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# Shodhaytan

AISECT University Journal of Commerce, Arts,  
Education, Sociology and Humanities

Vol.-I/Issue.-II

December-2014



Published By

**AISECT UNIVERSITY**

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Village-Mendua, Post-Bhojpur, Distt. Raisen (M.P.) India Pin-464993  
City Office: 3rd Floor, Sarnath Complex, Opposite Board Office, Shivaji Nagar Bhopal-462016  
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## Shodhaytan (AUJ-STN)

- Multidisciplinary Academic Research

Indexing and Impact Factor :



**INDEX COPERNICUS : 48609 (2018)**

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# Apprehending the Future: Emerging Technologies, from Science Fiction to Campus Reality

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## ABSTRACT

*Emerging technologies are a matter not only of qualitative challenge but also of sheer quantitative overload. Web 2.0, gaming, wireless and mobile devices, virtual worlds, even Web 3.0 in all its unrealized potential—each churns out new developments daily and connects with other domains to ramp up the problem still further. How can those of us in higher education best understand new technologies? The phrases "emerging technologies" and "evolving technologies" remind us that the digital world is largely in flux. New devices, altered applications, and shifting practices keep crossing over the horizon—or quietly appearing in our midst. Deciding which technologies to support for teaching and learning—and how to support them—depends, first, on our ability to learn about each emerging development. Doing so is partly a matter of science fiction, which consists, after all, of the stories we tell about the future. This paper will introduce and explore methods for apprehending the future as it applies to the world of higher education and information technology.*

**Key Words:** Emerging Technologies, Science Fiction, Higher Education.

## I INTRODUCTION

Deciding which technologies to support for teaching and learning—and how to support them—depends, first, on our ability to learn about each emerging development. Selecting a platform without knowing what is coming right behind it can be risky. Similarly, it is folly to grasp onto a technology without seeing the variety of ways that the technology can actually be used. If William Gibson was right—"the street finds its own uses for things"—then academic computing needs to be sure of its "street smarts."<sup>(1)</sup> But trying to grapple with what comes next is a deep problem. Doing so is partly a matter of science fiction, which consists, after all, of the stories we tell about the future. Doing so is also an issue of complexity, since each practice, or device, or network, or application comes embedded in a nest of other practices, or devices, or networks, or applications.

How can those of us in higher education best understand new technologies? The phrases "emerging technologies" and "evolving technologies" remind us that the digital world is largely in flux. New devices, altered applications, and shifting practices keep crossing over the horizon—or quietly appearing in our midst. These are not hypothetical approaches; they are realized, documented, and applied methods. There is no perfect method; nor has any one approach emerged to overshadow the others. This article will thus explore each for its specific affordances, structures, and practical usage. Together, they represent an aggregate, sector-wide movement that tries to help academics understand the future as it hits the present. Put another way, these future-scanners seek to follow the translation of digital ideas from science fiction to campus reality. But trying to grapple with what comes next is a deep

problem. Doing so is also an issue of complexity, since each practice, or device, or network, or application comes embedded in a nest of other practices, or devices, or networks, or applications.

## II DEFINING TERMS

Science fiction contains a speculation about something known in science or technology. There is a "What if ..." question being asked, with possible consequences explored within a story framework. It is a thought experiment. Science fiction can be contemporary or historical, as well as the more familiar far future or space settings. Subgenres of Science Fiction these aren't "official" categories, but terms readers may use when asking for SF titles.

### (a) Alternate history

Readers are looking for books where an historical event is imagined to have happened differently, with the resulting changes in technology and society described. For example, Harry Turtledove's 2nd world war novels.

### (b) Space Opera

This has become a less useful term. Originally, it was somewhat derogatory and referred to implausible adventure stories that involved travelling between stars. Space westerns, in a sense. Older readers may still use the term that way. Now, however, you'll also find it used in the sense of "far future adventure" and no longer derogatory. As a reference from a reader, keep in mind the ideas of adventure and many worlds.

### (c) Military SF

One of the more recognizable categories, typically with book covers showing weapons and uniforms.

(d) Humour, romance, mystery, horror, detectives - Science fiction contains all of these, sometimes in combination. Where possible, note which titles overlap.

### (e) Science Fiction Fantasy

You'll see this on books where writers deliberately blend the genres. Magic on spaceships, vampires on the moon etc. Some are very good reads. Some aren't.

### (f) Hard SF

This is another evolving term. Originally, it identified stories with detailed, exact science as well as the speculative "what if ..." That science was most often physics, astrophysics, or technology. Many of the early classics were hard SF, and their plots involved puzzles or problem-solving. While there is still this type of SF being written, particularly in short fiction, the term has grown to encompass any science fiction where the science is detailed and exact, giving the reader confidence in the underlying speculation. All sciences are now included, from biology to sociology.

## III KEEPING AN EYE ON WHAT'S NEXT

One popular method for seeing what's coming over the horizon is to repeatedly survey that horizon, looking for the leading edges of new projects and trends. This is usually referred to as an *environmental scan* and is based on using quantity to defeat the problem of complexity. Such projects consult multiple sources, comparing details across the spectrum and trying to find complementary perspectives. The projects can be conducted on various timelines, from a single, once-off attempt to continuous monitoring.(2)

Examples of such approaches are plentiful. Several journals and many blogs offer continuous surveys of emerging technologies: MIT's *Technology Review* (<http://www.technologyreview.com/>); Ray Kurzweil's AI.net site (<http://www.kurzweilai.net/news/frame.html?main=news.html>); and Jamais Cascio's "Open the Future" (<http://www.openthefuture.com/>). Of course, journals and blogs themselves are fodder for environmental scanning, since they offer bits of content oriented toward the present. A set of RSS feeds is one of the best tools that an environmental-scanner can possess.

In higher education, the Online Computer Library Center (OCLC) has conducted one environmental scan every few years, the most recent being in 2000 and 2003.(3) The Association of Research Libraries (ARL) published a more recent study, surveying a series of threats, transformations, and opportunities for that sector: scholarly communication, public policy, and the library's role on campus.(6) The EDUCAUSE Evolving Technologies Committee issues reports and an article annually on these technologies, addressing virtual worlds, business process management, location-aware computing, regulatory compliance, and green enterprise computing in 2008.(7)

Another form of environmental scanning for emerging technologies in higher education could consist of members of an academic computing group monitoring a source or a small group of sources and then pooling their observations through regular meetings and/or a blog. A cross-population campus group, perhaps organized by a computing committee or the library, could do something similar, taking advantage of different professional perspectives and backgrounds: faculty, students, librarians, instructional technologists, administrators. With each round of observation and sharing, some themes will begin to emerge. Indeed, such scanning projects can generate their own vocabulary of key terms, an ontology of their futures.

The environmental scan method offers several advantages, starting with the fact that drawing on multiple sources and perspectives can reduce the chances of bias or sample error. The wider the scan, the better will be the chance of hitting the first trace of items that, although small at the moment, could expand into prominence. A further advantage is pedagogical: trying to keep track of a diverse set of domains requires a wide range of intellectual competencies. As new technologies emerge, more learning is required in subfields or entire disciplines, such as nanotechnology or digital copyright policy.

Disadvantages of this method start from its strengths: environmental scanning requires a great deal of sifting, searching, and analyzing. Finding the proverbial needle in the haystack isn't useful if its significance can't be recognized. Furthermore, the large amount of work necessary for both scanning and analyzing can be daunting, especially for smaller schools or enterprises.

## IV WORKING THE EXPERTS: THE DELPHI METHOD

A different approach to identifying emerging technologies focuses on experts and their interpretation of events. The *Delphi method*, named after the Greek oracle (the ultimate expert), is process-driven. Experts in a field are assembled, either physically or virtually, and consulted on emergent developments in that domain. The Delphi process can be implemented in a single face-to-face sitting or over an extended period of time. The Delphi organizer might structure a series of discussions, in which the group members compare notes, assess others' observations, and gradually surface a set of topics. That set is then narrowed down through a consensus process. One of the best-known Delphi projects in higher education is the Horizon Project (<http://www.nmc.org/horizon>).

Another application of the Delphi method in higher education is "The Future of the Internet III," produced by another collaboration, this one between the Pew Internet & American Life Project and Elon University. The project leaders developed an instrument and then surveyed a series of experts and thought leaders.

A third project using the Delphi method is the EDUCAUSE Top Teaching and Learning Challenges 2009 (<http://www.educause.edu/eli/Challenges/127397>).

In phase one, the project leaders queried experts and practitioners in numerous focus groups, gradually building up an aggregate model of key issues as identified by the members of this community. Addressing topics that are both similar to and different from those identified by the Pew/Elon and NMC/ELI projects, the top-five issues are cast in a different syntactical form.

