay session of Indian National Congress arrived at Cuttack and Malati Choudhary arrived next day. Their arrival surcharged the political atmosphere of Cuttack town with rebellious spirit. Since all important leaders of the movement were put behind the prison bar, Surendranath Dwivedy working as the underground leader of Orissa guided the movement from Cuttack by sending instructions to different places. And all those were conveyed to the people in a number of bulletins that he issued. One such Bulletin contained an appeal to the police to give up their service and not to take action against the Congress revolutionaries. In another bulletin, he appealed to the public to destroy all communications and Government records, carry on campaigns against payment of taxes, seize police weapons, and burn therein uniforms. In another bulletin he called upon the youth of Orissa to 'let a river of blood flow'. Receiving the instructions from the top through Calcutta he was guiding the movement. In fact, he became the hero of the hour. Government tried to arrest him but failed. Meanwhile in response to the decision taken in the meeting of 10th August 1942, the students of Ravenshaw College, Cuttack observed strike on 11th August 1942. It was a brilliant success. According to police report nearly 75 percent of students abstained themselves from attending the college on that day. It was on 12th August 1942 that a meeting of the students of Ravenshaw College was held outside the college premises. Biren Mitra, Nara Singha Tripathy, Durga Charan Mohanty, Manmohan Mishra and a few others took the leading part. P. Saigal, the secretary of Bengal Student's Federation who was present in Cuttack in connection with anti-fascist conference also attended the meeting on the 12th August 1942, Balaram Mohanty was arrested from Nababharat Press building at Cuttack for writing a pamphlet, entitled '*Biplabi Subash*'. It was published by Sunil Kumar Ghosh at the Nababharat Press.²¹

In 13th August, 1942 was one of the most eventful days in Cuttack town during the historic August Revolt on that day while the small students of Ravenshaw College School, Pyarimohan Academy and Town Victoria High School came out their schools at the call of senior students. A clerk of Ravenshaw collegiate school, Loknath Mohapatra resigned from his office as a protest against the arrest of the leaders of Orissa. On the same day the first public meeting after the arrest of Congress leaders was held near Gourisankar Park of Cuttack town at 4.45 p.m. It was attended by nearly 2000 persons out of whom the students constituted the majority. Dasarathi Behra of Bakharabad of Cuttack town addressed the meeting. Among the students, prominent members who attended the meeting were Surajmal Saha, Satyabadi Mishra, Sailen Mohapatra, Radha Kanta Padhi, Shymaghana Patnaik and Biren Mitra. After the meeting Dasarathi Behra was arrested from his residence at night on the same day Narasingham Tripathy was also arrested. Meanwhile the students of Cuttack town led by the leaders of Ravenshaw College coined a term 'Secret News Service' or S.N.S. for the purpose of propaganda. On 13th

August one such notice under the Caption Secret News Service was pasted on Ravenshaw College Notice Board, The Principal of the College handed it over to the Superintendent of Police.²²

Meanwhile, on the 14th August, 1942, the students of Ravenshaw College held a meeting at about 1 p.m. outside the college premises in defiance of the order of the District magistrate. He issued order not to hold any meeting without license under the section of 144 Cr.P.C. Around of 500 students were present in the meeting and after the convention some student entered the college office and damaged some furniture and equipments. They also set fire to the records and this action seems to be the first violent one during the Quit India Movement in Orissa. The key leaders were Banamali Patnaik, Biren Mitra, Surajmal Shah, Bibhudendu Mishra, Bijay Ketan Mangaraj and Ashok Das. Out of them Bibhudendu Mishra, Surajmal Shah and Bijay Ketan Mangraj were arrested under the Defense of India Act and latter confined in Berhampur Central Jail.²³

Next day, on 15th August, the students of Ravenshaw College launched a strike and it was instantly followed by strikes in other educational institutions of Cuttack town. The students of Ravenshaw College together with the Congress workers appealed to the Government Servants to resign from their jobs, asked the people to withhold the payment of taxes, cut telegraph and railway lines. Thereafter the movement spread like wild fire to the remote areas of the Cuttack district. These were the early days when the young people of Cuttack town played a key role in giving a momentum to the movement in Cuttack district. The foremost events in the district are as follows;

Brutal Firing at Kaipada – Kalamatia:

It was during the Quit India Movement at Kaipada-Kalamatia in Binjharpur Police station of Cuttack district that four *satyagrahis* died and nineteen persons were injured on 26th August, 1942 in atrocious firing of the police.

TABLE 1
CUTTACK DISTRICT – KAIPADA - KALAMATIA

Sl. No.	Name	Village	Mode of death
1.	Sananda Swain	Krushnangar	Police firing
2.	Santi Mallick	Swirampur	Police firing
3.	Mayadhar Bhuyan	Hatashi	Police firing
4.	Hadibandhu Panda	Krishnanagar	Baynot injury

Source: WWCC, Accession No.54

The circumstances leading to the firing were as follows. It was for the spread of the message of Gandhi and to impart training to the people regarding his constructive programme that Gopabandhu Choudhury established a Sevashram at Bari in 1934. Its branches were opened at Kaipada, Ramchandra Pur, Anikana and Sannyasipur. In the adjacent areas of the Sevashram, a Banarasena was also formed to paralyse the activities of the Government by destroying the Government offices, post offices, police stations, and the like. In the Banarasena, the highest

numbers of members were enrolled from Krishnanagar Village. The police intelligence had already collected this fact and intimated the same to the concerned authorities.²⁴ Meanwhile on 9th August, 1942, along with other Congress institution, the Bari Sevashram was seized and sealed by the police. This action created a stir among the people in Binjharpur police station. As a reply to the police action, some agitators on 16th August, 1942 set fire to the records which the police had seized from Bari Sevashram and burnt there the uniforms of Choukidars and Dafadars. Four days after, on 20th August 1942 the Banarsena also proceed to Kaipada and burnt the post office located there. They also destroyed the papers connected with smallpox vaccination of that area. They were led by a few leaders, who were conducting the movement remaining underground. Prominent among them were Birakishore Ray, Haldhar Das, Jayamani Samal, Trilochona Mohanty and Bichtrananda Sukla. This action of the satyagrahis was informed by Nabab Khan, the Sub-Inspector of Binjaharpur Police Station to the Administrative and Police authorities of Jajpur. So on 25th August, the Deputy Superintendent of Police, Lakman Mishra with Sub-Deputy Collector, Gopal Rao Patnaik of Jajpur and 27 Bihar Policemen reached Kaipada to take action against all those who were associated with the incident, with them accompanied Edwin Sudhakar Das, the second clerk of Jajpur S.D.O. office. He has given on eye witness account of all that had happened at Kaipada – Kalamatia.²⁵

It was after the arrival of police force that the villagers of the neighboring areas took a decision to hold a protest meeting at Kaipada. Accordingly the people from different parts started flocking to Kaipada from the early morning of the 26th August 1942. That was the '*Gamhapurnima*' (Rakhi-tyeing) day. They all assembled in front of the granary office located there. On that day a valiant and young women leader Annapurna Moharana, popularly known as 'Chuni Dei' was addressing a public meeting at Sannyasipur. She was requested to come to Kaipada, but before her arrival, the D.S.P. with the Magistrate and police force had reached the place of the meeting, held near granary office. Meanwhile the Dafadar present there could somehow manage to arrest a few leaders from the meeting place and detain them by tying ropes around their waists. They were Indramani Tripathy, Bidyadher Ray, Dambarudhar Ray, Hrushikesh Ray, Anam Chandra Das, Benudhara Das and nine others. In this situation the people present there protested and the trouble ensues between them and the police. The police then opened blank fire after which some left the place take the advantage of this situation. The arrested persons were taken to Kaipada Sevashram. The people followed them and waited outside demanding their release. Then, they sent their representative Hadibandhu Panda who requested the police to release them. But he was brutally whipped and driven out.²⁶

In the meantime, the police force with the arrested persons proceeded towards Binjharpur police station. About one thousand people followed them. They were in search of an opportunity to attack the police and release the arrested leaders. In the meantime Annapurna Maharana returned from Sannyasipur after the meeting. She along with some followers met the Police and Satyagrahis at Kalamatia Chhak. She made a demand to the Police either to release the arrested leaders or arrest them all. But the Police paid no heed to her demand. Rather, they arrested a few more. So the situation grew tense. In the meantime, Hadibandhu Panda, Nidhi Samal and Narahari Panda broke the Police cordon and released one Gouranga Panda from Police custody. Hadibandhu Panda also ran away with a rifle. But he was captured. A bayonet was then pierced into his chest. Describing the situation Edwin Sudhakar Das has thus written "It was difficult for the Sepoy to take our bayonet from the chest of Hadibandhu Panda. At last the Sepoy has to make him flat and take out the bayonet. The blood oozing out of his body was nearly one foot

deep.” This action of the Police led them mob to proceed towards the Police force. D.S.P (Deputy Superintendent of Police) had cautioned them as written by Edwin Sudhakar Das thus “They are all armed. Do not proceed”.²⁷ But being fired with fury, the people did not care for the caution. So the D.S.P. ordered for firing. As a result, Sananda Swain of Krishnanagar, Santi Mallick of Srirampur, and Mayadhar Bhuyan of Hatsahi died at the spot. Hadibandhu Panda died on the way. Ramakrishna Jena, Supravat De and 17 others were injured. Among the injured there was one small boy. Pointing at him, Annapurna Maharana was reported to have scolded the Police saying “What has this boy done and you have fired at him; you are receiving your pay with the money paid by these people, and you are firing at them. You are all ungrateful dogs.” However, after the firing the dead-bodies and the arrested persons were brought in a boat to Binjaharpur and from there to Jajpur. Edwin Sudhakar Das has written that four Sepoys sitting in the boat by his side measuring their respective bayonets as to whose had pierced more into the chest of the satyagrahis. However, thereafter, the members of Banarsena were arrested in batches and taken to Jajpur. Anticipating further danger at Jajpur all of them were sent to Cuttack jail.²⁸

This is the saga of the brutal atrocities committed by the Police at Kaipada-Kalamatia. Yet that was not the end of the movement in Cuttack district. It also surfaced in other parts. The people were so much stirred by the revolutionary doctrines that they indulged in large scale arson, looting and sabotage under the inspiration of the Congress workers. In Jajpur subdivision of Cuttack district alone, there were 71 revolutionary cases during the last week of August, 1942.

MOVEMENT AT OTHER PLACES OF DIFFERENT DISTRICTS

Of all other places of Cuttack district, Jajpur town figured prominently during the Quit India Movement. The Congress leaders as well as the lawyers held meetings in the town, where they condemned the repressive policy of the British Government and passed resolutions demanding the release of the arrested national leaders and opening negotiations with them for the establishment of a National Government. *Hartal* was observed in Jajpur town on 10 August, 1942 and the administration in Jajpur was paralysed for quite a few days. Padmanabha Ray, Baidyanath Das, Gopinath Sahu, Duryodhan Mohanty. Santanu Kumar Das and a few others took the lead. Santanu Kumar Das was arrested on 12th August, 1942 while picketing before Jajpur High School. Along with him Parsuram Das, Purna Chandra Padhi and three students were arrested. In Jajpur town and neighboring areas, the *Satyagrahis* burnt the Post Offices, Canal Revenue Offices, P.W.D. Dakbungalows and disconnect the telephone and telegram lines. Mention may be made of Dasarathapur Canal Revenue Office, Dak Bungalow, Chhatrapara Dak Bungalow, Jayantara Police-out-post, and Rambag Post Office. In this connection the valiant actions of one illiterate youngman of village Kaspas of Jajpur Subdivision is worth-mentioning. He was Bhagban Sahu. Moving from place to place with at most secrecy he did miracles in the adoption of almost all violent steps. He was tried by the Special Magistrate of Cuttack R.S. Guha who sentenced him to 29 years of rigorous imprisonment. Of course, the punishment was reduced to 9 years 3 months imprisonment in the Court of Appeal.²⁹

And that was not all about the movement in Jajpur town. It was after the firing at Kaipada-Kalamatia, the situation in Jajpur town became tense when the arrested persons were taken to that place. It was on 27 August, 1942, in defiance of the Government prohibition against procession and assemblies, the Congressmen and their followers numbering nearly 10,000 assembled at Jajpur town and proceed towards the Police Station and S.D.O. Office explicitly with an intention to reduce them to shambles. Padmanabha Ray and a few others were leading

them. Ratnakar Sarangi a young officer with somewhat nationalist temperament was then the Sub-divisional Officer. The Protestors found an armed force standing at a distance of 50 yards from the place. So they halted there. From among them three Congressmen approached the local officers including the S.D.O. to give up their jobs. Meanwhile the Police stood prepared to disperse the mob by opening fire. But it was owing to the adroit handling of the situation by Sri Sarangi, the S.D.O. the firing could be averted. Fortunately at that time an aeroplane dropped tear gas shells resulting in the dispersal of the mob. Thereafter Section 144 was promulgated in the town. On the return march, the agitators being fired in fury were found to have destroyed quite a number of Government buildings.³⁰ In Cuttack district, some other places became the seed-beds of revolutionary movement. Mention may be made of the places located in Barchana, Binjharpur, Tirtol, Ersama, Kendrapada, Govindpur, Mahanga, Kishannagar, Jagatisinghpur and Pattamundai Police Stations.

In the Govindpur Police Station, one village came to prominence due to the revolutionary steps taken by some youngmen. That was Bhagalpur. It was after the Police atrocities at Kaipada-Kalamatia and at some other places the people felt the necessity of sending defense organizations in different places of Cuttack district with the object of self – protection. In this regard, one youngman of that village, Gouranga Charan Das took the lead. He trained a batch of young men in *lathi* play in order to fight with the Police personnel in the event of their arrest or any other workers. Those youngmen were Chittaranjan Das, Kalpataru Das, Jagannath Das, Kamla Charan Das and Indramani Das. Gobinda Chandra Mohanty was the close associate of Gouranga Charan Das. In disguise, he used to distribute the secret letters issued from Cuttack. An organization called Raktabahini was formed by the young men of the village Batimera with the object of combating the Police. The learning of the technique of cutting the roads and telegraph wires was also another objective of theirs. Bibhuti Bhusan Acharya, Ram Chandra Mohapatra, Narayan Sengupta, Baishnab Charan Sengupta, Haramani Kanungo were some active members of this organization. In the village Govindpur the revolutionaries through an organization adopted a terrorist attitude and resolved to assassinate Policemen and other Officers and burn Government buildings and *Zamindar* Courts. Similarly in the same Govindpur area, an organization named as ‘Death Squad’ or ‘Marana Bahini’ was established by the extremist group from among the workers. It established connection with similar organizations of other provinces of India. There was yet another organization formed in that area. That was the ‘*Sangram Bahini*’. Having got the intelligence report of all such organizations the Police rounded up the houses of the workers who represented these organizations and seized a number of literatures concerning the movement. Even then they grew strong. They helped in concealing a few leaders for which the Police could not trace them for few months in spite of their best efforts. One such leader was Gouranga Charan Das.