The Delphi method offers several advantages. Drawing on experts lets the process leverage professional knowledge. The iteration approach generates a wide range of concepts. And since the method has been practiced extensively and over time, best practices are readily available.(8) The drawbacks are subtle and largely social. One problem is that Delphi outcomes can be driven by a desire for consensus, rather than actual agreement, meaning that divergent ideas can get quashed.(9) In addition, the process can be resource-intensive, especially in terms of time.

## V ROLE-PLAYING FUTURES: SCENARIOS

Games enter into another futurological form: the *scenario*. Unlike polls, surveys, or markets, scenarios are social processes based on role-playing. Individuals or teams represent actors in a situation. Scenario organizers portray events through various media and then facilitate as players react in accordance with the actors they are simulating. As defined pithily in the *Forecasting Dictionary*, a scenario is "a story about what happened in the future" (<http://www.forecastingprinciples.com/forecastingdictionary.html>).

Like theatre or performance art, scenarios are open to many styles of organization and implementation. Background information can be conveyed by oral presentation or by multimedia documents. Participants may represent themselves, or they may act as exemplars of their professional role, or they may play some other type of person entirely.

Three major trends that we thought would have the biggest impact on the web:

- (i) **Augmented Reality:** The gap is closing between the Web and the world. Services that know where you are and adapt accordingly will become commonplace. The web becomes fully integrated into every physical environment.
- (ii) **Data Abundance:** There's more data available to us all the time—both the data we produce intentionally and the data we throw off as a by-product of other activities. The web will play a key role in how people access, manage, and make sense of all that data.
- (iii) **Virtual Identity:** People are increasingly expected to have a digital presence as well as a physical one. We inhabit spaces online, but we also create them through our personal expression and participation in the digital realm(10)

Scenario planning is flexible enough to be included in other prediction methods. In the Delphi method, for example, the Pew/Elon report asked respondents to imagine scenarios of possible technological systems. In prediction markets, the possible outcomes for each proposition could be considered mini-scenarios.

## VI OTHER CHALLENGES

Futurological methods are still, at best, partial works in progress. No method has yet succeeded in accurately predicting the future. One challenge to any futures method is the sheer complexity of the future. The present-day world is teeming with multiple and ramifying details. These are rendered

into a higher order of complexity when advanced in the stream of time. The methods discussed above try to solve this problem by abstracting the details into simpler shapes or by isolating the details out from larger backgrounds.

Another challenge to futurism is the "unknown unknown," a recently coined phrase so resonant as to spawn a slang contraction: "unk-unk."<sup>(11)</sup> Ultimately, it is impossible to imagine a development that we don't know exists or don't know is about to emerge. We can imagine possibilities, from jetpacks to fast interstellar travel to a generally accepted solution to copyright problems. But new *categories* of technologies, new types we aren't even thinking of, are sometimes precisely the ones that erupt most noisily.

Perhaps the best answer to the question of whether we should attempt to apprehend the future is that doing so prepares us for events when they occur. The intellectual exercise of working through options and possibilities stretches our personal and institutional horizons, building intelligence and flexibility. Just as learning how to use one tool prepares us to better grasp the next, similar tool, thinking through different hypothetical scenarios and trends helps us know how to react to and take advantage of the ones that actually cross over the horizon.

## VII CONCLUSION

Technology development has yet to slow down, and the use of electronic devices continues to grow nearly past our ability to keep up. The complexity of what is described only increases over the years. New pedagogical and scholarly forms appear. Already established products and platforms morph. Practices change in spite of, or because of, financial problems.

That complexity demands non-simple responses. Each of the techniques sketched above offers one way of helping groups to think through these emergent forces and to apprehend the future. Crowdsourcing, scenarios, prediction markets, the Delphi method, and environmental scanning are complementary strategies. Using several of these methods can teach us to learn about the future in more sophisticated, pro-active ways. If the methods appear strange, resembling science fiction, perhaps that is a sign of their aptness for the future, since the future often appears strange just before it becomes ordinary—or, in our case, just before it becomes a campus reality. As higher education budgets clamp down and the future hurtles toward us, we need these methods and techniques as allies that can help us to survive . . . and to learn.

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# e- Commerce in India – An Overview

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## ABSTRACT

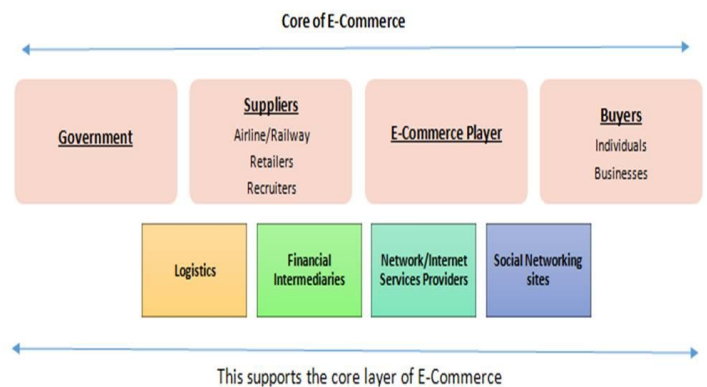
*E-Commerce is a medium of buying and selling of goods remotely i.e. using Internet as a mode of purchase. Internet now has become the key component of our fast moving lifestyles as e-commerce. This has resulted in many outcomes such as numerous choice of single product, retailing even without distribution network, reducing grey sales of product and decreasing margins of sellers by the concept of direct sales from producer. As a consumers also this change has resulted in more and more use of internet to buy goods and demand the competitive pricing. I have also covered journey of ecommerce in last decade, key factors that influencing Ecommerce in India and outcomes of increasing penetration of Ecommerce. Expected market size from Ecommerce, upcoming changes which ecommerce market will witness and competition across banking and online retail segments.*

## I INTRODUCTION

Electronic commerce (or e-commerce) covers businesses that are conducted by using computer as a mode of transaction. Advancements in internet exposure and telecommunications in recent years have made e-commerce a strong pillar of the economic groundwork. More and more companies are able to facilitate transactions through internet. Tremendous competition has been arisen to target each and every internet user who is connected either by computer or mobile phone

There is a complete race to increase consumer transactions as E-commerce revenues is generated through number of consumer transactions consumers are performing online E-commerce provides wide range of benefits to end consumers like goods at lowest possible price, selection from widest variety and saves time etc. With e-commerce revolution people can purchase with a click of a button even without moving out of their home or office. Online services such as banking, airline ticketing, bus ticketing, railway ticketing, bill payments, hotel booking etc. are offering convenient ways to consumers. This is believed that e-commerce will increase many folds in upcoming years. Not only business to business transactions which have the largest revenue but also online retailing will take a drastic growth.

## II COMPONENTS OF E-COMMERCE



There are 3 type of transactions take place in an E-Commerce:

- (a) Product flow:** Goods moves from suppliers to end consumers via E-Commerce and logistics partners here retail distribution is not involved.
- (b) Information flow:** Transmission related confirmation of orders flow from customers and successive information flow of order status flow through value chain.
- (c) Monetary flow:** This involves money exchange from consumers to e-Commerce providers and suppliers and vice-versa this happen via banking or financial mediators.

## III E-COMMERCE JOURNEY IN INDIA

Indian e-commerce begun in 1996 with introduction of B2B (business to business) portals, with the need of computerized operations where they wanted to link their customers and vendors for example ERP applications. Now E-Commerce ready to become only successful medium for business and household transactions in fact for few selected transations it has completely removed the middle man for business ease and end user comfort for example internet banking.



**(a) Beginning Phase (2000 – 2005):** Initial wave of E-Commerce in India took a very long time due to limited resources like small base of online shoppers, limited internet exposure, slow internet throughput, fear of security by consumer and unavailability logistics infrastructure. Post, IT slowdown in the year 2000 this actually led to the shutdown of more than 1,000 E-Commerce companies across India. After this, ecommerce activities were muted in this space till 2005.

**(b) Growth Phase (2005 – 2010):** Post 2005 with IT sector reform, increasing telecom penetration, awareness on online banking story of Indian E-Commerce was shaped in highly positive manner. Two sectors were on boom within this period and these were:

(i) **Online Travel:** Indian Railways implemented the e-ticket booking initiative and started their online ticket booking schemes which was massive success followed by Airlines sector. Low Cost airline in the aviation in Indian context started raising up in 2005 this was the initiation of second e-Commerce wave in India. For saving overheads low cost, aviation companies took a decision to sell their tickets online and which was a step to save cost which aviation sector was sharing with third parties this also encouraged concept of Online Travel Agents. Going forward aviation companies' also developed their own websites and current model of partners with OTAs to distribute came in existence.

(ii) **Online Retail:** In the year 2007 with changing lifestyle of urban consumer and the need for convenient way of shopping at home concept of online shopping got introduced. Going forward this segment developed with the launch of numerous online websites. New businesses were not only enhanced customer experience but also act as differentiator for investors by and establishing a strong market visibility

**(c) Maturing Phase (2010 onwards):** This was a period when consumers are exposed to this technology at its peak. Introducing of high speed internet, low cost computers, increasing Smart phone were few key factors which resulted into this massive change.

(i) **Group buying:** 2010 onwards, the group buying behavior and offering via deals daily models became a necessity after a successful entry of many entrepreneurs into India, reflecting the global trends. Bulk buying sites raised to seen a significant level and this has increased unique visitors numbers and number of memberships.

(ii) **Social Commerce:** A new avenue for E-Commerce providers started with social commerce this has also led to reach out more and target customers. Companies then got into

social media advertisement or digital marketing phase for branding activities, making direct connect with customers for taking feedback and introducing new products and schemes.

**(d) Present Scenario:** E-Commerce market in India grew at an astonishing rate of 88% in 2013 and reached \$16 billion. This was riding on the boom of online retailing trends which challenged the era of slower economic growth and led to raise inflation. E-Commerce market in India was approximately \$2.5 billion in 2009, it raised to \$6.3 billion in the year 2011 and to finally touched \$16 billion last year i.e. 2013. Going with the trends further this is expected to grow up-to \$56 billion by 2023 which in fact will be 6.5% of retail market

## IV FACTORS DRIVING E-COMMERCE IN INDIA

- (a) Increasing penetration of internet
- (b) Reducing internet cost
- (c) Mobile penetration
- (d) Changes in mobile handset industry
- (e) Technology changes in desktop to laptop to tablets
- (f) Introduction of service 2G, 3G, 4G, LTE
- (g) Urbanisation
- (h) Govt regulations related encouraging technology providers
- (i) Hypercompetition in service providers
- (j) Increasing exposure to social networking
- (k) Evolution in banking sector (increasing credit card penetration)

## V E-COMMERCE OUTCOMES

- (a) Reduced search and transaction cost
- (b) Reduced process lead-time and faster time to market
- (c) Increased customer service
- (d) Improved convenience and shopping experience
- (e) Increased information transparency
- (f) Knowledge generation
- (g) Novel products and services

## VI TOP 10 ACTIVITIES ON E-COMMERCE

- (a) Flipkart
- (b) eBay India
- (c) Snapdeal
- (d) Amazon India
- (e) Myntra

- (f) Shopclues
- (g) Dominos
- (h) freecharge
- (i) Jabong
- (j) Tradus

## VII WHAT IS NEXT?

Internet is the key to success this has now evolved as a significantly from the level it was 10 years ago. Consumer's dependency on internet has increased significantly for different activities like banking, social networking, emailing, shopping, and searching for information

<p><b>Initial</b></p> <p>Internet User base close to 5.5 mn in 2000</p> <p>No. of Broadband subscribers as low as 51000 in 2001</p> <p>No. of credit card &amp; debit cards in India close to 4.2 mn and 0.3 mn respectively in 1999</p> <p>No 3G auctions till 2010</p> <p>Avg time spent by an Indian consumer per month is 12.9 hrs in 2006</p> <p>No. of users transacting online 3 mn in 2007</p>	<p><b>Intermediate</b></p> <p>Internet User base close to 121mn in 2011</p> <p>No. of Broadband subscribers at the end of Sep 2011 were 12.8 mn</p> <p>No. of credit card &amp; debit cards in India close to 18 mn and 228 mn respectively in Jul 2011</p> <p>3G auctions in 2010</p> <p>Increased to 17.4 hrs in 2011</p> <p>Increased further to 11 mn in 2011</p>	<p><b>Future</b></p> <p>Internet User base to increase to 300 mn by 2015</p> <p>No. of Broadband subscribers to reach 100 mn by 2014 and 150 mn by 2020</p> <p>No. of credit card &amp; debit cards in India close to 73.7 mn and 350.4 mn respectively by 2014</p> <p>3G subscribers to increase to 118 mn by FY 14 and 303.1 mn by FY 20</p> <p>Increased to 21 hrs by 2015</p> <p>Increased further to 38 mn by 2015</p>
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### (a) Internet Penetration:

The adoption of high speed internet including broadband, 3G and most awaited 4G which offers high speed internet on move, along with introduction of low cost PCs, smartphones, all this will lead to raise internet penetration and usage in India. Introduction of most trusted payment gateways also led to increased use of plastic money by Indian customers. Introduction of multiple levels of authentication via one-time passwords Payment gateways has made mobile banking more and more secure than earlier. This has boosted user's confidence in doing more online transactions.

### (b) M-Commerce:

With lowest mobile tariffs across globe India now has more than 900 million mobile users, and of which approximately 300 million use internet services. Mobile users will further expected to grow till 1200 million by 2015 and hence increase in internet using futurity. Experts says that more than 100 million mobile users will be on high speed internet service i.e. 3G and 4G in the coming few years.

## VIII CONCLUSION

Concluding, we are in a time where E-Commerce Industry expanding in all horizons. Indian internet growth story will shape up the future of E-Commerce companies. As consumers increasing the average time spent being online e-commerce companies getting more and attention through innovative marketing strategies which mostly

revolve revolving around social media. Further to utilize this opportunity of increasing capable devices in network ecommerce companies should focus on developing easy to use mobile-compatible websites and mobile apps. This would enable customers use easy-to-access platforms and browse e-Commerce websites with handy mobile devices.

Taking study from developed countries in coming time E-commerce should become a platform for the anti-competitive agreements between the companies. There are few cases of anti-trust issues which may Impcat E-commerce as a platform.

Credit cards being key element of E-commerce, some international case studies are done where anti-competitive agreements and anti-trust issues between the credit cards companies may come up. Also credit cards market in India is growing at a very faster pace. These issues may also creep up in India in the near future

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# Black Economy: Its Magnitude, Effects, Government Measures and Schemes

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## ABSTRACT

*Parallel Economy means an illegal economic operation or otherwise known as black money. It represents a segment which is not legitimate. It practices those activities which are contrary to the principles of economic policy pursued in an economy. It is well-known that there is a large quantity of money, income and wealth which has been and is being made owned which is unaccounted in our tax system and therefore, has not suffered tax. This form of money is known as black money. Black money is not only the problem of Indian economy, but it also transcends the borders and has become a global dilemma. Recently, various studies have taken place under the Government of India to tackle the problem of black money in India. Those studies have revealed some astonishing facts about the black money market in India. In the last decade alone, India has lost approximately \$125 billion in illegal money. A study has revealed that the black money even exceeds 10% of our Gross Domestic Product. When it comes to flow of black money worldwide, India is ranked in eighth. The flow of black money can seriously affect the entire economic system of India. Black Money causes the prices of commodities to increase to a level beyond normal. People with black money are able to give bribes to the administrators and politicians for getting whatever they want. To control the generation of black money there should be a strong and appropriate legislative framework.*

**Key words:** Black Economy, Black Money, Magnitudes, Economic Development, Swiss Account etc.

## I INTRODUCTION

Black money refers to money that is not fully legitimately the property of the 'owner'. Black money may be defined as the money that is generated by activities that are kept secret in the sense and not reported to the authorities. This money is also not accounted to the fiscal authorities or you can say that taxes are not paid on this money. A white paper on black money by the Government of India suggested that there are two possible ways of generating black money in India. The first source of earning black money includes those activities which are not permitted by the law, such as crime, drug trade, terrorism, corruption and all of which are not legal in India. The second, more probable source is that the black money may have been generated through a lawful activity but accumulated by failing to declare income and pay taxes. Some of this black money ends up in illicit financial flows across international borders, such as deposits in Swiss accounts.

## II REVIEW OF LITERATURE

Sukanta Sarkar, (2011), "The parallel economy in India: causes, impacts and government initiatives" The study has made an attempt to assess the overall profile of parallel economy in India, particularly in terms of causes, impacts and government initiatives. The results indicate that parallel economy has been expanding very rapidly in India as well as in developing countries. It is evident from the study that g

overnment of India already introduced various commissions for estimating black economy but estimation reports are not same. Indian government is more concerned about the prevalence of the parallel economy and various commissions are formed for controlling it but results are not so impressive. Thus, the paper suggests that recommendations of the commissions or laws should be implemented correctly for reducing bad effects of black economy.

Vladimer Papava & Ivane Javakhishvili Tbilisi, (May 2010), in their study, "The Economic Development Complex in the Black Sea area: the impact of the global Financial and Economic Crisis, states that the Black Sea Region is not as integrated economically as to allow one to outline some common development trends of all regional economies. The most of the region's nations (Albania, Armenia, Azerbaijan, Bulgaria, Georgia, Moldova, Romania, Russia, Serbia, and Ukraine), except Greece and Turkey, are post-Communist countries. The purpose of this paper is to highlight the economic development difficulties of the post-Communist Black Sea Region and to examine the key economic problems of all the countries encompassing it in the context of the ongoing financial crisis.