Similarly in Mahanga area, the movement under the leadership of Krushnamohan Routray and Sachi Jena took a violent turn, Sachi Jena, called ‘Mahanga Gandhi’ with the help of other associates looted the Post Office, set fire to Barachana Police Station and caused a sort of reign of terror. He also indoctrinated his wife Nirupama Dei to join the movement. Some Government properties at Kuanpal and Balichandrapur were destroyed at the instance of Krushnamohan Routray.³¹ Equally in Ersama area, some subversive activities were resorted to by the workers under the leadership of Gourishyam Nayak. Ersama Outpost and a few Government buildings were burnt. In Jagatsinghpur Police Station Nrusingha Charana Mohanty, Biswambhar Parida, Jayram Panda and Loknath Ray of Chheliagad village and harijan youngman Kanduri Charana

Mallik took the leadership. The granary of Biswambhar Parida was known to have been the place of concealment for the workers of Jagatsinghpur area. It was for conspiracy and attack on Nalibar military camp that Biswambar Parida, Jayram Panda and Somnath Nayak were arrested on 26 August, 1942. On that day six other school students of Jagatsinghpur were also arrested. Nilamani Pradhan of Bilasuni village was yet another outstanding leader of the area. In Tirtol Police Station, the Sanra Water Revenue Office and P.W.D. Dakbungalow were also burnt. Purnachandra Lenka, Burndaban Nayak, Somanath Nayak, Padma Charan Parija, Baidyanath Nayak, Nisamani Khuntia and Kanhu Charan Prusty took the leadership. In Pattamundai Police Station, Ghanashyam Mohanty, Harekrishna Samal and Prahlad Parida emerged as the leaders of the time. In Kishannagar area, a young couple of village Malipur helped in the distribution of the secret bulletins issued from Cuttack. They were Binod Kanungo and his wife Sashibala Dei.³²

In Salepur area, Manmohan Choudhury, the Secretary of Cuttack District Congress took the leadership of the movement. In Kanika area the movement was found expression in Panchmukha and Kerada. Muralidhar Mallik was one of the active leaders of the area. In Barchana Police Station of Cuttack district on 21 August 1942, a group of people broke open into the Gopalpur inspection Bungalow and damaged crockery and glass plates and burnt the curtain and visitor's book. At Barda in the same Barchana Police Station, some people trespassed into the house of a Choukidar and burnt uniforms. Similarly two Choukidars were stripped of their uniforms in the Kharagpur Hat of the same Barchana Police Station and their uniforms were burnt. In Dharmasala Police Station, the records of the Canal Revenue Collection Office at Neulpur were burnt. The telegraph lines were cut between Cuttack and Bengal that the mile 255/12. Furthermore it was at Dhanmandal in Barchana Police Station on 26th August 1942, several Congress leaders including Krushna Chandra Rout were arrested by the District Magistrate and Superintendent of Police after receiving the confidential report from the manager of Darpani Estate about the violent disturbances caused by some Congressmen.³³ Thus almost all parts of Cuttack district experienced the tremor of the political earthquake caused on account of the Quit India Movement. And that is not all.

Other parties and organizations contributed their mite to the success of the Quit India Movement in Orissa. Cuttack happened to be their Head Quarters. The Communists in their first meeting held at Chandini Chowk of Cuttack Town on 9 August, 1942 with Swami Sahajananda Saraswati in the Chair declared to continue to fight for National Independence. On that day the Party Office was opened by Bhagabati Charan Panigrahi at Chandinichowk and the flag of the Party was hoisted in the very Capital of orissa. It was attended by Parsuram Padatika Ray of Bolgarh, Gangadhar Paikray of Begunia, Digambar Harichandan of Tangi, Gokul Mohan Ray Chudamani and Pranath Patnaik of Khurda, Bankanidhi Subudhi, Damodar Mishra and few other leaders. A hand-written paper entitled '*Mukti Juddha*' was circulated on that Day.³⁴ Similarly the Forward Blocks activated the Quit India Movement in Orissa. They issued some leaflets and one such was the 'War of Independence'. It contained the recommendations for anti-Government agitation through Guerilla War. Another leaflet of their which appeared during this period was Harijana Note. It justified the movement on the ground that the established Government in India was an illegal body. This leaflet also incited the people to disarm the policemen and other officers who carried weapons. Side by side other pamphlets were widely circulated among the public containing appeals to disobey Government. The Utkal Socialist Party, an offshoot of the Socialist Party supported the movement although they expressed dissatisfaction with the leadership of Mahatma Gandhi as they thought that he had not given adequate emphasis on the

economic policy. However, the leaders of this Party remaining underground moved throughout the province and conducted the movement. Prominent among them were Surendranath Dwivedi, Bankabehari Das, Nishmani Khuntia, Loknath Mishra, Gour Chandra Das, Biswanath Parida, Narasingh Charan Mohanty, Gouranga Charan Das, Anil Kumar Ghosh and Ghanashyam Patra.³⁵ The attitude of the Harijan Sevak Sangha towards the movement in Orissa was very encouraging. Nanda Kishore Das, the President of Harijan Sevak Sangha issued appeals to Government servants to resign from their jobs.

Yet a section of the Muslims, particularly the members of the Muslim League had no sympathy with the Movement. They resolved not to participate in any movement initiated by the Congress. Furthermore, they appealed to their Co-religionist in the Congress to resign from that organization and join the Muslim League.³⁶ Finally, a startling case during the Quit India Movement needs to be briefly illustrated. That was popularly called 'Orissa Conspiracy Case' in which 14 Satyagrahis were sentenced to different terms of rigorous imprisonment in early 1943 by G.E. Maher the Special Judge of Cuttack. Two were acquitted and the leaders who were sentenced to imprisonment were Surendranath Dwivedi, Biswanath Parida, Ghanashyam Patnaik, Bhairab Chandra Mohanty, Nisamani Khuntia, Bankabehari Das, Narasingh Charan Mohanty, Loknath Mishra, Nabaghana Behera, Gourchandra Das, Pyarimohan Das, Dukhishyam Padhi, Ramakanta Das and Narayan Prasad Mohanty. Sachidananda Mishra and Jadumani Jena were acquitted. The main charge against Dwivedy was his secret establishment of link with Congress Workers for two months i.e., from 10th August to 12th October, 1942 when he was arrested. During this period he used to supply cyclostyled bulletins for the guidance and necessary actions through his above associates. The Judge observed in his Judgment that those bulletins were in circulation all over the province and they were the inflammatory news sheet of the rebellion. In the bulletin issued on the occasion of Gandhi Jayanti Day, it was written thus, "The funeral pyre of the weak Government is burning in the flames throughout the country... At places the Government buildings are raised to the dust and at places the Government is made of ghost of straw and burnt away. At places, the Police Stations and Courts, the resorts of Governmental oppressions are burning in flaming tongues. This fire is no more to be extinguished. This fire must wipe out foreign Government from this country. On the ashes of the Government, on the carcass of this brute administration, on the grave of this sinful Kingdom will be erected the Government of farmers and labourers and the administration of Justice and Righteousness." Similarly in another bulletin the clarion call for open rebellion was given. In it was written, "violate the laws of the Government; carry on meetings and processions in towns and mofussils, close to bazaars. Let the revolutionaries rise in excitement, burn the Police Stations, Law Courts, Post Offices and other Offices of the Government. Remember, the salvation Offices of the Government. Remember, the salvation lies in destruction. If you retreat, Gandhiji's life will pass away."³⁷

No doubt that all those bulletins roused and excited the Public sentiments in very many parts of Orissa. Even Surendra Nath Dwivedy tried to excite his comrades inside the jail by some dare-devil ways. This being detected, he was transferred from Cuttack to Koraput jail and kept under strict vigilance.

Thus it is to be observed that the Cuttack district played a spectacular role during the Quit India Movement. It added a precious feather to the glorious cap of the movement.

REACTIONARY VIEWS

Mushirul Hasan said Jinnah's two nation theory got a momentum following this movement. The timing of the movement was not right contrary to other movements launched by Mahatma Gandhi.

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INDIAN PHILOSOPHY OF 'DEATH' DEPICTED IN THE POETRY OF WALT WHITMAN

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ABSTRACT

*A survey of Indian philosophy is usually done in the way in which European philosophy is surveyed by its historians. Here an attempt has been made to broaden the perspective by discovering the dominant trends in their work. Philosophical search, thus, either in the West or East strives for a search within and without. The poets transformed his life into beautiful poems pregnant with occult meaning, collected in their "spiritual autobiographies": **Leaves of Grass**. The idea of death was something that had haunted Whitman right from the beginning. The sense of loss left a deep impression in the minds of the poets. Since they had dealt with the other aspects of life with a masterly skill, the theme of pain and loss has also been dealt with equal perfection and originality. Hence death which is physically undefeatable and yet also an inconceivable idea, is an endless source of angst for Whitman. He continued to pursue literary projects, and in 1870 he published two new collections, *Democratic Vistas* and *Passage to India*, along with a fifth edition of *Leaves of Grass*. He started his voyage, "Westward from Hindustan from the vale of Kashmir." The cardinal truth of the Upanishads is "Atmanam viddhi" (know thyself). It sums up the essence of the search for Identity. That is why, Whitman instead of turning morbid in the face of death, with a serene grace calls death 'Beautiful End.'*

KEYWORDS: Death, Whitman, Indian Philosophy, Leaves of Grass.

INTRODUCTION:

Whitman probes into the mysteries of death. Death and suffering which afflict every aspect of life and times touched them to a great extent too. Whitman grew amidst disease, despair, and dejection. He came from a family which was engulfed by poverty, neurosis and ill luck. The sense of loss and nostalgia haunted them. The American Civil War which broke out in 1861 also touched him deeply. This war was the greatest shock of his life. He hated the war and yet accepted its consequence.

In the mid-1860s, Whitman had found steady work in Washington as a clerk at the Indian Bureau of the Department of the Interior. He continued to pursue literary projects, and in 1870 he published two new collections, *Democratic Vistas* and *Passage to India*, along with a fifth edition of *Leaves of Grass*.

On March 26, 1892, Walt Whitman passed away in Camden. Right up until the end, he'd continued to work with *Leaves of Grass*, which during his lifetime had gone through many editions and expanded to some 300 poems. Whitman's final book, *Good-Bye, My Fancy*, was published the year before his death. He was buried in a large mausoleum he had built in Camden's Harleigh Cemetery. Despite the previous outcry surrounding his work, Whitman is considered one of America's most groundbreaking poets, having inspired an array of dedicated scholarship and media that continues to grow. Books on the writer include the award-winning *Walt Whitman's America: A Cultural Biography* (1995), by David S. Reynolds, and *Walt Whitman: The Song of Himself* (1999), by Jerome Loving.

REVIEW OF LITERATURE:

Thoreau too remarks that: "*Leaves of Grass* was wonderfully like Orientals." In the light of the above statements regarding the oriental impact on his poetry, we must remembered that there is no reference explicit or implicit anywhere in his Note books or Manuscripts to his knowledge of 'Hindoo books', but in his poetry is an ample proof of his deep understanding of the essence of Indian Philosophy. He even uses the word '*Maya*' in one of his poems.

OBJECTIVES OF THE STUDY:

The objective of the present research paper is to study the poetry of Whitman order to focus on philosophy of life. Her poems though very simple, probe deep into human life and offer her vision of life.

SCOPE OF THE PAPER:

The scope of the subject is very limited to the poetic collection of Walt Whitman *Leaves of Grass* published in 1855

Whitman was voracious and avid readers and Whitman as an editor, he must have come across many articles on the subject and no doubt they left a deep mark on his psyche, though unconsciously. Thoreau's reply dated Dec. 12, 1856 to Whitman's letter reads:

"Our acquaintance with ancient Hindoo books is not at all personal. The Best, I think, of are Bhagvad Gita (An episode in an ancient heroic Poem called Mahabharata), the Vedas, the Vishnu Purana." Indian epics Ramayana, Mahabharata, Puranas, books on Advaita Vedanta were quite popular in America therefore appropriate use of words like '*Maya*', '*avatar*', '*Sudra*', '*Brahma*' is very not surprising. The sense of the pervading mystery disturbed him even as a

child. The riddle of the solid marrying the liquid always fascinated him. The vast expanse of the sea always reminded him of some measureless entity behind it. In 'Specimen Day' he writes:

"Even as a boy, I had the feeling, the wish to write a piece perhaps
a poem about the sea-shore, that suggested the curious lurking
Something....I felt that I must one day write a book ..."

His dream came true with the writing of *Leaves of Grass*, where he emphasizes the theme of the Self. It was an attempt at "Self definition" He thought that the mystery of identity was the most curious mystery of all. He could not find a meaning or a clue to this mystery, so he turned to the Orient – the Land of Primal thought, to seek something yet unfound. The Orient did not disappoint him. He started his voyage, "Westward from Hindustan from the vale of Kashmir." The cardinal truth of the Upanishads is "*Atmanam viddhi*" (know thyself). It sums up the essence of the search for Identity. The Self within the man is the spirit, the essence of his existence about which man remains ignorant throughout his life. The poet reflects the intensity of his quest for his identity: Whitman is also baffled by the same puzzle of existence.

"Why even I myself often think know little or nothing of my real life,
Only a few hints, a few diffused faint clews and indirections."

Death is an ever-recurrent theme in the poetry of Whitman and Tagore. It haunts *Leaves of Grass* in all its phases. Whitman has vast scope for discussion on the theme of Death. It has attracted the attention of both the poets. Both believe that death is the essential and inevitable end of life. D. H. Lawrence calls Whitman a very great poet of the end of life as death remains the central concern of the poetry of Whitman.

Whitman dealt with death on two levels, the conceptual and the experimental. At the initial stage, both the poets have used poetry as a sort of desperate confession. The mysterious nature of death did perplex the minds of the two poets with equal intensity. They not only gradually learned how to master the pangs of separation but with the passage of time, also successfully analyzed the experience with artistic detachment. That is why, Whitman instead of turning morbid in the face of death, with a serene grace calls death 'Beautiful End.' The best that death can do is to deliver the soul of man into the realm of beauty, which is immortal. This concept gains utterance in 'When Lilacs Last in the Dooryard Bloomed.' 'When it is so, thou hast taken them I joyously sing the dead'. In the same section he speaks of immortality:

"I am the mate and companion of people, all immortal
And fathomless as myself;
(They do not know how immortal, but I know)"

Though Whitman has accepted the inevitability of death yet he tries to explore more about the mysteries of death and says: 'All goes onward and outward nothing collapses' in Song of Myself – (6) Here Whitman is more analytical in his attitude towards death than that of Tagore. In Song of Myself -7, Whitman takes an optimistic view of death:

“Has any one supposed it lucky to be born? I hasten to inform his or her
It is just as lucky to die, and I know it.”