John C. Bogle, (2009), Working Papers Series Perspectives - Black Monday and Black, Investors needs to be aware that rare events with an extreme impact that, afterwards, we think we could have predicted - in short, black swans - happen in the markets. Those who are trying to measure risk in the financial markets need to carefully distinguish risk, with its

probabilities, from uncertainty, which cannot be measured. We have become increasingly vulnerable to black swans because our financial economy has come to play an ever-larger role in our productive economy.

### **III OBJECTIVES OF STUDY**

The prime and the most important objective is to understand the dimensions of black economy in Indian context, causes and measures to eradicate it. For this purpose Secondary data have been gathered from various published sources and reports.

### **IV BLACK MONEY IN INDIA**

According to a report released by Global Financial Integrity (GFI) in December 2012, India is among the top 10 developing countries in the world with a black money outflow of \$1.6 billion (Rs. 8,720 crore) in 2010. Total outflow of black money from India since independence until 2010 was \$232 billion, generally in the form of corruption, bribery and kickbacks. The cumulative value of illicit assets held by Indians during the same period is estimated to be \$487 billion. The BJP, in a 2011 report, had estimated India's black economy being worth around \$500 billion and \$1.4 trillion or about between Rs. 27.5 lakh crore and Rs. 74 lakh crore, while US think-tank Global Financial Integrity had estimated India had lost \$123 billion (Rs. 6.76 lakh crore) in "black money" in 2001-10. This is money that is earned and transferred illegally abroad in tax havens, such as the Cayman Islands, typically to avoid taxes. In the post-reform period of 1991-2008, deregulation and liberalization accelerated the outflow of illicit money from the Indian economy. About a third of India's black money transactions are believed to be in real estate, followed by manufacturing and shopping for gold and consumer goods. If hidden incomes of Rs. 25 lakh crore were to be disclosed and taxed at 30%, it would generate Rs. 8.5 lakh crore, enough to build a 2,000-bed super-specialty hospital in each of India's 626 districts.

### **V BLACK MONEY OF INDIA IN SWISS ACCOUNTS**

India has slipped to 70th position in terms of foreign money lying with Swiss banks and accounts for a meagre 0.10 per cent of total global wealth held in the country's banking system. An article in the reputed newspaper "The Hindu" in 2010 revealed that unofficial estimates indicate that Indians had over US\$1456 billion in black money stored in Swiss banks (approximately USD 1.4 trillion). While some news reports claimed that

data provided by the Swiss Banking Association Report (2006) showed India has more black money than the rest of the world combined, a more recent report quoted the SBA's Head of International Communications as saying that no such official Swiss Banking Association statistics exist. Another report said that Indian-owned Swiss bank account assets are worth 13 times the countries national debt. These allegations have been denied by the Swiss Bankers Association. James Nason of Swiss Bankers Association in an interview about alleged black money from India holds that "The (black money) figures were rapidly picked up in the Indian media and in Indian opposition circles, and circulated as gospel truth. However, this story was a complete fabrication. The Swiss Bankers Association never published such a report. Anyone claiming to have such figures (for India) should be forced to identify their source and explain the methodology used to produce them."

In a separate study by Global Financial Integrity concludes, "Media reports circulating in India that Indian nationals held around US\$1.4 trillion in illicit external assets are widely off the mark compared to the estimates found by their study." The report claims that the amounts are significantly smaller, only about 1.5% of India's GDP on average per annum basis 1948-2008. This includes corruption, criminal activities bribery and kickbacks, trade mispricing and efforts to shelter wealth by Indians from India's tax authorities. According to a report, published in May 2012, Swiss National Bank estimates that the total amount of deposits in all Swiss banks, at the end of 2010, by citizens of India were CHF 1.95 billion (INR 92.95 billion, US\$ 2.1 billion). The Swiss Ministry of External Affairs has confirmed these figures upon request for information by the Indian Ministry of External Affairs. This amount is about 700 fold less than the alleged \$1.4 trillion in some media reports. The report also provided a comparison of the deposits held by Indians and by citizens of other nations in Swiss banks. Total deposits held by citizens of India constitute only 0.13 per cent of the total bank deposits of citizens of all countries. Further, the share of Indians in the total bank deposits of citizens of all countries in Swiss banks has reduced from 0.29 per cent in 2006 to 0.13 per cent in 2010. In 2011, according to the data provided by Swiss Bank, India is topping the list almost \$1500 billion of its black money deposited with them, followed by Russia \$470 billion. The amount of black money is increasing day by day at very rapid speed.

## VI CAUSES OF GENERATING BLACK MONEY IN INDIA

One of the most important causes of generating black money in India are as follows: 1. Unrealistic Tax Laws and Tax Frauds 2. Different Rates of Excise Duty 3. Control Policy 4. Quota System 5. Scarcity 6. Inflation 7. Elections in the Democratic Systems and Political Funding 8. Real Estate Transactions 9. Privatization 10. Agricultural Income.

## VII IMPACTS OF BLACK MONEY ON INDIAN ECONOMY

The flow of black money can seriously affect the entire economic system of India. Some important impacts are discussed here:

**(a) Less Tax for the Government**—Many times, the Indian Government has failed to collect the estimated amount of tax from the people of our country and for this, credit has to go to the black money driven underground economy. Recently, a report was submitted to the Finance Ministry of India that divides the spread of black money in different sectors like real estate, mining, telecom etc. The study, headed by NIPFP chief P. Kavita Rao, explains how illicit wealth is likely to exceed 10% of GDP.

**(b) Uncontrollable Inflation**—When black money is out in the market, the amount of money in the system is higher than the Government expects. This causes the prices of commodities to increase to a level beyond normal. This is a direct result of people having more money offering more money on specific items. Even if the Government tries to control the credit flow in the market by taking necessary measures, the amount of black money present upsets the move, resulting in some sort of pressure on the economy.

**(c) Leads to Mass Poverty**—The distribution of wealth and income in our country have been severely affected by the growth of underground economy. The common people get affected indirectly in so many ways. The tax evaders are keeping the money away from the deserved. If all the black money in the tax havens is recovered and used by the Indian government, all the outstanding liabilities of the country could be paid off and money would still be left for spending.

**(d) Lack of Technology**—Due to the existence of black money, India is facing the problem of shortage of capital. This has the direct impact on the up gradation of technology in all sectors. The major reason behind such backwardness is the parallel economy.

**(e) Impact on Growth by moving investments on Gold, Stones and Jewellery**—People who are looking to turn black money into white money are largely investing in precious metals like Gold and other jewelry. There are people who believe that almost 70% of the total gold investment in our country is black money. One reason for people to invest in gold is that it is hard to trace. People in black market may buy gold bars, coins, jewellery etc because one can buy gold easily and can be converted back to money anytime. This flow of underground money has caused Indian economy to stall on its growth. It is estimated that if all the money in the underground economy could be diverted to our main economy, our economy would grow by more than thrice in no time.

**(f) Corruption**—While corruption creates black money in the economy, it can also be a result of the growing underground market. People with black money are able to bribe the administrators and politicians to get what they want. By doing this, they are able to get what they want and others are pushed down the stack.

**(g) Inflated Real Estate**—When people with deep pockets are ready to pay more for a piece of land, the price of surrounding land also tends to increase; thus artificially inflating the prices of an entire area. Generally, people involved in black money market are always ready to pay more for a piece of land as this helps in converting their coloured money to legal money.

**(h) Transfer of Indian Funds Abroad to Safe Heavens**—The black money generated in India is kept in foreign tax havens. For this, money has to be transferred from India to other countries through secret channels. Under-invoicing of exports and over-invoicing of imports are two of the main methods used by black money holders for transferring money overseas.

**(i) Encourages Anti-Social Activity**—It is no doubt that black money is a curse to any country. Black money is always promoting anti-social activities in the society. Bribery, mentioned earlier, is only one example. The anti-social effects of black money include activities like terrorism, a huge threat already to our country.

## VIII EFFECTS OF BLACK ECONOMY

The effects of black money are discussed under the following heads:

**(a) False Information about the Economy:** The most important effect of black money is providing false information about the actual economy because it remains outside the purview of the economic policies. The presence of a sizeable black



money casts doubts on the validity of the data on national income estimates, per capita income, and distribution of income, consumption, savings and investment. The economic planning loses its worth, because they are based on macro-economic parameters which completely ignore the black money.

**(b) Impact on Fiscal System:** Government is fully based on tax revenue. Evasion of taxes has serious consequences for the economy's fiscal system. In long-run consequence of such revenue loss is to reduce the built-in elasticity of the tax system. To raise a given target of revenue the Government is obliged to depend increasingly on discretionary hikes in tax rates or to expand the array of taxes. Direct Taxes Enquiry Committee in this connection mentioned "Black money and tax evasion, which go hand in hand, have also the effect of seriously undermining the equity concept of taxation and warping its progressiveness. Together, they throw a greater burden to the economy."

**(c) Create Inequalities:** The black money creates inequalities among people. The excess of money leads to purchase non-essential articles, which gives demonstration effect. The overall consumption pattern is tilted in favour of rich and elite classes.

A rise in the overall consumption on non-essential products leaves less resource for investment in priority areas. These distortions in the product-mix in favours of non-essential consumption have adverse effects on production and thus they distort the objectives of planning.

**(d) Mis-guiding on Resource Allocation:** Black money distorts resource allocation in the economy and often leads to wasteful and often leads to wasteful use of money. It leads to conspicuous consumption and in turn results in the diversion of large funds to unproductive channels which ultimately put the economy out of order.

**(e) Implications for Monetary Policy:** The black money related to the stock of 'black liquidity'. The stock of 'black liquidity' is defined as the accumulation of black savings (from black incomes) in the form of cash and other readily convertible assets such as gold and silver.

It is the 'black liquidity' which creates a lot of problems for monetary authorities to regulate the economy. The existence of sizable 'black liquidity' in our country misguides the Government to diverting credit from more urgent to the less urgent.

## IX MEASURES TAKEN BY THE GOVERNMENT OF INDIA

The government has introduced compulsory reporting in case assets held abroad and also started tax collection at source in case of purchases in cash of gold in certain cases. The Government of India is working with fervor to bring up all the black money in our country. Different strategies have been formulated to curb the problem of black money in India.

**(a) Lower Tax Slabs for encouraging Voluntary Compliance**—In the early '70s, the tax rates were high that it encouraged many people to be involved in tax evasion. Since this became an evident reason for increasing black money, Government took steps to reduce the tax rates. However, the fact remains that with lowering of tax rates and introduction of new laws, new opportunities opened up for tax evasion. A global presence of black money also started to help these people in pursuing the crime.

**(b) Introduction of Tax Deduction at Source on high Value Transactions**—In the recent budget, the Finance Minister introduced TDS, Tax Deducted at Source, to all transactions involving immovable assets above Rs 50lakh. He also introduced a new tax, Commodities Transaction Tax or CTT, hoping it will help in keeping a trail of bullion trade.

**(c) Special Bearer Bonds**—These were special bonds introduced by Indian Government in 1981 to make use of the 'unaccounted' money for constructive purposes. Black money holders could convert their money to these bonds and could enjoy the freedom from any enquiry or investigation about sources of these funds. It carried 2% interest and had a lock in period of 10 years.

**(d) Amnesty Scheme**—The Amnesty Schemes, introduced by the Finance Ministry from time to time, allows tax defaulters to pay a tax, waiving the penalty and interest. Using these schemes, a defaulter could disclose their wealth and convert them to legal money. No more questions will be asked. These schemes help Government to rake up the taxes and bring huge amount to legal money back into the Indian market.

**(e) Punishment to Corrupt Officials**—The Government of India has taken and continues to take stringent actions against those involved in corruption. The actions against the Telecom Minister A.Raja, during his tenure the 2G spectrum scam took place, is an example. The Government is keen to inflict of insecurity to those involved with corruption and black money market. If Government continues to act strong against the corrupted, India will soon be a better country and maybe even a world leader in economy.

The law in our country, even today, has some loop holes which tax evaders take advantage. The lawmakers in the country have to come forward with better and strict laws regarding tax payment and to control flow of black money. If Government does not take proper timely action, the trend is only going to grow up.

## **X SCHEMES FOR THE DISCLOSURE OF BLACK MONEY**

The Government of India introduced a series of 5 new schemes on 1st October 1991 to unearth the black money and to improve foreign exchange reserves in the country. The schemes are as follows;

**(a) Scheme One:** State Bank of India issued Bharat Development Bond in which Non-Residential Indians (NRIs) were permitted to deposit foreign reserves of US dollar and British Pound (no upper limit) for 5 years. These bonds were sold up to January 31, 1992. The Government announced the rebate of income tax on the income earned as interest on the bond.

**(b) Scheme Two:** The Government introduced a scheme to promote the inflow of foreign currency in the country. Under this scheme any person residing in foreign country could send unlimited foreign exchange to any Indian citizen without declaring its source.

This scheme was open up to January 31, 1992. Under this scheme, the inflow amount of foreign exchange was exempted from various taxes and Foreign Exchange Regulation Act restrictions.

**(c) Scheme Three:** Under this scheme, any person could deposit his black money up to January 31, 1992 in National Housing Bank. The depositor was authorized to withdraw the 60% of deposited amount but the remaining 40% was to be used for constructing low cost houses for poor people.

**(d) Scheme Four:** Under this scheme, the Government amended clause 273A of the Income Tax Act to give one more chance to the person having black money to declare it, but this opportunity can be availed by persons only once in their life.

**(e) Scheme Five:** This scheme provided for exemption from penalties on declared black money and assets if the taxpayer declared his black money at the time of his tax assessment.

In continuing that, the Government of India also introduced the Gold Bond Scheme in 15<sup>th</sup> March 1993 to unearthing black money.

## **XI CONCLUSION**

Black money or the illegal money circulating in the parallel economy is a big menace for the Indian economy. It is also an originator of big loss in the tax-revenues for the government of India. Because of the existence of the black money in Indian economy, the per capita income of the people has not been growing in line with the other advanced countries despite the liberal measures taken by the government of India since early 1990s. Even after several decades of economic planning and push in the right direction, India still continues. It is really a difficult task to eradicate completely black money which has permeated every section of society and every sector of economy. Nevertheless, the measures enlisted above can go a long way to bring down the black economy to manageable proportion over a period of time.

The evil of black money is big indeed with very bad consequences for the economy. It is, therefore, necessary that we find out its causes, and discuss the steps taken by the government to curb it.

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# Self Confidence and Job Satisfactions of High School Teacher in Terms of Gender

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## ABSTRACT

*The variables undertaken for this study are with respect to economic conditions and time bound confined for as Self Confidence, Job Satisfaction of High School Teacher In Terms Of Sex in the year 2011-12 under Barkatullah University, Bhopal. The survey type of research study is delimited for sample size, schools, area and time. The findings are as 1. Malehigh school and female high school teachers significantly differ in their mean self-confidence scores. 2. Maleprivate high school and female private high school teachers significantly differ in their mean self-confidence scores. 3. MaleGovt.high school and female private high school teachers not significantly differ in their mean self-confidence scores. 4. Malehigh school and female high school teachers significantly differ in their mean job satisfaction scores. 5. Maleprivate high school and female private high school teachers significantly differ in their mean job satisfaction scores. 6. Malegovernment high school and female government high school teachers differ significantly in their mean job satisfaction scores.*

## I INTRODUCTION

Education is the unique invention of mankind. Man without education is just like an animal. Education is a power, which makes a man "a man". Every man possesses some inner potentialities. To draw out of their potentiality teacher play an apex role. Teacher is the backbone of entire educational system as well as in to the Nation. In our teaching process teacher is the nuclear part of the total system. The role of the teacher will have to shape up in the light of changing demands in school. "School without a teacher is just like body without soul, skeleton without flesh and blood shadow substance". The teacher is the yardstick that measures the achievement and aspiration of nation. The worth and potentiality of a country get evaluated. The teacher is an important constituent in the instructional process. The way he teaches and handles the students has an effect on the future personality of children. Ryan & Wundt (1955) conducted a study in the independent dimensions of teacher's behaviors, which are as follows:

- (a) Fair and Democratic Methods
- (b) Business like Organized responsible
- (c) Encourages Students Participation, Challenging and interesting
- (d) Enthusiastic and
- (e) Open-minded.

The teachers are well educated and trained if their intellectually active and keen interest in their job than only the success is ensured. They must poses self-confidence in their mind and satisfaction should posses in their jobs otherwise the whole destiny will be distracted. The teacher must give the heart to their job according to National Policy Education (NPE). The teachers must enjoy:

An honored place in society.

- (i) Academic freedom to pursue study and research and to speak or write on matters educational and
- (ii) Facilities for in-service education.

The teacher is an agent of society in order to bringing up a good society as well as a good nation. The teacher's role also is bound to be of an advanced an elaborate in nature. He has to socialize the children. To establish peace and harmony in the society value orientation education should be given to the children. To enable the younger generation ownest from nation and shape according to requirement that which is needed by humanity for its survival and comfort. In the terms of first task, education, whether formal or informal has taught the younger generation to become use-full, productive member of society.

## II VARIOUS ATTRIBUTES

For the formation of a good society as well as a good nation a teacher must have confidence. Satisfaction should be there in his job and value should be uncalculated by him for a well-established society.

**(a) Self-Confidence:-**Self-confidence is a personality trait and it helps the individual to behave in the social environment with ease and success with the help of social confidence. One can promote his ability and sublime all the shyness. In teaching learning process or any other work, it develops one's innate ability. A Self-confidant person perceives himself to be a social competent, emotional mature, intellectual adequate, satisfy, decisive, optimistic, independent, self-reliant, self-assured, forward moving, fairly assertive and

having leadership qualities. Self-confidence developed a man to adjust in every situation such as in the classroom, office, environment and any other organization.