Death is the subject of his two masterpieces ‘Out of the Cradle Endlessly Rocking’ and ‘When Lilacs Last in the Dooryard Bloom’d’. The death of the female bird in the first named poem is a symbol of the stern fact of death in all nature. It is the sea which whispers the word death to the poet.

The theme of death is dominant in ‘Drum Taps’. It is no mere biological fact, but rather a sort of passage, a mystically foreshadowed and necessary way of re- union with cosmic energy – with the divine energy. Though he fully realizes that the precious quality of life depends on its mortality, he continues with his struggle and tries to catch even the minutest facet of pain with the help of his keen observation. In Song of Myself 48, Whitman declares, “No array of ferns can say how much I am at peace about God and about death.”

For Whitman, without death, there is no life, hence with an optimistic note he says death is just another beginning, a re-involvement in the generative forces of ceaselessly evolving universe. In Nature, there is the never-ending rhythm of birth-death and re-birth. Life and death are two identifiable realities with man. They form a synonymous entity. They are interchangeable and convertible units. In other words, life matures into death, which in turn is a certainty of life.

Similarly, Whitman accepts death with great humbleness and love. He views death with a philosophical bent of mind because only death can unite him with God. This concept almost makes him long for death, the last fulfillment. Whitman was hunted by the mystery of death, wanting to solve it. In the poem ‘Out of the Cradle Endlessly Rocking’ Whitman traces the moment of his birth as a poet to his mystic communion with the sea who whispered in his ear ‘the low and delicious word death. ‘Even as a boy he was haunted by the mystery of death and one of his earliest ambitions was to solve the mystery of death.

“As to you death and you bitter hug of mortality, it is idle to try to alarm me. Its shows

the oneness of all life is complete when souls merge with the divine after release from death.”

Both the poets have pointed out death and its sensational and emotional aspects to understand its ultimate relation with love and immortality. They try to suggest that though, death appears to be very cruel but it also contributes, to the extinction of sorrow from life. Both of them have a very similar attitude towards death when, they speak of death as mysterious or personified as a lover who woos like a gentleman and ultimately, wins their affection by taking away love in triumph. Whitman even glorifies copulation as it is the ingredient of procreation, “Copulation is no more rank to me than death is”

Whitman both talk of death, with a tone of optimism. They realize that it is death only which can confront them with their Supreme Being. Before considering death with philosophical overtones and insights, emphasizes upon its physical aspects, to bring out the terrible emptiness occasioned by the soul’s departure. Even so these frightening limitations of temporal life are shown a ray of hope through the sublime light of immortality. They succeed in turning deprivation into a spiritual triumph. So also Tagore almost yearns to be united with the Almighty and waits eagerly for the arrival of death which alone can fulfill his ultimate desire. In Song of Myself, Whitman Says, ‘It is as lucky to die, and I know it, invites death, it shows his longing for death.

“Come lovely and soothing death.

Undulate round the world serenely arriving

In the day, in the night, to all, to each

Sooner or later delicate death.”

In Gods, Whitman addresses death as, “opener and usher to the heavenly mansion.” He thinks, “Death is a linking motif between the two eternities the self and the SELF.” Death for Whitman is not cessation. He knows, he is deathless. For him death becomes a mystic longing for reunion with infinite which hopes to realize through death. It is part of the progressive universe as Whitman wrote in *Leaves of Grass* and says death is not end of life but a renewal of it.

Again for Whitman, it is a transitional state, an obligatory pre-requisite for another life. His attitude towards death confirms his faith in transmigration and rebirth. Malcolm Cowley finds the resemblance between Whitman’s ideas on rebirth and the Hindu mysticism. He writes: “Whitman’s mysticism is less Christian and more Indian because of he expresses belief in such peculiarly Indian concepts as metempsychosis and Karma.”

The Hindu seers believed in the succession of life. There will always be one or the other form of life, till the union with the Absolute is achieved. Whitman expresses his firm belief in the immortality of man and in a continuing life after death. Nowhere does he say that the human soul undergoes many successive incarnations in the shapes of other creatures, such as animal, birds and beasts as some orthodox Hindus believe; but he does speak again and again of the human soul margining, though the journey towards that goal is a long one. He believes, the Divine spirit reveals itself to man through all the objects of nature, and show itself in the shape of a beggar or a tired and thirsty traveler. Whitman thinks that the universe is [continuous] procession. Nothing is ever really lost or can be lost. “The smallest sprout shows that there is really no death.” At every change of the body, the soul takes a new form.

“I know that the day will come when my sight of this earth shall be lost

And life will take its leave in silence, drawing the last curtain over my eyes. ”

FINDINGS:

Death has been viewed by Whitman in varied forms, as a ‘long sleep’ a mystery; or as a gateway to Heaven and God. There still lurks the fear of death in the remote corner of his mind but finally, he succeeds in driving away the terror out of death and, calling it a gateway to as life of vitality. He accepts the inevitability of death but before dealing with the philosophical examination of death, he talks of the morbid physical process of death, as when talking about the sensations of the dying person in *Leaves of Grass*.

Nowhere has Whitman said that he was inspired by Hindu philosophy. In view of the known literary influences on Whitman, his own assertion that he owed nothing whatever to books or other poets cannot be taken at face value. Whitman’s brother George said that Whitman spent many hours in New York libraries while he was writing the first poems of *Leaves of Grass* and Prof. Rajshekhariah, a visiting professor from India, has found in the 1854 catalogue of the Astor

Library (Index of the books published by trustees in 1854) over two hundred items on India which would have been available to Whitman. Prof. Rajshekhariah wrote letter to G. W. Allen on dated September 7, 1965, 'I find there was enough material about India there to give Whitman a thorough knowledge of the fundamentals of Indian philosophy' Tagore's personal library contains a copy of *Leaves of Grass* (1888). There is much in *Leaves of Grass*, that is wonderfully like Indian mystical thought.

In 'Song of Myself'-46, Whitman warns us, '*I have no chair, no church, no philosophy.*' Poets are rarely systematic philosophers. Mysticism is neither creed nor philosophy but a practical way of looking at the world with a pure soul. It is an attempt at the purification of the soul and the realization of the inherent unity in all. Whitman's mysticism proceeds from an egocentric perspective, the self of the poet reaching out and embracing the objective world.

The harmony in nature and the harmony which Indians wanted to establish between man and nature has always appealed to him. Whitman recognize man's creative urge to give expression to even inexpressible things. In their philosophy, they leave room for accepting the communicability of mystical experiences. Both the poets hold the view that a Divine being sustains this universe by a continuous act of creative will. 'Death'- the most crucial terminus of his journey for Whitman, suggests another beginning.

CONCLUSION:

Death has life hidden in its folds. Whitman believes that it is a continuous process in an ever-evolving universe. Whitman hails 'Death' by beautiful endearment. It is 'delicious, 'beautiful', 'dark mother'. It is lovely and soothing. It is a key to eternity. "I will show that nothing can happen more beautiful than death." Whitman finds a philosophy through life, to explain its various aspects. His philosophy is rooted in the respective philosophies of his own culture but intermixed by assimilation of Indian philosophy also. Both appear to be products of both the Orient and Occident.

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DEMONETISATION: IMPACT ON INDIA'S ECONOMY

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ABSTRACT

"The Currency Notes in themselves are nothing but paper".

The above quote can be proven and inferred from the notice issued by Government of India on November 8, 2016 making notes of 500 & 1000 of Indian Currency Useless. November 8, 2016, One of the most important day for the dramatical change in Indian Economy. Hon'ble Prime Minister of India, Shri Narendra Damodar Das Modi, announced that the Rs 500 and Rs. 1000 denominated currency notes will cease to be legal tender from the midnight of 8th of November 2016. People have been given upto December 30, 2016 to exchange the notes held by them. The reasons offered for demonetisation are two-fold: one, to control counterfeit notes that could be contributing to terrorism, in other words a national security concern and second, to undermine or eliminate the "black economy". As per arguments poised by Government of India, they have issue the said order under the power vested in Section 26(2) of RBI Act of 1934. Hence according to the said proviso the act, central Government of India can remove "any series of bank notes at any time" but it has removed two of the highest denominations in one go making all notes of 500 & 1000 useless. One individual can open his or her account at zero balance in any bank. According to report issued by Pradhan Mantri Jan Dhan Yojna on 09.11.2016, 255116805 account were opened under the scheme.

KEYWORDS: Concern, "Black Economy", Denominations, Illegal, Constitution, Ensuring

INTRODUCTION

Further, once it is notified by the central government that any note of the 500 & 1000 will no longer be a legal tender after the said notice issued under Section 26 (2) of the Act. Government of India have no power under any law of country to permit use of illegal tender at selected place like, government outlet, or at hospitals, or at airline ticket counters or to pay GOI dues, or for farmers to buy seeds, etc.

Moreover, the same notice of GOI directly violate the right of property provided to Indian Citizen under article 300A of Constitution of India. Nevertheless, In the context of the 1978 demonetisation, the Supreme Court in a landmark case held that demonetisation is not merely a regulation of property, as the government is presently arguing, but constitutes compulsory acquisition of a “public debt” owed to the bearer of the notes declared illegal.

Unlike the demonetisation happened in year January 1978 at the time of Morarji Desai's Government, the present demonetisation of 2016 made almost 86% of Indian Currency useless overnight and had affected many section of population, including, daily wage earners, those without bank accounts and those dependent on the informal cash economy for their livelihood and business.

We live in a country governed by the rule of law, and not by the rule of men. The objectives of the demonetisation notification may be laudable, whether the notification will achieve those objectives is debatable. But, as it exists, the demonetisation notification is illegal and violates the Constitution.

To understand the effects of these dimensions, it is important to first understand what is it that cash does in the economy? What are the costs of this demonetization? Will it be effective if people can still create new black money thereafter? Was that constitutional? Was demonization is right move of government? Author will try to look for answers in the paper.

OBJECTIVE OF PAPER

One of the main objectives of this study is to determine the necessity of demonetization. I relied heavily on a large body of scientific literature and empirical evidence to support my assertions. The study will mainly focus on following heads :

- To determine whether demonetisation in India was necessary or not?
- To observe the arguments posited by government for demonetisation.
- To determine the impact of 2016 demonetisation on India
- To analysis demonetisation in respect of Indian Laws.

RESEARCH METHODOLOGY

Definition of Research -

“The manipulation of things, concepts or symbols for the purpose of generalizing to extend, correct or verify knowledge, whether that knowledge aids in construction of theory or in the practice of an art.”

- D.Slesinger and M.Stephenson

For conducting this research, Authors have used the secondary method of research. Secondary research [also known as desk research involves the summary, collation, or synthesis of existing research rather than the primary research Which involves data collection from experiments. The tool used under this method is ‘other writings’ which involves writings of other researchers, books published, etc.

Demonetisation Wasn't Step Decided in Single Day

It was the evening of November 08, 2016 when then Prime Minister Narendra Damodardas Modi announced the withdrawal of Rs. 500, and Rs. 1,000 notes from circulation. There have been arguments and controversies that Mr. Modi decision was meant to benefit Mr. Mukesh Ambani, the owner of Reliance Industry Limited, who allegedly helped him financially in the Central Election of 2014. It was a surprise of common people of country, but it was not a step of few hours or days. It was started long back with mindful and sensible planning by Hon'ble Prime Minister.

Pradhan Mantri Jan Dhan Yojna, Introduced on August 24, 2014 just after few months of Narendra Modi, took office of PM. The scheme aimed at ensuring access of financial service without any cost or charges to every citizen of country mainly weaker and poor section of society. One individual can open his or her account at zero balance in any bank. According to report issued by *Pradhan Mantri Jan Dhan Yojna* on 09.11.2016, 255116805 account were opened under the scheme.

Taking another step, in April 2016, government introduced Jan Dhan Scheme with aim to link all bank account with Unique Adhar Number to trace the financial transaction of every individual who have multiple bank accounts with different banking service providers. Finance Minister Mr. Arun Jaitley in his announcement speech mentioned

"The goal of the proposed policy changes is to replace the use of cash, either in government transactions or in regular commerce, by providing the necessary incentives to use digital financial transactions over a period of time through policy intervention. These measures will further strengthen our efforts in financial inclusion as it will be ensured that each eligible account holder under the Pradhan Mantri Jan Dhan Yojana is provided access to digital financial services in addition to the RuPay Card".

If we analysis this statement, we can see the vision of government of curbing black money in Indian Economy by introducing cashless economy.

Then come the final surprise for the Indians, which was not expected by anyone, the demonetisation of Rs. 500 and Rs. 1000 in circulation.

Despite the planning of months, the demonetisation was not a complete success in 2016 because of various factors, If we compare the demonetisation introduce in past and present, in past the demonetisation didn't affect the common people of nation as high denomination currency was being used by rich people contributing few percent to entire economy. But at present, even a beggar might have a note of 1000 which is highest denomination of Indian Currency.

Demonetisation might introduced in hurry or might not but government didn't think on the consequence of scraping about 87% of total liquid currency of nation's economy. As the demonetisation directly hit the common people of nation. It created chaos and panic in the country. India is majorly a rural country where a big section of society don't know about the virtual transaction or internet banking. Hence, a big section of rural India used to store their saving of years in cash. Banks and exchange center were not having enough cash to exchange the money of people.

Government without proper advance preparation, introduced the policy and there was almost on daily basis change in policy related to exchange of notes.

There was few major problem also addressed by Mr. Shashi Tharoor in his parliamentary speech in Lower House post demonetisation is lack of new currency. The banks and ATMs were not ready and equipped to dispense a big amount of money. The ATMs were not of capacity to dispense new currency introduced by Reserve Bank of India because of change in size of currency.

BLACK MONEY IN INDIA

In India, Black money refers to funds earned in the black market, on which income and other taxes have not been paid. In reality, Black money is the money that is unaccounted for. Estimating unaccounted money accurately is not possible. In addition to wealth earned through illegal means, the term black money would also include legal income that is concealed from public authorities to evade payment of taxes (income tax, excise duty, sales tax, etc), payment of other contributions. It is difficult to estimate the amount of black money held by Indians in the world. But, guesstimates based on 'Global Financial Integrity' claim that the amount exceeds '**USD 1.4 trillion**' in total. Swiss Bankers Association and the Government of Switzerland thrashed the reports & said that the total amount held in all Swiss banks by citizens of India is about '**US\$2 billion**'.