**(b) Job-Satisfaction:-**Job-satisfaction is the whole matrix of job factor that makes a person like his work situation and is willing to head for it without distaste at the beginning of his workday. For keeping the right mans on the right job or “man matching with job”. This is possible only through job analysis and an understanding of the principles of job-satisfaction as the first step in fitting man to job and in mentioning fitness at work, is to make a comprehensive study of occupational activities and requirements.

**(c) Rationale:-**The future of any country is interchangeably linked with its educational system. The aim of our education is all round development of the human personality. It is necessary to develop individual interest, attitude, aptitude and personality towards education. If personalities develop education must be developed. Self-confidence is a personality trait through which one can show his/her good performance any spare.

### III OBJECTIVES, HYPOTHESIS & METHODOLOGY

**(a) Objectives:-**The following objectives are taken for the study: To compare the mean self-confidence, job satisfaction scores of male and female high school teachers with respect to type of school.

**(b) Hypothesis:-**There will be no significant difference among mean self-confidence, job satisfaction scores of male and female high school teachers with respect to type of school.

**(c) Methodology Sample:-**Sample for the study was selected through incidental sampling. Sample was comprised of 100 high school teachers. They were taken from three Govt. and Private high schools of Bhopal City. Distribution of sample from Private and Government as per sex are presented in table 3.1.

**(d) Design (Type of Research):-**Present study is a survey study. Although the nature of the study was descriptive, the obtained data were calculated with the statistical technique. Survey was conducted to collect the data on four variables. These are self-confidence, Job Satisfaction, Social and Aesthetic Values. Survey was conducted on 100 teachers from High Schools of Bhopal City, including males and females.

Table 1.1: Distribution of male and female teachers from Government and Private Higher Secondary school of Bhopal City

S. No.	Name of School	Male	Female	Type of school	Total No. of Students
1	Kendriya Vidyalaya I	10	4	Govt.	14
2	Kendriya Vidyalaya II	10	3	Govt.	13
3	Kamla Nehru Govt.	010		Govt.	10
4	Nehru Govt. HSC	26		Govt.	08
5	Digambar Jain	12	2	Private	14
6	Maharshi Convent	8	5	Private	13
7	M.B. H.S.C.	4	12	Private	16
8	Vijay Kanvent	4	8	Private	12

### IV TOOLS

Three tools were used to collect data related to four variables. These variables were Self-confidence and Job Satisfaction. The brief description of tools is given here.

**(a) Self-confidence Inventory:-**Self-confidence of students was measured by self-confidence inventory developed by Dr. Rekha Agnihotri in the year 1987. It is consisted of 56 items. Each item has correct and in-correct response. But there are no any right or wrong answers for the items. All items are right or wrong according to individual choice. A score of one is answered for a responses indicating lack of self-confidence, i.e. for making cross (X) to incorrect response to item numbers 2, 7, 23, 31, 40, 41, 43, 44, 45, 53, 54, 55 and for making cross (X) to correct response to the rest of the items. Lower the score, higher would be the level of self-concept and vice-versa. Its reliability is ranged from .78 to .91 and validity is .82.

**(b) Job Satisfaction:-**Job Satisfactions of teachers were measured by Job satisfaction tool developed by Dr. Pramod Kumar and D. N. Mutha, in the year of 1975. The questionnaire contains 29 items. Each question has answer restricted yes or no type. For completing the questionnaire it takes 20 minutes. All the items except 6 and 29 are positively worded. All these items are given a score of one for positive responses except for item 6 and 29, in which case reverses is applicable. The reliability of the tool was estimated by the split-half (0.95) and test-retest (0.73) methods. The co-efficient of correlation found between the scores on two scales was 0.94.

**(c) Procedure of Data Collection:-**In the present study the data were collected as related to the variable objectives like self-confidence, job satisfaction, social and aesthetic value. The researcher took permission from the head of the department. As per the objectives the selected tools were distributed among the male and female high

school teachers. Researcher gave proper instructions to the teachers. Irrespective of government and private high schools were selected for collecting the data.

**(d) Statistical Techniques:-**In order to achieve the objectives of the study, analysis of data is an essential task for the investigator. Statistical technique served the purposes in a proper manner. Keeping in view the function of statistical techniques and the nature of data for an easy understanding and findings. The investigator used the following Statistical Techniques: Mean, Standard Deviation and 't'-test.

## V ANALYSIS AND INTERPRETATION OF DATA WITH FINDINGS

Objective wise data analysis, its interpretations and findings are given here.

### Comparison Of Mean Self-Confidence Scores Of Male And Female High School Teachers With Respect To Private And Government School:-

Using the tool Rekha Agnihotri's self-confidence Inventory in the year 1987 collected data related to objective 1. Collected data were analyzed by using mean, standard deviation and the t-test. Results are given in table 2

**Table 2**  
**Summary of t-test for self-confidence scores**  
**of male and female high school teachers**  
**with respect to Private and Government**

Group/Self-confidence	N	Mean	S.D.	t-value
Male	50	17.22	11.64	3.80 **
Female	50	25.7	10.65	
Male/Private	28	16.32	10.09	3.69 **
Female/Private	27	26.67	10.32	
Male/Govt.	22	17.19	14.18	1.23N S
Female/Govt.	23	22.09	11.06	

\*\* Significant at 0.01 level

Table 2 indicates that t value for df=98 is equal to 3.80 which is significant at 0.01 level. It means male and female high schools teachers significantly differ in their mean self-confidence scores. Thus, the null hypothesis namely, there will be no significant difference between mean self-confidence scores of male and female high school teachers, is rejected.

**(a) Finding1:** Male high school and female high school teachers significantly differ in their mean self-confidence scores.

Table 2 also indicates that t value for df=53 is equal to 3.69 which is significant at 0.01 level. It means male and female private high schools teachers significantly differ in their mean self-confidence score. Thus the null hypothesis namely, there will be no significant difference between mean self-confidence scores of male and female private high school teachers, is rejected.

**(b) Finding2:** Male private high school and female private high school teachers significantly differ in their mean self-confidence scores.

Table 2 also indicates that t value for df=42 is equal to 1.23 which is not significant at 0.05 level. It means male and female govt. high schools teachers not significantly differ in their mean self-confidence score. Thus the null hypothesis namely, there will be no significant difference between mean self-confidence scores of male and female private high school teachers, is accepted.

**(c) Finding3:** Male Govt. high school and female private high school teachers not significantly differ in their mean self-confidence scores.

## VI COMPARISON OF MEAN JOB SATISFICATION SCORES OF MALE AND FEMALE HIGH SCHOOL TEACHERS WITH RESPECT TO PRIVATE AND GOVERNMENT SCHOOLS

Using the tool developed by Dr. Pramadkumar and D.N. Mutha in the year 1975 for collecting the data were analyzed by using mean, standard deviation and the t-test. Results are given in table 3



**Table 3**  
**Summary of t-test for job satisfaction scores of**  
**male and female high school teachers with**  
**respect to Private and Government Schools**

Group	N	Mean	S.D.	t-value
Male	50	21.54	5.82	6.21 **
Female	50	14.16	6.04	
Male/private	28	21.75	6.16	3.76 **
Female /private	27	15.37	6.18	
Male/Govt.	22	21.18	5.62	5.34 **
Female/Govt	23	11.91	5.75	

\*\* Significant at 0.01 level

Table 3 indicates that t value for df=98 is equal to 6.21 which is significant at 0.01 level. It means male and female high schools teachers significantly differ in their mean job satisfaction score. Thus the null hypothesis namely, there will be no significant difference between mean job satisfaction scores of male and female high school teachers, is rejected.

**(a) Finding1:** Male high school and female high school teachers significantly differ in their mean job satisfaction scores.

Table 1.3 also indicates that t value for df=53 is equal to 3.76 which is significant at 0.01 level. It means male and female private high schools teachers significantly differ in their mean job satisfaction score. Thus the null hypothesis namely, there will be no significant difference between mean job satisfaction scores of male and female private high school teachers, is rejected.

**(b) Finding2:** Male private high school and female private high school teachers significantly differ in their mean job satisfaction scores.

Table 1.3 indicates that t value for df=43 is equal to 5.34 which is significant at 0.01 level. It means male and female government high schools teachers significantly differ in their mean job satisfaction score. Thus the null hypothesis namely, there will be no significant difference between mean job satisfaction scores of male and female government high school teachers, is rejected.

**(c) Finding3:** Male government high school and female government high school teachers differ significantly in their mean job satisfaction scores.

## VII SUGGESTIONS

- (a) This type of study can be conducted in different age levels and also in different classes of teachers.
- (b) This type of study can be conducted by taking different types of values and trades related to teaching learning process of the teachers, students and parents also.
- (c) Larger sample size can be taken for this type of study.
- (d) This type of study can be conducted in different occupational groups.

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# A Comparative Study of BSE and NSE

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## ABSTRACT

*This research paper is a comparative study of Bombay Stock Exchange and National Stock Exchange during 2001-2013. A ready market for investments was need of the hour and this was how the Stock Exchange came into being. The health of the economy is reflected by the growth of stock market. Over the years, the Indian stock markets have become stronger. Presently, the Bombay Stock Exchange Limited and National Stock Exchange of India Limited put together account for 80% of the total turnover as compared to 10% by the other stock exchanges. So the researcher decided to compare these two most prominent stock exchanges of India.*

**Keywords:** Stock Market, BSE, NSE, Liquidity and Volumes etc.

## I INTRODUCTION

Financial markets played a vital role in raising funds from public for the companies and it helped the investors to get profits from the trading on the shares and other financial assets of these companies. For this purpose there, a special part of the financial market called 'Stock Exchange' was evolved. The comparison between two most prominent Stock Exchanges of India on the basis of financial performances is presented in the present paper. Financial statement analysis is a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. This can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation.

## II RESEARCH METHODOLOGY & OBJECTIVES

The research methodology of the selected topic follows in these dimensions: articles, reports and surveys published on Capital Markets, BSE and NSE etc.

The broader objectives of the study are:

(a) To make comparative analysis of financial performances of Bombay Stock Exchange and National Stock Exchange over the period of time.

(b) To make comparative analysis of profitability of Bombay Stock Exchange and National Stock Exchange over the period of time.

## III SCOPE OF THE STUDY AND ANALYSIS

This study is based on census of all stock exchanges of India for the period of ten years from 2000-2001 to 2012-2013. It covers the evaluation and comparison of financial performance (profitability) of NSE and BSE for ten years. The tool for appraisal of financial performance is mean, standard deviation, co-efficient of variance and trend analysis.

For the comparison between the two major stock exchanges the researcher has used some statistical tests according to the nature and objectives of the study. The collected information is suitably classified, tabulated and analyzed with the help of statistical tools like Mean, Standard Deviation, Co-efficient of variance, trends analysis, t-test. The hypothesis has been analyzed by t-test and the conclusions have been drawn on the basis of 5% level of significance.

The market internals indicate a higher turnover due to the buying conviction. The number of trades was higher and the average ticket size per trade was higher, which indicates a retail buying bias. The capitalization of the market was higher in line with a bullish session. The put call ratios indicate the bears adding on to their shorts on advances.

**Table No. 1**  
**Growth of Sectors Comparison of BSE and NSE**

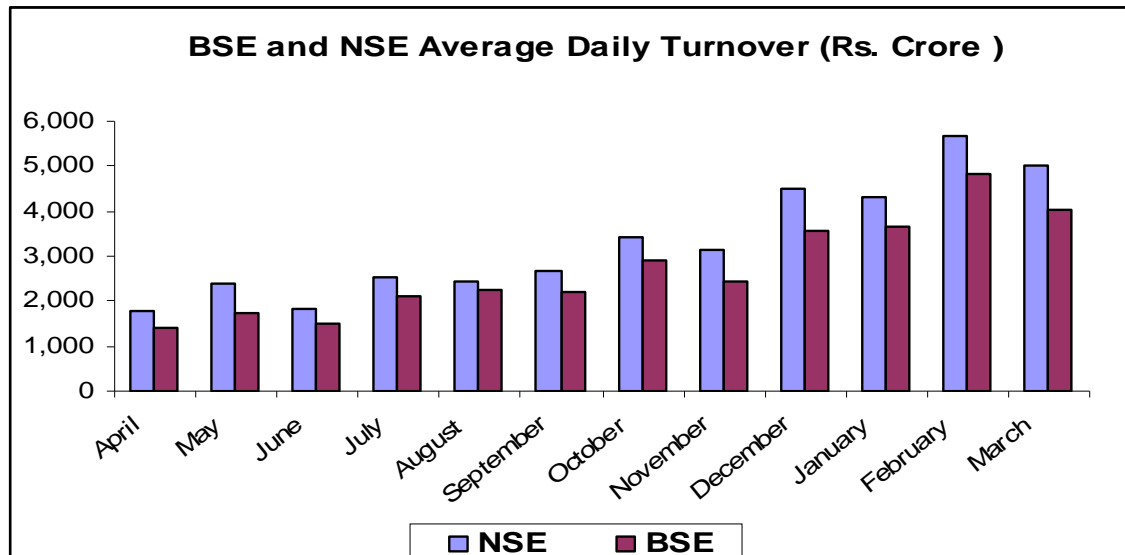
NSE cash figures	Jun 23, 2013	Jun 24, 2013	Change
Turnover Rs Crs	8,998.44	12,392.50	3,394.06
Number of trades	54,23,186	59,77,228	5,54,042
Capitalization Rs Crs	62, 54,649	64, 11,484	1,56,835
Average value per trade - Rs	16,593	20,733	4,140

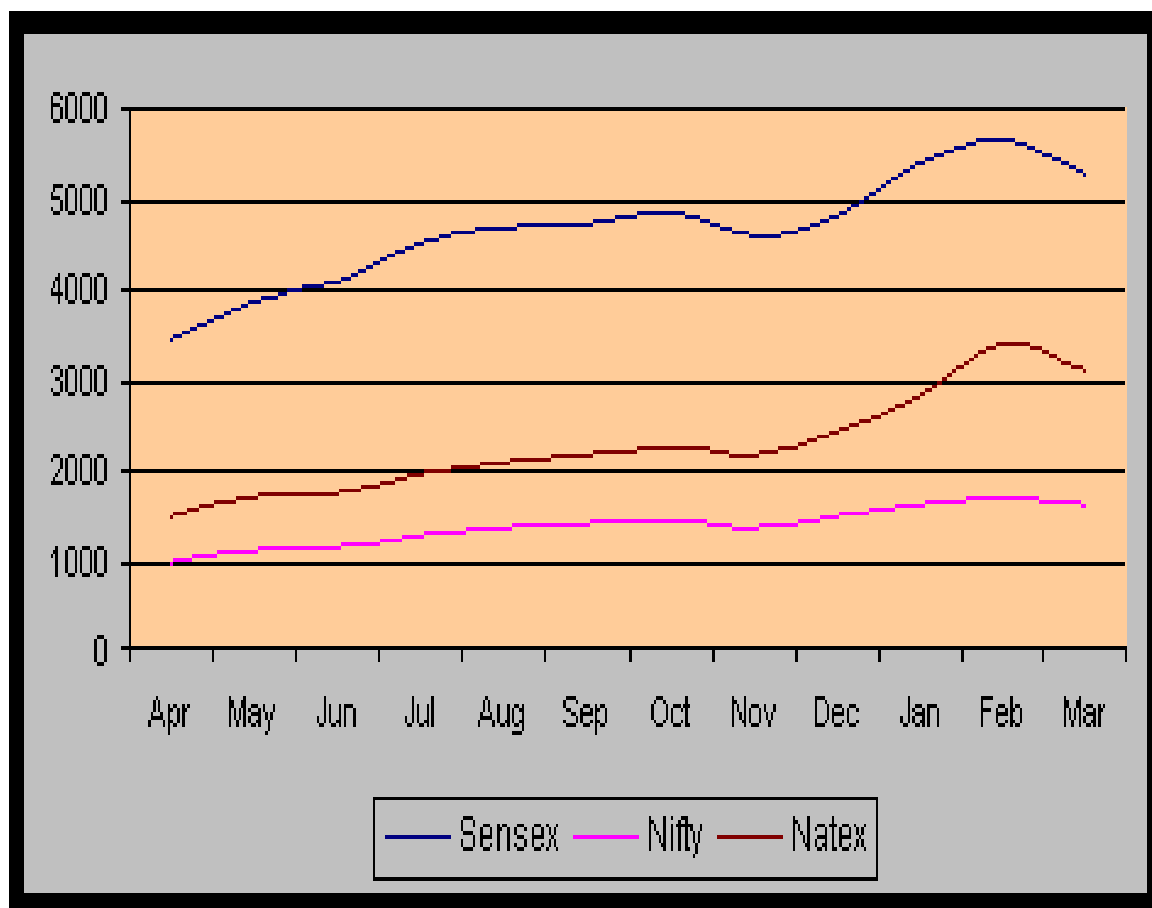
**Table No.2**

F&o Cues	Jun 23, 2013	Jun 24, 2013	Change
Nifty PCR	1.07	1.28	0.21
Bank Nifty PCR	0.79	0.89	0.10
Stock PCR	0.26	0.28	0.02
Marketwide PCR	0.42	0.46	0.04

The year 2012-13 was marked by a smart recovery and strong spurt in equity prices. During the larger part of the year, the equity market registered upward movement. The BSE Sensex on point to point basis recorded a growth of 34 per cent from 3739 as on March 31, 2012 to 5001 as on March 31, 2013. The BSE-100 (Natex) also shot up by 76 per cent from 1651 to 2902 during the same period. On the other hand, S&PCNX Nifty increased by 42 per cent. During 2011-12 and 2012-13 BSE Sensex, BSE 100 and NSE 50 all had shown downward trend for most of the part of these two years. The rise in the equity prices did not confine only to blue chip companies but the scrips in Group B also participated in the rally on number of occasions. The industries, which were the top performer included information technology and pharmaceuticals.