According to Government of India, one of the major reason to use the power conferred by section 26(2) of Reserve Bank of India, Act is to curb Black Money stored in denomination of 500 and 1000 by the big gamblers, business man & politicians. India Ratings and Research estimated that, demonetisation is likely to destroy black money worth **almost 4 Lakh Crore Rupee. The amount constitutes about 12 % of total black economy of India.** But In 2012, the Central Board of Direct Taxes had recommended against demonetisation, saying in a report that "demonetisation may not be a solution for tackling black money or economy, which is largely held in the form of benami properties, bullion and jewellery". According to data from income tax probes, black money holders keep only 6% or less of their ill-gotten wealth as cash, hence targeting this cash may not be a successful strategy.¹

Hasn't It Been Done Before?

Almost four decades ago, On January 16, 1978 Government of Janta Party led by Hon'ble Prime Minister Morarji Desai has demonetised currency notes of 1000, 5000 and 10000. The decision did have some positive impact on economy but it wasn't entirely successful. Various article state that there was various factor which helped in the failure of the demonetisation of 1978. According to a report, The 1000 rupee notes were already out of circulation one week before the demonetisation and huge amounts of high denomination notes were sent to several Gulf countries, especially to Dubai and Kuwait a few days before the ordinance was announced.

Another factor was unlike today, at that time the support of RBI Governor was not with government of Morarji Desai in the decision of demonetisation of high denomination notes. According to reports, the demonetisation announced in 1978 affected only two percent of currency in circulation, valued about 145.42 crores. Unlike the time given by Modi's Government, Government of Morarji Desai gave only three days to change the currency stored in high denomination. In the earlier editions, RBI was mostly against the exercise and was proven right. This time it seems RBI has welcomed the idea. The big difference obviously is the size this time. Previous ones barely impacted common people but this one is huge with 85% of currency out of the system.

Demonetisation in other countries

When Our Prime Minister announced the demonetisation in the country. World leaders, economists, and international organizations watched the bold experiment with a mix of wonder and worry. Would it work as a means to crack down on unaccounted cash and counterfeit currency? The measure isn't new, however, as several other countries have embraced it in the past. Some met the purposes, whereas some failed miserably.

Britain

Before 1971, pound and pence currency used to be circulate in Britain but to bring uniformity in currency government stopped circulation of old currency in 1971, and brought coins of 5 and 10. Though, government was continuously telling about this big change from last 2 years but this policy failed in other countries except Britain.

Myanmar

Military government discontinued currency notes in Myanmar in 1987 with the same thought of end of black money and corruption. But this led political dispute among government and resultant thousands of people died because of this. And so, demonetization came to an end.

Nigeria

In 1984, Muhammadu Buhari was the President of Nigeria, that time he started new currency notes with design and colour to bring economy in stable position. But it didn't brought any changes in the economy and resultant Buhari resigned from his position. It took long 21 years for him to become President again.

North Korea

In 2010, dictator Kim Jong-il changed made some changes with currency to lower down the market of black money and to improve the economy of the country. But this decision of Kim Jong saw opposite face of it in economy. Price of necessity goods increased and this led people to become angry on this decision and resultant Kim Jong murdered finance minister and asked for apology.

United States of America

Step was taken in 1969, Due to black money existence in the nation, the country was losing its sheen built on Silicon Valley and the so-called even today existent American Dream. In 1969, US President Richard Nixon announced all bills above \$100 null and void. It was a Success. Even today \$100 bill is the maximum available for circulation.

Australia

Step was taken in 1996, the government to the curb black money crisis and improve security features on the notes, they withdrew all paper-based notes and replaced them with long life polymer-based notes of the same denomination. This improved the life of the bills and helped in making Australia a business friendly country, despite the initial costs incurred to manufacture polymer-based notes.

If we have a look on all the other demonetization drives, only the ones done by developed nations have been successful.

Demonetisation & Indian Laws

According to the Officials of Government of India, notice issued by Government in respect of demonetisation is done under power vested with them under Section 26(2) of the Act. The said section of the act give power to central government to cease 'Any series' of 'any denomination'. On the broad reading the section, it shows that government has power to demonetise through notification. The crux of the question lie in the interpretation of the section that whether, the term 'any series' can be read as 'every series'. To know whether the term any be interpreted as every, we can look into the ruling by supreme cases in past. In various cases Apex court ruled that, the term any can be read as every subject to case and circumstance.

Another question of fundamental right : Right to trade, vested under article 19(1)(g) of Constitution of India. Article 19(1)(g) has been comprehensively interpreted to include, as was said in *Sodan Singh v NDMC* , “all avenues and modes through which a [person] may earn [his/her] livelihood”. It is very clear that demonetisation has crashed the business of major section of Indian society which run on daily cash transaction. It is evident that demonetisation has bound the hands of Indian traders who majorly deal in cash and doesn't use the banking system. Moreover, the demonetisation also took away the piece of food from the mouth of all labour and worker who majorly work on daily wages.

Apart from demonetisation, limit of cash withdrawal from bank account has been imposed on Indian Citizen. On a plain reading of laws of land such restriction can't be imposed. The restriction could be justified under section 35-A of the Banking Regulation Act, 1949, which empower RBI to issue directions to banks in public interest to ensure that the interests of depositors are not compromised. Given the cash crunch, these restrictions will ensure that all depositors are able to access some cash for their basic needs. Nevertheless, questions can be posed about how reasonable these restrictions are. In the light of *Jayantilal Shah v RBI* (1996) – where the legality of the Demonetisation Act 1978 was challenged – the government's demonetisation wipes out public debt owed to note holders of such denominations. Consequently, it amounts to a compulsory acquisition of private property by the state. State acquisition of private provided is allowed provided that the public purpose and compensation for the same is satisfied. In the present situation, for a specific duration the person could exchange his or her notes maximum to 2000/- if he or she is having bank account and rest can be credited in account but couldn't withdraw it for a substantial time. But If he or she is doesn't have bank account either he had to open a bank account or forgot his or her cash if he possess more than the said amount as the notification was silent in this regard. Thus, the only conclusion that can be reached is that any cash in excess of Rs 2,000 stands expropriated by the state unless these individuals open a bank account to deposit this cash. Does this violate the fundamental right to personal liberty by forcing people into opening bank accounts?

Another interesting question is in regard to the usage of demonetized currency which is ceased as legal tender post November 8 at few places like petrol pump, hospital etc. But neither the RBI Act, nor the Banking Regulation Act, 1949, empower the government to allow uses of notes once declared illegal in the manner it has been done. Such actions require an authorising legislation, either an Act of Parliament or an Ordinance.

Is Demonetisation a good step?

Despite of several limitation mentioned herein above, demonetisation somehow helped in curbing black money from Indian Economy. The step of government has banned and made almost 87 % of total currency of Indian Economy useless by a single notification. The decision of central government directed India toward a situation of Financial crisis which might lead to Financial Emergency in the nation. Demonetisation was a very risky step for the government as unlike the demonetisation introduced in past, this time the amount of demonetisation was almost 87% of total currency and people doesn't have money to purchase daily essential for survival. Team Modi should also read the facts presented in the parliament by DMK member Visvanathan, who had said that out of Rs 140 Crore in higher denomination in 1978, thousand rupee notes worth about Rs 125 Crore (Presently 6.3 lakh crore), five thousand rupee notes about Rs 13.6 crore and ten thousand rupees notes about 82 lakh were in circulation. The figure shows that only two percent of higher denomination notes were demonetised by Janata Party government in 1978 in comparison with over 86 percent of currency termed as paper by the Modi government.

In term of the economy, few sectors were adversely affected by the decision of the government, which are majorly backed by cash, specifically which only deal in cash like the transport services, kirna stores, general road side vendor faced the high fall in the demand due to fall in purchasing power of customer. This in turn can have two effects: while it is expected that supply exceeds demand, there would be a fall in prices, however, if supply too gets curtailed for want of a medium of exchange, prices might, in fact, rise. Thus, while generally people seem to expect prices to fall, it is quite possible that prices would instead rise.

Possibly, the demonetization of 2016 will also prove to be of great help in tackling the menace of counterfeit currency, funding to terrorism, narcotics trade and exaggerations in the real estate market. It would also curb the use of black money in politics (mainly elections), which might be the case this time around as well. Though there are reports of black money holders trying to convert their money to white by all kinds of means and sources (buying gold with black money or exchanging the notes at loss in informal markets), the impact in the long term will be rewarding and fruitful to the economy.



MONETARY POLICY COMMITTEE: MANY HEADS BETTER THAN ONE?

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ABSTRACT

The most important policy tool in the post-reform period in overall macroeconomic management, particularly pursuing the objective of growth with controlled prices (inflation stability). Views of all the stakeholders in the economy, advice of the Technical Advisory Committee (TAC) contribute to the process for arriving at the key decision on policy repo rate- the rate at which the central bank lends to the banks. These nominated members are experts in the field of economics, banking, finance or monetary policy. The other three are from the Reserve Bank of India with the RBI Governor being the ex-officio chairperson. The MPC ensures that decisions on interest rates are made through debate and detailed discussions by a panel of experts. The many-heads-are-better-than-one approach ensures that the decision is not influenced by bias or lobbying. The adoption of "flexible inflation targeting" as the new policy framework, along with the amendment of the RBI Act, 1934, with effect from June 2016, the RBI formally joined the club of inflation targeters. The Finance Bill 2016 which included an amendment to the Reserve Bank of India Act, 1934 clipped the central bank governor's power to set monetary policy.

KEYWORDS: currency, policy, amendment, monetary policy, constituted

INTRODUCTION

The Reserve Bank of India- the bank's bank is the central bank of India. It was established on April 1, 1935 in accordance with the provisions of the Reserve Bank of India Act, 1934. The RBI being the central bank of India, is vested with the functions like:

Monetary Authority: The most important function vested in the organization is to formulate, implement and monitor the monetary policy to maintain price stability and ensuring adequate flow of credit to productive sectors.

Regulator and supervisor of the financial system: With the Objective of creating public confidence in the system, protect depositors' interest RBI prescribes broad parameters of banking operations within which the country's banking and financial system operates

Manager of Foreign Exchange: Manage the Foreign Exchange Management Act, 1999. Facilitate external trade and payment and promote orderly development and maintenance of foreign exchange market in India

Issuer of currency: RBI has the sole rights Issue of Indian currency to give the public adequate quantity of supplies of INR

Developmental role: RBI is the Banker to the Government: performs merchant banking function for the central and the state governments. It is also Banker to banks, maintains banking accounts of all scheduled banks.

Amongst the above-mentioned functions, The Reserve Bank of India's (RBI) monetary policy has emerged as the most important policy tool in the post- reform period in overall macroeconomic management, particularly pursuing the objective of growth with controlled prices (inflation stability). The conduct has evolved over time, with regard to the policy framework as well as the operating procedure.

RECENT STATUTORY CHANGES

The Finance Bill 2016 which included an amendment to the Reserve Bank of India Act, 1934 clipped the central bank governor's power to set monetary policy. The amendment made to the RBI Act through the Finance Bill removed the governor's power to singularly set monetary policy, vesting them in a six-member Monetary Policy Committee (MPC)

PAST SCENARIO

Before the amendment, the RBI's Monetary Policy Department (MPD) assisted the governor in formulating the monetary policy. Views of all the stakeholders in the economy, advice of the Technical Advisory Committee (TAC) contribute to the process for arriving at the key decision on policy repo rate- the rate at which the central bank lends to the banks. The Governor, however had the overriding powers to decide on the interest

ABOUT MPC

The Monetary Policy Committee (MPC), constituted under section 45ZB of the amended Reserve Bank of India Act, 1934, will set interest rates to keep retail inflation within targets. The Committee is formed with an intend to add value and transparency to monetary policy decisions

COMPOSITION

The MPC is composed of six members. Of the six members, the government, through a Search-cum-Selection Committee under Cabinet Secretary and Economic Affairs Secretary, nominates three members. These nominated members are experts in the field of economics, banking, finance or monetary policy. The other three are from the Reserve Bank of India with the RBI Governor being the ex-officio chairperson. This is an ideal framework for more effective and sound monetary policy to keep the inflation rates under control. The MPC meets quarterly, thereby making it four times a year to decide on monetary policy by a majority vote. In case of a tie in opinion, the RBI governor gets the casting vote.

Why should it matter?

The RBI adopted “flexible inflation targeting” as the new policy framework. The interest rates in the country matters to every citizen as a consumer, saver, borrower and investor. High interest rates favors the savers by increasing earning on debt options. Loan-takers may prefer a lower rate as the cost of borrowing is reduced. The MPC ensures that decisions on interest rates are made through debate and detailed discussions by a panel of experts. The many-heads-are-better-than-one approach ensures that the decision is not influenced by bias or lobbying.

“India’s shift to an MPC, driven by a clear inflation-targeting framework, if it succeeds, may also ensure that consumers and investors can look forward to lower inflation rates over the long-term. The public disclosure of MPC deliberations will also tell you why its members batted for higher or lower rates.” - Aarati Krishnan

CONCLUSION:

The overall monetary policy framework has witnessed gradual repair, improvements and refinements conforming to the evolving ideal monetary policy. The changing institutional requirements have been a continuous process. The many-heads-are-better-than-one approach is expected to bring more transparency, clarity, and fixed accountability.

The adoption of “flexible inflation targeting” as the new policy framework, along with the amendment of the RBI Act, 1934, with effect from June 2016, the RBI formally joined the club of inflation targeters. This marked the government setting the explicit inflation target of 4% in terms of consumer price index (CPI) with a tolerance band of $\pm 2\%$ during August 2016–March 2021, and a formally constituted six-member Monetary Policy Committee (MPC) taking decisions on the policy rate. “The RBI now has a clear mandate with regard to its monetary policy objective, and has been provided complete operational autonomy to achieve the same. Overall, the new framework will bring clarity and transparency in terms of the objective of monetary policy, the operating procedure to achieve the target, decision-making process, as also fixing accountability in terms of writing a report for failing to maintain inflation within the stipulated tolerance limits for three consecutive quarters.” We expect the economy to grow with controlled inflation within the $\pm 2\%$ band.



THE WAR AND THE FORMATION OF THE COALITION MINISTRY OF ORISSA (1939-1944)

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ABSTRACT

The out break of war coincided with hectic political activities in orissa following the resignation of Biswanath Das's Government. A provincial unit of the Forward Block party was constituted in march 1940 under the presidentship of Dibakar Patnaik .The congress members launched a vigorous campaign of civil disobedience,staging hartals picketing and processions.There was scathing public criticism against the war policy of the Government irrespective of party affiliation. The Raja of Paralakhemundi was invited by the Governor to form a coalition Government with the National Party,the United Party,Muslim League and the defector. Congress members of the Assembly as the constitutes. On 24 November 1941,the Raja formed a new Government with Godabarisha Mishra and Abdus Sobhan Khanas the Ministers. This political marriage of convenience was destined to be shipwrecked sooner or later because the leader lacked the support of majority members in the Assembly. 27 members were in support of the Raja as against a solid block of 32 congress men who were avowed opposed to the coalition. The Ministers tried to defend themselves by making ridiculous public statement,such as their aim was to defend India against foreign aggression. In spite of the mounting public criticism,the Coalition Government gave Orissa a long cherished University and Medical College at Cuttack.Both these institutions helped to accelerate the progress of higher education in the state. A split in the Swarajist Party of Godabarisha Mishra forced the Raja to tender his resignation on 20 June 1944,which was followed by imposition of Governor's rule. The resignation of the Premier and other ministers was accepted on 29 June 1944. It ended the rule of the Coalition Ministry and Orissa reverted back to the administration under the section 93 of the Government of India Act,1935 from 30 June 1944.

KEYWORDS: *Second World war,Coalition,Maharaja Krushna Chandra Gajapati Narayan Dev,Pt.Godavarisha Mishra,Biswanath Das,Congress Party, Assembly,British Government.*

INTRODUCTION

The out break of the Second World war and the British Government's decision to participate in it without having any discussion with the elected representatives led to the resignation of the Congress Ministry on 4th November 1939.

After a gap,a coalition Ministry was sworn in on the 24th November 1941 with Maharaja of Paralakhemundi as Prime Minister. During the tenure of this Ministry,a number of developmental works have been carried out in the state.

The Second World War broke out in 1939. India was committed to war against Germany without her consent. The Indian National Congress protested earlier against dispatching Indian troupes to Singapore and Egypt and voiced against the imposition of a war on an unwilling people. It advised the Provincial Governments not to assist the war preparations of the British even if it led to their resignation or removal¹. It demanded immediate establishment of a popular Government in India and a promise to grant full freedom to frame her own constitution after the war². On 17th October 1939 the Viceroy in a statement promised to re-examine the whole scheme of Indian Constitution after the war and interests to help the Viceroy in conduct of war³. The Congress Working Committee rejected the declaration as it did not promise any immediate grant of freedom and called upon the Congress ministers in the provinces to resign the ministry in Orissa submitted its resignation on 4th November 1939.

After the resignation of the Congress ministry in Orissa attempts were made to form an alternative ministry⁴. A meeting of the United Nationalist party was converted by the Raja of Khallikote at Cuttack on 11th and 15th July 1940 to discuss on the formation of a coalition ministry in Orissa It was decided tentatively to constitute a ministry with Godabarish Mishra as Premier; Rama Chandra Mardaraj Deva as Home Minister; Jadumani Mangaraj, Rai Bahadur Mandhata Gorachand Patnaik,

The Provincial Congress Committee retaliated by expelling Godabarish Mishra from the primary membership of the party for his move to form a ministry which was contrary to the policy of the Congress⁵. Pandit Nilakantha das resigned from the Congress Pandit Godabarish Mishra formed an association called Orissa Congress Swaraj Dal (The Orissa Congress Swarajists Party) in October 1940 with himself as President; Dibakar Patnaik as Secretary⁶. Their programme was to fight for Swaraj (self rule) by entering into the Government and not by abstaining from it like the Congress⁷.

Renewed efforts were made to form a coalition in May 1941 Godabarish Mishra would be Prime Minister and the Raja Bahadur of Khallikote be acknowledged to be the leader of the party supporting the ministry. The Orissa Congress Swaraj dal because it wanted Panidit Nilakantha das be the leader of the party. The chances of forming a coalition Government improved in October 1941. A committee was appointed on 12th October 1941 to prepare a programme of action. The formation of a cabinet was discussed and it was agreed that Maharaja of Parlakhemundi should be the Prime Minister⁸.

On 24th November 1941, a ministry was formed with Krushna Chandra Gajapati Narayan Deva as the Prime Minister and Godabarish Mishra and Maulana Sobhan Khan as ministers The British authorities were condemned for encouraging such a move and helping installation of a minority ministry in the Province⁹. The Congress termed the ministry as “the betrayer of the

cause of the country, betrayer of the cause of the electorate and the betrayer of the poor and helpless Indians¹⁰. The Maharaja of Parlakhemundi in a statement to justify their move told “We assume charge with the first and foremost point in our minds to give a stimulus to war... when our ideal is mainly to do good to the country and serve the King Emperor we expect whole-hearted support and cooperation from the public of Orissa¹¹. The Governor was the real head of administration with vast emergency powers. The ministry had no strength or confidence or full support of the Assembly for a show down against the Governor. Moreover, it was the satisfaction of the Governor and the promised support to the war efforts that brought them to office. The Government was sworn in on the basis of presumable majority in the Assembly. The Congress in spite of the defection of nine candidates still commanded a majority in the Assembly. In the sixty member house the following was the position of different parties : Congress 31, Coalition 26 and Independents 2 with one seat vacant. From this it was obvious that the position of the ministry was precarious and at any time the Congress could dislodge them by a vote of no-confidence. But the war situation brought indirect blessing to the ministry¹². The majority of the ministry was still unsafe another the ministry survived just by the precarious majority of one vote only¹³.

The first session of the Assembly (from 12th February to 31st March 1942) saw the effective opposition by the Congress. The Congress allegation that the ministry had survived by a show of artificial majority was not without justification¹⁴. The whole political situation was changed by the outbreak of the Quit India Movement launched by the Indian National Congress in August 1942 and the subsequent arrest of Congress leaders. Without the Congress members who were in the prison it was not difficult to run the Government even if a section led by Raja of Khallikote were opposed to the ministry¹⁵. Besides its own vulnerable position in the Assembly the coalition had some inherent problems. The Prime Minister was the representative of the landed aristocracy and therefore a pro-landlord while Pandit Godabarish Mishra was pro-tenant. Pandit Godabarish Mishra whose hopes to head the ministry was dashed, could hardly be called fully satisfied or contented. The Raja of Parikud and Tikayat of Kanika from the beginning were opposed to the formation of the ministry¹⁶. Birakishore Behera, a member of Orissa Legislative Assembly, expressed the confidence in the House that manifold developments would be possible and difficulties of distressed people of Orissa would be removed under the leadership of Krushna Chandra Gajapati.¹⁷ In a general discussion on the Budget of Orissa for 1941, Krushna Chandra Gajapati in his reply to the points raised concerning the law and order situation, stated that his Government was aware of the happenings and his department never claimed to be perfect.

He had definite views about the Government contribution to the Newspapers and he opined that “the Government would find it useful at times to financially help the Newspapers in the interest of their stability so that they might efficiently disseminate the correct news¹⁸. Nanda Kishore Das, a member of Orissa Legislative Assembly, scathingly criticized Krushna Chandra Gajapati's Government by saying that he did not believe in the so called ‘We Efforts’ of the Government and alleged that a ministry had been formed in Orissa for the sake of forming a ministry, for the pleasure of being called the Honourable Ministers of the Crown and for “all the sweets that attach to that office”.¹⁹ Further he said that the plea of promotion of war effort was only a camouflage”.²⁰ And he pointed out that, “the Maharaja of Parlakemedi is a born aristocrat and a ruler, though a ruler of a small tract of land, and a ruler in the most restricted sense of the term. It would not be unnatural for him to aspire after a much wider kingdom having the real powers of the ruler.

As a matter of fact the Honourable Maharaja had the pleasure and privilege of being the first titular head of the province soon after the introduction of the Government of India Act of 1935²¹.

Krushna Chandra Gajapati indicated that his government was doing its best for ameliorating the conditions of the poor class of people by retrieving them from their usual habit of crime and by providing sufficient avocations and engagement for them to eke out a better livelihood.²²

In the context of the Second World War which was going on, Krushna Chandra Gajapati stated that Orissa has experienced with the rest of India and the world as a whole, most abnormal and unknown trials that human life had ever been called upon to tackle in such magnitude or with such relentless continuity. In this connection, he pointed out : “To-day, though poor, we are in industries, commerce and in finance. We hold our own against each and all throughout India with our ancient heritage, and, I am proud to say on the floor of this House right royally, that Orissa, true to that glorious inheritance of loyalty to her king and righteous thought, has acquitted herself through sane and judicious behavior in the present times of indiscreet political agitation and strife through contribution to the World War with men and money.”²³ He considered that Orissa should be proud of its contributions to the World War and he called upon all collectively and individually to spare every pie and shed every drop of blood to defeat the enemy, “whose atrocities are too well known. He stood for independence just as much as any body else and he thought that life is not worth living without independence.”²⁴

He considered that right thinking and good actions never go unrewarded. He said that if Orissa is true to her glorious tradition, she should maintain the attitude of cooperation during the War and such attitude would make Orissa, “the first province in India to attain Independence and lead the way again, as she has done in forming an elected ministry with all the oppositions challenge that the congress put for the and in spite of the call to break the ministry at all cost from no less an influential person than Mr. Gandhi with his followers and supporters.

He insisted that the British Government should not make any delay in granting Independence to India. In this regard, he stated that many people of India were anxious to know what place India would occupy in the Common Wealth of Free and Democratic Nations of the world.¹¹² He thought that the need for a ‘Declaration of Independence’ was felt by all and he appealed to the British Statesmen to exercise imagination and take advantage of the “Psychological position of the times²⁵.

He maintained that the officers are the agents of the different departments of the government and they should attune themselves to the public service. It is the duty of the government not to connive with them and at the same time, the government should see that the officers do not misbehave and transgress their Powers. It after proper enquiry, it is proved that the officers have transgressed their powers, the officers are to be given chances to protect themselves with the statements and evidence they can produce²⁶.

This broad outlook should guide the government in the day-to-day administration so that social equality can be established which is so vital for the realization of a welfare state. The Government is meant for the people and it is expected not to have any motive other than service to the country.

Krushna Chandra Gajapati emphasized that the political prisoners should be kept behind the bar with the intention of maintaining law and order and to assure sufficient discipline to the country and also to defend the civil life. Pandit Godavaris Misra, Educational Minister of Orissa, moved the Orissa University Bill of 1942 on 30th June, 1943 in the Orissa Legislative Assembly for the consideration of the House²⁷. Prime Minister Krushna Chandra Gajapati referred to this day as a 'Red letter day' in the history of Orissa. He was very much happy as his humble endeavour in establishing a separate University for Orissa came into fruition. He said that the University had been long wanted by the student population of Orissa and he was proud to help the great province of Orissa to which he belonged. Addressing the Speaker of Orissa Legislative Assembly on the eve of the introduction of the Orissa University Bill, he stated: Sir, I must say that what I have done is entirely to keep up the traditions of the family and to tread the honourable and most worthy footsteps of my great and revered father.

Krushna Chandra Gajapati donated the whole amount of his pay and travelling allowances, which he received as the Prime Minister, to the funds of Utkal University for its development.²⁸ This charity was quite in consonance with his undiluted interest which he fostered for the spread of education in the province. He spoke on the floor of Orissa Legislative Assembly that the spread of education, "is a very important factor in our life, if a community or a Nation is to advance and develop. He was a staunch supporter of female education and his government had accepted a progressive policy in this regard.

In May 1944, a new party under the name of 'Orissa Parliamentary Party' was formed with Pandit Godavaris Misra as President and Dibakar Patnaik as the secretary, which resulted in the political differences among the members of cabinet headed by Krushna Chandra Gajapati.²⁹ Towards the close of June, 1944, Krushna Chandra Gajapati resigned from the office of Chief Ministership of the province and the Governor of Orissa took charge of the administration of the province under section 93 of the Government of India Act of 1935.

CONCLUSION

The Coalition Ministry, consisting of diverse elements had continued in power from November 1941. Some internal differences had developed between them in course of time, and it was evident from conflicting statements issued by them during acute food crisis in the province. The Premier submitted his resignation on 20 June 1944 with a hope to forming a new ministry for harmonious functioning of the government. Pandit Godavaris Misra issued a long press statement stating the differences between him and the Premier. He, however, regretted that the Maharaja of Parlakhemidi had submitted his resignation all of a sudden without the consent or even the knowledge of his colleagues.

The resignation of the Premier and other ministers was accepted on 29 June 1944. It ended the rule of the Coalition Ministry and Orissa reverted back to the administration under the section 93 of the Government of India Act, 1935 from 30 June 1944.

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6. O.P.A.I. Vol. V, 29th May 1941, No. 21, p.136 (O.S.A.)
7. In August 1939 a standing Committee of the Forward Bloc in Orissa was formed with Jadumani Mangaraj as the President. A Provincial committee was formed in March 1940 with Sri Dibakar Patnaik as the President and Ashok Das as the Secretary. It is worthy to note here that Mr. Jadumani Mangaraj and Mr. Dibakar Patnaik were members of Nilakantha Das's group and the Secretary was his son.
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CITIZEN-CENTRIC ADMINISTRATION: PROBLEMS AND PROSPECTS

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ABSTRACT

Preamble of the constitution ensures the social justice and economic opportunities for all citizens. Further, the Directive Principles of State Policy play an important role for the overall development of our citizens. In the words of CJI, M.C.Chagla, "if all these principles are fully carried out, our country would indeed be a heaven on earth, India would then be not only democracy in the political sense, but also a welfare state looking after the welfare of its citizens." In this connection, administrative machinery is responsible to act according to the spirit of the constitution. Our constitution gives the direction to administration to adopt, a citizens' centric approach. But it is far from reality as our administrative structure has failed to provide efficient, effective and transparent administration to the people. This sorry state of affairs is due to of lack of administrative culture; red-tapism; indifferent attitude of public servants; lack of accountability and transparency; ineffective implementation of laws; unawareness of citizens about the rights and duties; rigidity of laws; lack of customer oriented approach; corruption etc. These are the problems which are always faced by citizens. Ultimately, this leads to maladministration. These problems can be tackled by making administration more accountable, effective, transparent and responsive through awareness of RTI, implementation of Judicial Reforms; providing strong lokpal and lokayukt; introduction of rewards and awards for honest personnel; simplification of administrative procedure; less paper work; e-governance; equity based administration; Right to Service Act and Citizen's Charter; and strong grievance redressal mechanism etc.

KEYWORDS: Constitution, implementation, integrity, accessibility, transparency, participatory,

INTRODUCTION

The Constitution specifies the vision of its framers for the people of this country and also spells out the role and functions of the three organs of the Government-Legislature, Executive and Judiciary. It enshrines the Fundamental Rights which are critical for democracy and the Directive Principles of State Policy which represent the concept of a Welfare State. These are unique features of our Constitution. The effort of the Government at all levels has, therefore, been to provide for a citizen centric administration. For this purpose, a strong legal framework has been created. Institutions such as the National Human Rights Commission, the National Women's Commission, the National Consumer Disputes Redressal Commission, and *Lokayuktas* etc. have been set up. Several other measures including affirmative action have been initiated for the socio-economic empowerment of the weaker sections of the society. The study conducted by Centre for Media Studies observed that a majority of citizens are not satisfied with the delivery of public services. In seven out of the 11 departments covered the study, less than one-third of the citizens are satisfied with the services delivered. In fact, in most need-based services such as the police, judiciary and municipalities, not even 20 per cent of the households are satisfied with their services. Even in essential services such as the PDS, hospitals, and electricity and water supplies, mere 30-40 per cent of the households are happy with the services¹.

Ideally, the interaction between citizens and administration is supposed to be trustworthy and purposeful, in reality, it is aptly observed that this is always plagued by conflicts, stresses and strains. Discontent among the citizens is due to the result of a wide disparity between the performance of administration and popular expectations. Thus, it has become a normal feature. The general feeling of the people is that the policies are neither cumbersome nor the processes of administration are unjust but the problem is of the deterioration in the standards of honesty and integrity both, politics and administration due to corruption. Rigid observance of rules and regulations, non-acknowledgement of complaints and inordinate delay in disposal of various matters account for lack of faith of public in administration.

Citizens in their day to day life constantly interact with administration. The purposes of contact may be varied, for example, it may be for getting basic services or it may be getting basics services like water, electricity and health services or it may be for getting driving licence or feeling of income tax returns in income tax department. Sometimes, people get an opportunity to directly participate in policy-making and implementation of a governmental agency or project. When people do not get services in time or harassed by public authorities, they seek redressal of their grievances from the court and when they do not see justice coming from any side, they resort to protest or criticize the unjust policy and action of the government agencies. Through these happy and unhappy interactions, citizens form their opinion about public administration.

There are different ways of citizens' interaction with the administrative agencies in their day to day life. These may be in the form of:

Client: citizens seek to obtain benefits or services from governmental agencies.

Regulate: the public interacts with many government agencies like the police, income tax authorities, licensing authorities, and so on.

Litigants: the public moves the court against unjust actions of public agencies.

Participants: people become direct participants in decision-making in public agencies at different levels.

Cutting-edge encounters: people approach agencies which are responsible for day to day primary services and facilities for the public.

Protesters: there could be another form of interaction, that is, of people as protesters. People often interact with government agencies on public policy as protesters opposing the injustice in government policy and action.

In a democracy, the administration-citizen relations are significant because the support and consent of the governed is a prerequisite for the sustenance of representative government. The state, and in actual terms, the administration has the major responsibilities of providing major amenities of life-education, health, employment opportunities, improved means of transport and infrastructure, and so on to the citizens. All this affects the individual and collective life of a very large numbers of people concerned.

An analysis of the barriers to citizens-centric administration reveals that there are several pre-conditions which must be fulfilled in order to make administration citizen-centric like accountability, accessibility, transparency, participatory, responsiveness, effectiveness and efficiency. Success of an administrative system also depends on the effective and efficient delivery of services to the people. Effectiveness is the extent to which an objective or goal is achieved. If an organization has successfully achieved its objectives, it is considered effective. Effectiveness is, thus, a matter of comparing results with intentions. Efficiency on the other hand refers to the process by which the organization maximizes its objectives with the minimum use of resources.

PROBLEMS IN THE WAY OF CITIZEN CENTRIC ADMINISTRATION

The reasons for Administration not being citizen centric can be attributed to the attitude and work of some government servants, the deficiencies in existing institutional structures and also to some citizens. While the laws made by the Legislature may be sound and relevant, very often they are not properly implemented by government functionaries. The institutional structure provided at times may be also weak and ill-conceived and thus has neither the capacity nor the resources to implement the laws in letter and spirit.

ATTITUDINAL PROBLEMS OF BUREAUCRACY

There is a growing concern that the administration in general, has become wooden, inflexible, self-perpetuating and inward looking. Consequently, the attitude is one of indifference and insensitivity to the needs of citizens. This, coupled with the enormous irregularity in the wielding of power at all levels, has further aggravated the situation. The end result has been that officers perceive themselves as dispensing favours to citizens rather than serving them and given the abject poverty, illiteracy, etc. a culture of exaggerated deference to authority has become the norm. Most of the bureaucrats approach is to control and govern and not to work as team for development². The majority of bureaucrats work for themselves. And then there are egos, differences, grudges and dislikes for fellow bureaucrats. So there is never a team approach in whatever to do and this drags the performance of the government. Our Prime Minister said, “we cannot march through the 21st Century with the administrative systems of the 19th Century”³.

LACK OF ACCOUNTABILITY

Common reason usually cited for inefficiency in governance is the inability within the system to hold the Civil Services accountable for their actions. Seldom are disciplinary proceedings initiated against delinquent government servants and imposition of penalties is even more rare. This is primarily because at most levels authority is divorced from accountability leading to a system of realistic and plausible alibis. Cumbersome disciplinary procedures have added to the general apathy towards discipline in Government. Moreover, the safeguards provided to civil servants, who were well intentioned have often been misused. Another reason for lack of accountability is that performance evaluation systems within government have not been effectively structured. The contentment that the system breeds has resulted in employees adopting an apathetic or lackadaisical attitude towards citizens and their grievances. Our bureaucracy is more procedure driven than outcome driven⁴.

DELAY IN WORK

Bureaucracies the world over are expected to adhere to rules and procedures which are, of course, important for good governance. However, at times, these rules and procedures are ab initio ill conceived and cumbersome and, therefore, do not serve their purpose. Also, government servants sometimes become overly pre-occupied with rules and procedures and view these as an end in themselves.

LACK OF AWARENESS OF CITIZENS

Inadequate awareness about their rights prevents citizens from holding erring government servants to account. Similarly, low levels of compliance of rules by the citizens also acts as an impediment to good governance; when citizens do not adhere to their duties they infringe on the freedom and rights of other citizens. Thus, awareness of rights and adherence to duties are two sides of the same coin. A vigilant citizenry, fully aware of its rights as well its duties, is perhaps the best way to ensure that officials as well as other citizens discharge their duties effectively and honestly.

INEFFECTIVE IMPLEMENTATION OF LAWS AND RULES

There is a large body of laws for e maintaining public order and safety, sanitation and hygiene, protecting rights of citizens, giving special protection to the vulnerable sections etc. Effective implementation of these laws would improve the welfare of all citizens and at the same time, encourage each citizen to contribute his best towards the development of society. Contrary to this, weak implementation can cause a great deal of hardship to citizens and even erode the faith of the citizenry in the government machinery.

MALFUNCTIONING OF NGOS

The Supreme Court decided to review laws governing NGOs to assess the regulatory mechanism to prevent financial irregularities and ensuring proper utilization of funds for achieving stated goals. The apex court passed the order after being surprised by the fact that nearly 1 lakh NGOs were there in Aasam alone, while there were about 29 lakh such organizations across the country. The court has already ordered a CBI probe. Punjab and Haryana have a disproportionately high concentration of NGOs going by the population of the 2 states and the NGOs in the other states, information given by the CBI to the SC shows. While Haryana had

more than 1 lakh NGOs, Punjab accounted for 84752 such organizations. The CBI filed the report in response to an apex court order asking the agency to conduct a survey on the total number of NGOs in the country and go into their functioning to ascertain their financial irregularities⁵.

INDIFFERENT ATTITUDE OF STATE GOVERNMENTS

Generally, the states governments are reluctant to provide basic amenities to the people and to maintain the law and order too. An AIIMS study has found that the Punjabis spend Rs. 7500 crore annually on drugs, a massive Rs. 6500 crore on heroine alone. Apart from the financial outgo and the personal pain of parents, the manpower loss to Punjab's economy on account of young ones (76 per cent addicts are aged between 18 and 35 years). A former Punjab DGP Shashi Kant has named six politicians involved in drug smuggling. The Ruling father-son duo has either conveniently ignored the list or put the blame on the BSF. The Punjab and Haryana High Court has made scathing observations as "Punjab not serious in combating drugs"⁶. Chennai is also a witness to the state's vulnerability to the harvest from pursuing the path for private greed and private rationality. The flood in Chennai was the act of a handful of the rich, punishment for thousands of the poor⁷.

APATHY OF THE SYSTEM

According to a report submitted to the government has pointed out that at least 12 states have water contaminated by Arsenic, a chemical naturally found in the ground and extremely harmful to humans and animals. The latest information is an addition to multiple reports that have earlier pointed to the existence of Arsenic in our environment. It has been estimated that one lakh people have died from Arsenic related diseases and around 7 crore may be affected by it. The Indian Council of Agriculture Research study has specifically pointed to the presence of Arsenic in vegetables, oil seeds and pulses, which is particularly alarming as there is no way avoids such food items⁸.

JUDICIAL HINDRANCE

In present scenario, our judiciary is playing a very active role in lieu of executive. But it has some problems. The then Chief Justice of India T.S. Thakur lamented inaction by executive to increase the number of judges from the present 21000 to 40000 to handle the avalanche of litigations. Contrary this perception, the law ministry has said, the shortage of judges is not the sole reason for increasing pendency of cases. Ministry said a variety of factors contribute to the delay in disposal of court cases, including lack of court management system, frequent adjournments, strike by lawyers, accumulation of first appeals, indiscriminate use of writ jurisdiction and lack of adequate arrangement of monitor, track and bunch cases of hearing. There were 4432 vacancies of judges in subordinate courts by the end of 2015⁹.

VOTE POLITICS

During the last nine years, the Badal Government in Punjab had taken several questionable decisions, but labeled them people friendly. While there were some decisions regarding matters that do not seem to be in line with the secular spirit of the Constitution, the biggest decision to fill around 1.14 lakh vacancies in different departments need to be welcomed. However, it brings out the fact that all this while public services were suffering particularly because most of the jobs are in the education, health and agriculture sectors, all of which have been in acute distress. The

government will hardly be able to pay the new employees, as it is falling drastically short of its revenue targets, and is unable to pay regularly even the existing staff. Recruitment, when done in hurry, will also be an opportunity for political leverage through favours¹⁰.

HOW TO ENSURE CITIZEN CENTRIC ADMINISTRATION?

Rapid economic growth, increasing literacy, improved health indices etc. point towards improving governance standards. At the same time, the poor image of government in the minds of large sections of society points towards inefficient and ineffective administration. All these need substantially reforming of our governance systems operating at different levels.

PRE-CONDITIONS FOR CITIZEN CENTRIC ADMINISTRATION

An analysis of the barriers to Citizen Centric Administration reveals that there are several pre-conditions which must be fulfilled in order to make governance citizen centric. Some of the pre-conditions are: sound legal framework; strong institutional mechanism for proper implementation of the laws and their effective functioning; competent personnel staffing these institutions; sound personnel management policies; and right policies for decentralization, delegation and accountability. Besides, a number of tools can also be employed to make administration citizen centric. These are: Re-engineering processes to make governance 'citizen centric'; Adoption of appropriate modern technology; Right to information; Citizens' charters; Independent evaluation of services; Grievance redressal mechanisms; Active citizens' participation – public-private partnerships¹¹.

ACCESSIBILITY

It is desired that good administration has to be accessible to the people. If people face any problem, administrative officials should be ready to listen to them and accordingly respond to their problems. There has to be no fear in the mind of the people regarding the status and rigidity of the bureaucracy.

SOUND LEGAL FRAMEWORK

A sound legal framework is the basic pre-requisite for any orderly society. The Constitution is the cornerstone of our legal framework. Parliament has enacted a large number of laws to further the objectives enshrined in the Constitution. A dynamic society requires constant updating of existing laws as also enactment of new laws to meet emergent needs and challenges so that the welfare, protection and development needs of citizens is fully met. In fact, the Law Commission has inter alia been given the responsibility to examine existing laws to ensure their relevance to present-day needs and requirements.

HEALTHY ADMINISTRATIVE SYSTEM FOR ESTABLISHING RULE OF LAW

The country has, over the years, created and sustained strong and effective institutional mechanisms to ensure that the rule of law is maintained and the rights of our citizens are well protected and human dignity upheld. Some of these institutions have been established in our Constitution and others through statutes and executive orders. The Commission in its present Report has examined the structure, powers and functioning of some of these institutions like the National Commissions for the Scheduled Castes and for the Scheduled Tribes, the National Human Rights Commission, the Consumer Grievances Redressal mechanisms, the National Commission for the Child, etc.

DEDICATED HUMAN RESOURCE

A sound legal system and a robust institutional mechanism need to be buttressed by ensuring that competent and motivated personnel run the system in order to provide a vibrant citizen centric administration.

INTRODUCTION OF E-GOVERNANCE

E-Governance has to be citizen friendly. Delivery of services to citizens is considered a primary function of the government. In a democratic nation of over one billion people like India, e-Governance should enable seamless access to information and seamless flow of information across the state and central government in the federal set up. No country has so far implemented an e-Governance system for one billion people¹². It is a big challenge before us. It is emphasized that even in e-Governance projects, the focus has to be on governance reforms keeping the citizens at the centre stage and using the technological tools made available by the IT revolution to transform the interaction between the citizens and government.

TRANSPARENCY AND RIGHT TO INFORMATION

Transparency and Right to Information are an essential pre-condition for citizen centric governance. Access to information empowers the citizens to demand and get information about public policies and programmes, thus making the government more accountable and helps to strengthen participatory democracy and citizen centric governance. It enables citizens to keep themselves informed about the policies of the government, the rights that they have and what they should expect as service from the government. It is suggested that the Right to Information Act on various measures including changes in the Manual of Office Procedure, measures to strengthen the institution of Information Commissioners, the need for capacity building and awareness generation, etc, to facilitate the implementation of the Right to Information Act.

ACCOUNTABILITY

It is defined as the state of being accountable, liable or answerable. To be accountable means to be obliged to report, explain, or justify something. It ensures that something is carried out as expected. Accountability is a key requirement of good administration. It means public servants must be accountable to the public.

Accountability also means answerability i.e. questions asked of public officials have to be answered by them. There are two types of questions that can be asked. One type as under the RTI Act merely seeks information/data and involves one way transmission of information. It promotes transparency and to a much lesser degree accountability in Government. The second type of question enquires not just as to what was done but why; and therefore involves a consultative two-way flow of information with the citizens usually providing a feedback in respect of the working of government departments and service delivery of public agencies. Such mechanisms include citizens' charters, service delivery surveys, social audits, citizens' report card and outcome surveys.

EFFECTIVENESS AND EFFICIENCY

Success of an administrative system also depends on the effective and efficient delivery of services to the people. Effectiveness is the extent to which an objective or goal is achieved. If an organization has successfully achieved its objectives, it is considered effective. Effectiveness is,

thus, a matter of comparing results with intentions. Efficiency on the other hand refers to the process by which the organization maximizes its objectives with the minimum use of resources.

MONITORING AND EVALUATION

Monitoring and evaluation are important functions of each department and other governmental agencies. In government organizations these functions assume special significance because of their large size in terms of the workforce coupled with their wide reach. The success of the laws, policies and guidelines - which are implemented by a large number of field organizations - depend on their effective administration. This necessitates constant monitoring and evaluation. It has to be ensured that the impediments, hurdles and drawbacks found through and evaluation must be corrected through appropriate and timely actions.

GRIEVANCE REDRESSAL MECHANISMS

In a welfare State like India, citizens have a variety of interactions with the Government as a service provider, a regulator, as a provider of social and physical infrastructure etc. Meeting the expectations of the citizens is a challenging task for any Government. Sometimes, the task is compounded due to internal inefficiencies while at other times, despite the best efforts of the public agency, external constraints prevent them from meeting the expectations of the citizens. Addressing the grievances of those citizens whose expectations are not fulfilled is primarily the task of the Government agency concerned even though external accountability mechanisms, often having limited scope, do exist.

SIMPLIFICATION OF PROCESS

Simplifying transactions focusing on adoption of Single Window Approach, minimising hierarchical tiers, up-dating and simplification of existing department manuals and codes etc. needs to be brought to the centre-stage of administrative reforms. The Process should be started regarding re-engineering in all Government organizations focusing on rationality and simplicity ultimately leading to re-designing of governmental forms, processes and structures to make them adaptable to e-Governance backed by procedural, institutional and legal changes.

ZERO TOLERANCE POLICY FOR RULE OF LAW

All public agencies should adopt a zero tolerance strategy towards crime, in order to create a climate of compliance with laws leading to maintenance of public order. This strategy should be institutionalized in the various public agencies by creating appropriate statistical databases, backed up by modern technology, to monitor the level and trends of various types of offences and link these to a system of incentives and penalties for the officials working in these agencies. It should be combined with initiatives to involve the community in crime prevention measures.

MAKING THE GOVERNMENT'S INSTITUTIONS RESPONSIVE

Responsive administration is an apparently moral concept in public administration in as much as it calls for public functionaries' accountability directly to the people. It is a micro level concept deriving its credibility and validity from the delivery system of a country's administration. According to the Seventh Pay Commission of India, Government sector must be answerable to the people. The country government staff ratio is 139 per lakh citizens as compared to 668 for the United States¹³.

Rule of Law ‘requires institutions - which are adequately empowered, properly structured and have the right quality of personnel and resources at their disposal – for effective implementation. Besides, the Legislature has established several specialised institutions, to look after specific needs of the citizens’.

PARTICIPATION

Improvement is needed for delivery mechanism by decentralization with greater citizens and stakeholder involvements and encouraging participative governance by empowering local self-governments. Promoting citizen centric administration also implies giving a voice to citizens in the governance process. It means involvement of people in administrative activities particularly participation of beneficiaries of the developmental activities both at the formulation and implementation stage for the success of programmes. People participation is also an important safeguard against the abuse of administrative authority. It is a method of tapping human and material resources for development.

TRANSPARENCY

Transparency is one of the core principles of citizen centric government. Transparency in decision making, disclosure of standards of delivery and openness in the everyday functioning of the administration are the hallmarks of a citizen centric approach. As this is a reasonably new concept, which has gained acceptance after the enactment of the Right to Information Act, a change in approach is required at all levels of the government.

CIVIL SERVICE REFORMS

Civil servants are the backbone of the various institutions of Government. Their attitude, competence, efficiency and approach to governance determine the experience that a citizen has with government. One of the core principles for reforming the civil services has been ‘providing citizen centric administration’ so that the governance apparatus becomes an instrument of service to the people.

ETHICS IN GOVERNANCE

Ethics is a set of standards that a society place on it and which helps guide behaviors, choices and actions. Corruption and the abuse of office is an important appearance of the failure of ethics. Ethics in governance, however, has a much wider import than what happens in the different arms of the government. An across-the-board effort is needed to fight deviations from ethical norms. Such an effort needs to include corporate ethics and ethics in business; there is need for ethics in every profession, voluntary organization and civil society structures as these entities are now vitally involved in the process of governance.

RIGHT TO SERVICE AND CITIZEN’S CHARTER

It is the need of hour to have strong Right to Service Act and Citizen’s Charter for the delivery the goods and providing quality services to the people. It will definitely curb the corrupt practices adopted by the public servants. Many states have framed the Right to Service Act and implemented the same. They also developed the administrative mechanism. But desired objectives are not being achieved.

Reforms in Process

After appropriate laws have been enacted, policies lay down and the institutional structure determined, it is important that the appropriate processes are put in place to ensure that they serve the citizens effectively and efficiently. These include well designed citizens' charters with in-built penalties for non-adherence to commitments made, independent, empowered and effective anti-corruption agencies and innovative tools to involve citizens in government's functioning. All these, combined with legislations like the Right to Information Act, will undoubtedly play a major role in promoting a citizen centric administration.

Citizen-Centric Administration aims at providing an environment in which all citizens irrespective of class, caste and gender can develop to their full potential. It has the objective of providing public services effectively, efficiently and equitably to the citizens. The four pillars on which the structure of **Citizen-Centric Administration** rests, in essence are:

- **Ethos (of service to the citizen);**
- **Ethics (honesty, integrity and transparency);**
- **Equity (treating all citizens alike with empathy for the weaker sections); and**
- **Efficiency (speedy and effective delivery of service without harassment and using ICT increasingly)¹⁴.**

CONCLUSION

Governance in order to be citizen centric should be participative, transparent, effective, efficient and responsive to the citizens. Furthermore, an ethos of serving the citizens should permeate all government organizations. Last but not the least, Government organisations should be accountable to the people. As one of the primary functions of the State is to promote the welfare of its citizens, an evaluation of the functioning of the institutions of governance will ultimately has to be based on the satisfaction they provide to the common man. In this regard, prominence would need to be attached to the voice of the citizens themselves. We must honour the civil societies, NGOs and other community based organizations.

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**ESTRANGEMENT FROM SELF AND SOCIETY:
A STUDY OF SHIV K. KUMAR'S *TWO MIRRORS AT THE ASHRAM***

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ABSTRACT

The concept of estrangement and alienation is not quite new. Its origin can be traced back to Plato and Plotinus. Broadly speaking, man's alienation implies his estrangement from his family, his group, his society and even his own self. The theme of estrangement has been discussed by several writers like Albert Camus, Sartre, Anita Desai, Arun Joshi, and others. Shiv K. Kumar, in his novels, explores the themes of estrangement from self, alienation from society, quest for identity, faith, desire, violence and sex. His fifth novel, Two Mirrors at the Ashram (2006) is the story of Rajesh Sahni – a novelist, habitual drinker, womanizer and atheist who believes in the epicurean way of life. Rajesh is a chronic bachelor and a misogynist. He does not believe in marriage. His obsessive-compulsive notions of “detachment” force him to become cold and indifferent. He suffers from a personal malaise – an inner restlessness. He comes to a secluded ashram in Mullagarhi, near Vellore, in search of mental peace. Then suddenly one day, something unexpected happens, changing his perceptions. The present Paper aims to explore how Rajesh embarks upon the road to self-discovery.

KEYWORDS: Alienation, Estrangement, Detachment, Self-discovery, Straggler

TEXT OF THE PAPER:

The concept of estrangement and alienation is not quite new. Its origin can be traced back to Plato and Plotinus. Broadly speaking, man's alienation implies his estrangement from his family, his group, his society and even his own self. J. A. Cuddon, in *A Dictionary of Literary Terms*, defines alienation as "the state of being alienated or estranged from something or somebody: it is a condition of the mind". In English literature, the theme of alienation and estrangement has been discussed by writers like Albert Camus, Sartre, Anita Desai, Arun Joshi, Shiv K. Kumar and many others. Shiv K. Kumar's novels explore myriad themes, such as, alienation, quest for self, faith, desire, violence and sex, besides being bitter commentaries on "the infirmities and ostentations prevalent in our society" (Bansal 262). The novelist satirizes in his fiction religious regimentations and orthodoxy, fanaticism, infatuations and infidelity and also, corruption in legal and official circles. However, one particular aspect that attracts the reader's attention in Kumar's *Two Mirrors at the Ashram* is the author's tackling of the theme of estrangement from self and society.

Two Mirrors at the Ashram is the story of Rajesh Sahni – a novelist, habitual drinker, womanizer and atheist – who comes to a secluded ashram in Mullagarhi, near Vellore, in search of mental peace as well as characters for his next book. A bohemian by nature and practice, he does not believe in the idea of salvation and is contemptuous of godmen, whom he often portrays as rogues and villains in his stories. He treats his experience in the ashram, the austere life-style, abstinence, meditation, spiritual discourses, etc., with scepticism and flouts all the rules, celebrates temptation and indulges in every carnal, worldly desire that he is expected to forsake. Then suddenly one day, an unexpected confession by Swami Shanti Swarup, the moving spirit of the ashram, changes Rajesh's perceptions and he embarks upon the road to self-discovery. The Swami accepts him as a fellow traveller along this road. However, the beginning of Rajesh's quest for inner peace and tranquillity is virtually the end of all his social interaction, shedding of his social responsibilities and breaking away from all tangible relationships, barring his affinity with the Swami, who himself is a social recluse.

The protagonist believes in the epicurean way of life. The social circle he moves in comprises a "gang" of people of diverse beliefs and occupations, holding nothing in common, except for a penchant for winning and womanizing. All these people meet at the week-ends at an eatery, called "den" and indulge in their nocturnal orgies. For the other days of the week, each one of them remains to his own self. Rajesh is a chronic bachelor and a misogynist. He does not believe in marriage, though he has frequent sexual liaisons with several married and unmarried females, such as, Sakeena, Neera, Kulvinder and Susan. Even in his physicality, he does not stick to any single woman. He loves his freedom and unencumbrance exceedingly. He is an "impulsive animal" and a Lawrentian figure" (Singh 291). His obsessive-compulsive notions of "detachment" force him to become cold and indifferent to each one of them. He remains essentially a willing, lone straggler in the sea of humanity. As such, he is like Sindi Oberoi of *The Foreigner*, almost surgically dispassionate so far as deep emotional involvement of lasting nature is concerned.

Rajesh Sahni is the only issue of his widowed mother. He declares: "I loved Mother more than anything in the world, even my writing" (83 - 4), yet he does not brook the idea of living with her even in her old age. The mother lives in Kamla Nagar in Delhi, while the son lives in a separate house in Kirti Nagar of the same city. In fact, Rajesh is a charlatan and a fake.

Whenever his mother insists on his staying with her, or his getting married, he tells her that he loves his freedom and wants to live life in his own way. "If you want a litre of milk, why maintain a whole dairy. You can buy fresh milk from anywhere, anytime," is his stock response to the question about leading a settled, married life. In a way, he is partly like Arun Joshi's Sindi Oberoi and Ratan Rathor (*The Apprentice*) and in part, like Anita Desai's Nirode, (*Voices in the City*), leading a life of self-aggrandisement, devoid of any permanent social attachment. The fact is that Rajesh suffers from a personal malaise – an inner restlessness, an undefined sense of void and an unconscious search for something meaningful in life. So, when Bharat, his "drunk philanderer" (2) companion, suggests to him during one Saturday night revelry that the Swami at Mullagarhi ashram can cure him of his restlessness, the hero decides to visit the place because for him "the moment decides everything" (3).

Even at the ashram, Rajesh is disdainful to the Swami's preaching and is more interested in a charming young foreigner, Susan, for her ravishing looks. He goes out to Sardar Gurbachan Singh's dhaba, outside the ashram, to enjoy his wine and non-vegetarian lunch, in contravention to the Swami's instructions. Soon, he entraps Susan by his glib talk and seduces her. Though he utters the words: "I love you" during his love-making to her, yet he is conscious even then that he does not mean what he says. Ironically, prior to his own attempts at wriggling out of this emotional entanglement with Susan, Nature offers him an opportunity to escape when the news of his mother's heart-attack and hospitalization reaches him. He slips away from the ashram without informing anyone, least of all, Susan, who remains intrigued for some time and then leaves the ashram for Calcutta in her disillusionment. In Delhi, too, Rajesh cares for his mother only till she undergoes a successful heart surgery and recovers subsequently. After that, he expresses his inability to stay with her. The old lady withdraws into her lonely, humdrum existence, while the son leaves her and returns to the ashram (after a call from the Swami) only to discover happily that Susan is altogether out of his life. He is, in fact, a social recluse. The society he moves in abounds in loners and estranged people who are unpegged and unhinged. Even his so-called confidante, Bharat, is desperately embroiled in a divorce case against his wife. His biggest worry is to get out of the choking marital bond, somehow.

Besides Rajesh and Bharat, there are, in the novel, various other characters that fail to sustain and nurture happy and healthy human relationships and are estranged from one another. For instance, Mr. and Mrs. Sunder Gulati, business tycoons of London, are unable to maintain a parental bond of affection with their only child, Padma, who rebels against their hostility to the idea of her marrying an English young man. Ultimately, Padma elopes with her beau, while the elderly Gulati couples commit suicide. Rabindranath Bajaj and his petite wife, Kalpana Bajaj, in Chicago, are apparently a happy couple, blessed with a young son, Som, yet they are estranged intrinsically because Rajesh discovers that the young Som is not Mr. and Mrs. Bajaj's child, but he has been begotten through Kalpana's extra-marital sexual liaison with their driver, Aziz. When Mr. Bajaj dies suddenly in a fatal road-accident, Kalpana does not show any palpable signs of loss or remorse; rather, she leaves her husband's dead body in the mortuary and returns to her home along with her child and lover.

Similarly, Susan and Emillia, two foreigners in the novel, the former an American divorcee and the latter one, an economically distraught daughter after her father's death, fail to develop any lasting relationships anywhere. Both of them are estranged from their own selves and their immediate society. Susan comes to the Swami Ji's ashram in search of mental peace but there also, before she could form a lasting relationship with Rajesh, she is left alone by him. After

leaving the ashram, Susan goes to Calcutta where she is raped and dumped at a road-side by a Bengali man. After an abortion, she returns to America only to lead a lonesome life, since Rajesh Sahni makes it clear to her even in the U. S. A. (where he has reached with the Swami) that he has no desire to stick to her. Susan takes the hint and abruptly leaves the scene for good. Emillia, too, remains alienated and estranged from her aged grandfather and she comes to India in search of peace. She establishes a sexual partnership with Gurbachan, the dhaba owner at Mullagarhi, but neither she nor Gurbachan is sure of the outcome of this affair.

The narrative also includes several disgruntled and misdirected persons. One of these is Seth Mullu Ram, an affluent steel merchant of Agra. He dies a lonely death at the remote ashram after a prolonged illness, unattended by his kith and kin. Even Rajesh, who is Mullu Ram's room-mate at the ashram, does not wish him to get well, nor does he visit the sick man even once at the ashram infirmary. Aziz, the Pakistani driver to the Bajajs in Chicago also cannot expect a permanent alliance in marriage and family and remains only temporarily pegged on to Mrs. Kalpana Bajaj. The Swami himself, as already mentioned, is a social recluse, an unattached and renounced soul, still struggling to master the art of meaningful living. He treats Rajesh Sahni merely as a reflector or a mirror unto himself.

Paradoxically, all the major human characters of the novel are alienated and estranged beings who undergo the painful experience of slow, but sure disintegration of human relationship in the modern materialistic society, while a pet like Polly, the cat, shows her unwavering and selfless affection and attachment to her master, Rajesh Sahni, even when he abandons her for long stretches of time. One may infer here that in Shiv K. Kumar's novel, one of the non-human species (cat) emerges as an embodiment of unstinted love, devotion and loyalty, while her human counter parts are fickle-minded, who shift loyalties, break associations and mostly, remain socially unattached.

Mr. Sahni, on his part, may have learnt "detachment, withdrawal – and self-control" (207) from the Swami in the long run, but certainly at a heavy cost, the cost of losing his normal social relationships. Jyoti Singh, in her review of the novel, aptly says that the book "convincingly portrays the contemporary modern 'wasteland' where values of honesty, piety, care and commitments are overlooked in favour of selfish motives."

The novelist has implicitly, but successfully, sent across a message that it is the warmth and affability of heart-to-heart correspondence and emotional bonding, rather than an attitude of detachment and withdrawal from life, which make life wholesome and enjoyable – and it is that very thing which is constantly dwindling in the modern life.

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DUKHI MOCHI: THE MODERN METAPHOR OF DALITISM A STUDY OF ROHINTON MISTRY' A FINE BALANCE

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ABSTRACT

Society is like a vehicle having four wheels which are represented by four varnas of Indian society envisaging the Brahmins, the Kshatriyas, the Vaishyas and the Shudras. If we think co-operation and co-ordination is unnecessary, then we should try to run the vehicle, for a while, on three wheels. In the same way, a perfect equilibrium and a fine balance among all the echelons of society is not doable if there is pre-maturity of civic bonhomie. Under the influence of Marxism which means equality, liberty and fraternity for all and of Gandhism which means no one is untouchable, Rohinton Mistry, in the grab of social crusader, decides to raise his pent up feelings against the deep rooted disease of untouchability in Indian society, which has tarnished its secular and sympathetic silhouette.

KEYWORDS: *Four Varnas... Indian Denizens... Communal Discrimination... Humiliation and Forbearance... Plank of Dalit Literature... Corresponding Punishments... Eclectic and Holistic View... Modern Metaphor of Change ... Social Apartheid*

INTRODUCTION

Society is like a vehicle having four wheels which are represented by four varnas of Indian society envisaging the Brahmins, the Kshatriyas, the Vaishyas and the Shudras. If we think co-operation and co-ordination is unnecessary, then we should try to run the vehicle, for a while, on three wheels. In the same way, a perfect equilibrium and a fine balance among all the echelons of society is not doable if there is pre-maturity of civic bonhomie. Since, aeons ago, there has been no symmetry among all the compartments of community, as a corollary, a cleavage is discernible among different and divergent sects on the basis of caste, creed, culture, religion, profession and occupation. This social imbalance is so deep rooted that it, sometimes, looks like an organic unity of the Indian society. A crucial aspect of dalit literature is its realistic nature. As separate from the metaphysical, religious literature of ancient times and fanciful, romantic literature of contemporary age, dalit literature is a distinctive stream based on its realism. The purpose of a

dalit work is different from those of main stream literature, as this literature does not accept pleasure through the recognition of beauty its main objective.

Our constitution has made it mandatory that all the Indian denizens are equal in every aspect by providing them equal rights and opportunities in social, political, economic, and other arenas of life. The shudras in our society are called untouchables or dalits or the second rate citizens devoid of proper respect and status, and dignity and equality. Under the influence of Marxism which means equality, liberty and fraternity for all and of Gandhism which means no one is untouchable, Rohinton Mistry, in the grab of social crusader, decides to raise his pent up feelings against the deep rooted disease, of Indian society, which has tarnished its secular and sympathetic silhouette. In A Fine Balance through the tragic, towering and revolutionary personality of Dukhi Mochi, Rohinton Mistry posits a way for the elimination of untouchability and of restoring lost dignity and decorum by decolonizing the mind from the grip of brahminism and by changing profession. When the story starts, Dukhi Mochi was five years old when he learnt and acquired the skills as tanner by removing and skinning the carcass. Dukhi accepted this profession directly from his forefathers without any demur. He has been remained the victim of class and communal discrimination on account of his birth and profession. Due to animosity and atrocity of the upper caste people, Dukhi finds his job as drudgery but he gets mastery in making “sandals, whips, harness, and water skins (95). As he masters the skill, imperceptibly but relentlessly his skin becomes impregnated with the smell of leather, creating a mixed feeling of pride and sorrow for his mother when she says:

“You are becoming an adult, my son, I can sniff the change.”(AFB:95)

This odor goes deeper than skin in Dukhi when he compares it like the social system of untouchability:

“Like the filth of dead animals which covered him and his father as they worked, the ethos of caste system was smeared everywhere.”(AFB:96)

Through the clandestine conversation, between his father and mother, Dukhi comes to know about the atrocities and annihilation as well as the degrees of punishment awarded to the Chamaars by the Thakurs and the Pandits. Going close to the well of Pandits, refusal by a dalit woman to go to Zamindar’s farm, not buying dead animals from Pandits, listening hindu prayers, walking near the temple are considered the heinous crimes for which the dalits are murdered or their body parts are chopped off. The conversation of Dukhi’s parents erects the hair of a hard hearted fellow:

While Dukhi’s father ate, he repeated for his wife everything he had learned that day. The Pandit’s cow is not healthy. He is trying to sell it before it dies.

‘Who gets it if it dies? Is it your turn yet?’

‘No, it is Bhola’s turn. But where he was working, they accused him of stealing. Even if the Pandit lets him have the carcass, he will need my help – they chopped off his left-hand fingers today.’

‘Bhola is lucky,’ said Dukhi’s mother. ‘Last year Chhagan lost his hand at the wrist. Same reason.’

Dukhi’s father took a drink of water and swirled it around in his mouth before swallowing. He ran the back of his hand across his lips. ‘Dosu got a whipping for getting too close to

the well. He never learns.’ Eating in silence for a while, he listened to the frogs bellowing in the humid night, then asked his wife, ‘You are not having anything?’

‘It’s my fasting day.’ In her code, it meant there wasn’t enough food.

Dukhi’s father nodded, taking another mouthful. ‘Have you seen Buddhu’s wife recently?’

She shook her head. ‘Not since many days’

‘And you won’t for many more. She must be hiding in her hut. She refused to go to the field with the zamindar’s son, so they shaved her head and walked her naked through the square.’ (AFB96-97)

By the time Dukhi enters his teens, he finds it necessary to cross the sea of caste otherwise, like his ancestors, has to lead a life of humiliation and forbearance. Going hungry particularly for dalit women was a routine and to have milk for children was like a nectar. That is why, for the sake of children, the dalit women steal milk from the cows, during midnight, belonging to the people of upper caste by putting at risk even their honour. Sometimes they are raped. Dukhi’s wife Roopa has to barter her chastity and honour in return for oranges. Her body was rolled off by the cohort of Thakur:

“Roopa grabbed her clothes and the sack of oranges and ran naked through the orange grove. When she was certain he wasn’t following, she stopped and put her clothes on.”(AFB:97)

When Dukhi senses, at midnight, after Roopa’s arrival, the smell of coconut oil from his wife’s body, he feels the urge to speak to her to sooth her and to comfort her but he “weep silently, venting his shame, anger, humiliation in tears; he wished he would die that night” (99) The floggings and whipping on the Chamaars is a common phenomenon. Like other people of his caste Dukhi also contributes his skin. Once Dukhi is summoned to graze a herd of goats in return for a glass of goat’s milk. He dreams about the pleasure his sons, Ishvar and Narayan, would get from the milk but at last instead of getting milk, he gets a thrashing.

Humanism is a major plank of dalit literature. The celebration of eternal values such as liberty and fraternity in the precious human subject form the crux of dalit writings. It teaches equality to the mass of humanity, that is society. The concept of beauty has been changed with the arrival of dalitism but the fervor of co-operation, love and compassion maintains its pace among dalit community in particular and others in general. Rohinton Mistry dwells on dalitism which reduces untouchables no better than beasts. The mental aggression of Dukhi comes to the surface for the first time where he, after many idle days, is called by Thakur Premji who orders a sack of dry red chillies to be ground into powder by the evening. He has worked all the day and faced double whammy when he has been thrashed and denied of his payment after the mortar collapses into parts and his foot is crushed. The tyranny of the caste system is perpetrated on Dukhi when Thakur’s wife calls him ‘Chamaar donkey’ and ‘stinking dog’. His insurmountable outrages and militant attitude comes in the form of murderous thoughts:

I could kill that Thakur. Nothing but a lowly thief. And they are like that. They treat us like animals. Always have, from the days of our forefathers... I spit in their upper – caste faces. I don’t need their miserable jobs from now on. (AFB:105)

As a modern metaphor of change and revolution, he decides to change his profession from Cobbler to Mochi by migrating to the nearby city. He develops bonhomie with Ashraf, a muslim

but soon he realizes that “there was no difference between village grime and town grime, it looked and smelled the same.” (AFB:106) Another shifting of profession comes when, at the behest of Ashraf, he does the labour of loading and unloading the lorries of wood. In the city, through the speech of a leader, Dukhi realizes the equality of human beings. The speaker reads and delivers the Mahatma’s message to the public about untouchability:

This disease, brothers and sisters, is the notion of untouchability, ravaging us for centuries, denying dignity to our fellow human beings. This disease must be purged from our society, from our hearts, and from our minds. No one is untouchable, for we are all children of the same God. Remember what Gandhiji says, that untouchability poisons Hinduism as a drop of arsenic poisons milk. (AFB:107)

The Indian social apartheid or discrimination is not only confined to upper class illiterate but also to the educated ones particularly the teacher who is considered the God. Once Ishvar and Narayan enter the school. They are punished mercilessly and savagely by the teacher and are called Chamaar rascals for defiling the tools of learning and knowledge. When he says:

“And you two remove your pants. After I am through, not one of you achhoot boys will ever dream of fooling with things you are not supposed to touch.” (AFB:111)

It is Dukhi who goes to Pandit Lalluram, a chit-pavan brahmin, to complain the teacher. Instead of getting justice from the Pandit, he gets insult and humiliation. The Pandit advises him about dharmic duty and four varnas of the society. He says that his sons are lucky as “there wasn’t a holy book like the Bhagavad Gita in that cupboard, no sacred texts. Or the punishment would have been more final.”(AFB:114) Now Dukhi takes the most daring turn of his life and community to save his progenitors from the corresponding punishments to which he and his caste witness. After closing his social envelop forever for the upper caste hindus, he decides to veer his sons from cobblers to tailors, knowing that punishment for stepping outside one’s caste would have been death. He takes Ishvar and Narayan to Ashraf tailor and proudly instructs them in an authoritative manner:

If someone asks your name, don’t say Ishvar Mochi or Narayan Mochi. From now on you are Ishavar Darji and Narayan Darji. (AFB:115)

Rohinton Mistry as a humanist and spokesman of dalitism is well aware that the purpose of humanist is to promote humanity which in turn is promoted when human beings are survived. Human beings are survived when their dignity is maintained or restored. Their dignity is restored when people are able to raise their heads with pride in social set-up. And this will be feasible when economic independence is granted to everybody. To achieve this dignity, the barriers of caste, creed, culture, religion must be obliterated, then there would be an escalation of peace, progress and prosperity. When Dukhi raises his head, it is turned town by upper caste hindus but is supported and assisted by muslims. When he says, “muslim friend treated him better than his Hindu brothers” (116). This inordinate itinerary of Dukhi weighs heavy on Dukhi’s family as if engulfs all the members, including Narayan, Dukhi, Roopa, Radha and daughters, excluding Ishvar and Omprakash. The unimaginative atrocity happens to Naryan when he refuses to cast his vote according to the wish of Thakur Dharamsi. Thakur’s goondas take Narayan and his two friends to the farm. Dukhi is more blamed than his sons as Thakur Dharamsi says:

Dukhi had dared to break asunder; he had turned cobblers into tailors, distorting society's timeless balance. Crossing the line of caste had to be punished with the utmost severity. (AFB:147)

That is why, the goondas of Thakur flogged and hung naked, by Narayan and his two associates and "urinated on the three inverted faces. Semiconscious, the parched mouths were grateful for the moisture, licking the trickle with feeble urgency.... burning coals were held to the three men's genitals, then stuffed into their mouths. Their screams were heard through the village until their lips and tongues melted away. The still, silent bodies were taken down from the tree. When they began to stir, the ropes were transferred from their ankles to their necks, and the three were hanged. The bodies were displayed in the village square." (AFB:146)

The razor of atrocity does not stop here, it also takes away the lives of six members of Dukhi's family making, his hut, a graveyard. Now Dukhi is no more in the world. But there was nobody to submit his grief on such holocaust, and so called humanity had its other so called big adventures to think about that the wheel of time was spinning as if nothing extraordinary had happened. Through this protagonist, Rohinton Mistry leaves a question on Indian psyche without answer. Whether we would be accustomed to the prevalent condition or try to rise against the wind of social life. If there are Thakurs and Pandits, then there are Dukhis to raise their voices against the suppressive, suffocating, humiliating and strangulating socio-cultural and psycho-spiritual system of Indian scenario.

In this way, by having an intensive and extensive as well as eclectic and holistic view of courage and character of Dukhi Mochi, Rohinton Mistry posits two solutions under which a dalit can make his voice heard to the humanity. The one is undemocratic or Nazi's of killing those whom ones dislike. The other is more democratic and humane by changing profession as Ishvar and Omprakash are no more untouchables in city but are tailors. Perhaps, the second solution is more practical which can restore the lost productivity, pride and prestige of dalits in Indian society.

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