The performance of stocks prices was not linear during the year as shown by the movement of daily indices. In the beginning of year under review, the BSE Sensex was in the grip of bearish phase following the presentation of the Union Budget 2012-2013 presented at the end of February 2013. The BSE Sensex which stood at 3686 as on April 1, 2013 gradually dipped to 3272 by April 28, 2013 on account of massive selling pressure by the market operators due to the neutrality of Union Budget to stock market, followed by a pickup which continued till May 2012 and closed at 4123 on May 19, 2013. The market came under pressure, which was reflected in deceleration of the share prices and somewhat erratic movement. It was only from the middle of June 2013 the stocks market regained appreciation. The BSE Sensex moved northward from 4125 as on June 17, 2013 to 4728 on July 22, 2013 possibly due to increase in net investment by FIIs. The stock prices though reflected firming up trends thereafter but were in the high phase of bullishness only from January 2013 when the BSE Sensex touched 5375 as on January 3, 2013. The Sensex continued to push upwards and touched the highest level of the year at 5933 as on February 11, 2013 and thereafter it started sliding down slowly and reached 5000 as on March 31, 2013. The spurt in stock prices was to some extent assisted by massive inflow of funds by FIIs and mutual funds.

**Fig 1**



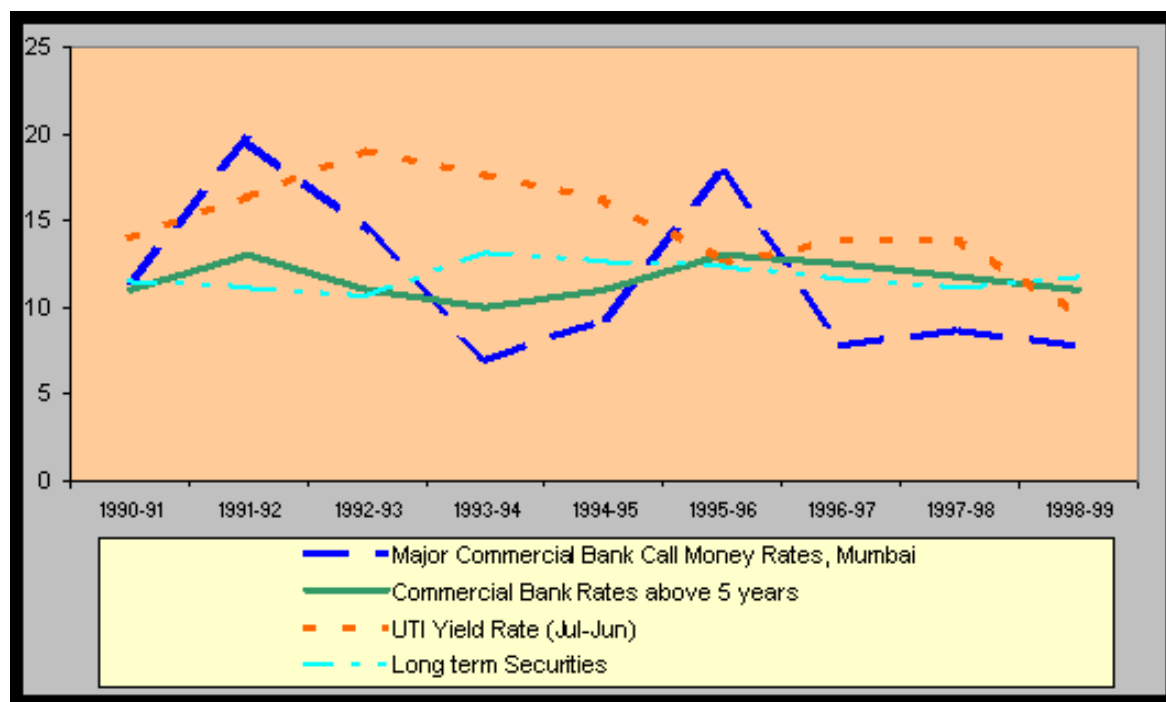
**Fig 1: Monthly Averages of Closing Indices**

**Table No. 3**  
**Distribution of Trading Days During 2012-2013**

% change	Sensex		Nifty	
	Increase	Decrease	Increase	Decrease
BSE	110	95	112	100
NSE	16	16	20	16
	6	2	2	2
			1	00
<b>Total</b>	<b>132</b>	<b>113</b>	<b>135</b>	<b>118</b>

Source: SEBI

The Table below sums up the daily movement of indices for BSE Sensex and Nifty in 2012-2013. During 245 trading days for BSE Sensex it recorded increase for 132 days and decrease for 113 days. Similarly; Nifty reported increase for 135 days and decrease for 118 days out of 253 days. Thus stock price in India demonstrated resistance during 2012-2013. A number of factors have influenced the stock prices. The robust trend in stock prices during 2012-13 interalia includes various incentives given in the Union Budget 2012-13, large investment by FIIs of the order of US\$ 2.34 billion and heavy net purchases by mutual funds following their massive resource mobilization.



**Fig 3: Movement in Interest Rates on Savings**

The downward movement of interest rate structure on bank deposits and low returns on short-term government securities also shifted investment resources towards equity market. In other countries also fall in deposit rates has diverted funds towards equity investment. As a result, the proportion of household savings invested in equities particularly has risen to around 2.4 percent in 2011-12 from 2.0 percent in 2012-13. The sentiments of the investors and traders were also boosted by information technology industry. The boom on NASDAQ also, has been on a number of occasion instrumental through the Indian companies listed on it, to boost the sentiments of Indian domestic players in the market. As regards macroeconomic fundamentals, exchange rate stability, high level of foreign exchange reserves and increase in growth of exports has strengthened the confidence of FIIs in the Indian domestic market. On top of all factors, increased in liquidity (M3 or Broad Money Supply) in 1998-99 might have also contributed to overall firming up trend in stocks prices through time lag. It has been established in various studies that broad money (M3) has impact on economic variables up-to 1 year.

**Table No. : 4**  
**Listed Companies Traded/ Not traded at**  
**Mumbai**  
**Stock Exchange (April 2012 to March 2013)**

Month & Year	Listed	Traded	Not-Traded	Percent of Traded to Listed Cos.
Apr	7,383	2,719	4,664	36.83
May	7,438	2,631	4,807	35.37
Jun	7,472	2,642	4,830	35.36
Jul	7,506	2,855	4,651	38.04
Aug	7,549	2,964	4,585	39.26
Sep	7,584	2,992	4,592	39.45
Oct	7,650	3,171	4,479	41.45
Nov	7,725	3,030	4,695	39.22
Dec	7,845	3,347	4,498	42.66
Jan	7,845	3,376	4,469	43.03
Feb	7,966	3,285	4,681	41.24
Mar	8,027	3,318	4709	41.34

Source: BSE,



#### **IV TRENDS IN TURNOVER AND MARKET CAPITALIZATION**

Equity market turnover which includes not only price variation but also the volume traded, is an important component in the measurement of the stock market size and liquidity. The liquidity allows investors to alter their portfolios quickly and cheaply and make investment less risky. The secondary market continued to grow vigorously as the average daily turnover at BSE and NSE rose from Rs.2,071 crore and Rs.2,606 crore in March 2012 to Rs.4,050 crore and Rs.5,028 crore in March 2013. In terms of percentage, the rise was 195 per cent and 193 per cent, respectively. On the BSE percentage of turnover to market capitalization was 7.2 per cent at end-March 2012 which, increased to 9.3 per cent at end-March 2013. However, the turnover as a percentage of market capitalization at NSE declined from 11.7 per cent at end-March 2012 to 10.3 per cent at end-March 2013.

#### **V FINDINGS AND SUGGESTIONS**

In table 1 and 2, we show paired comparisons of the mean and standard deviation values of liquidity measures and firm characteristics of our sample. Our results indicate that stock market is consistently higher on the NSE as compared to BSE. In a frictionless stock market would equal unity. We interpret our results to mean that trading frictions on NSE is less as compared to BSE. The other 1 important measure, execution cost, C, measured both in percent and in the Indian currency – Rupees, is significantly lower in NSE as compared to BSE. The average execution cost in NSE is less than half the average value of the cost in BSE. We note that trading frequency is higher on the NSE as compared to BSE, while the average size per trade is higher on the BSE. It would be interesting to examine if these differences in trading characteristics on the two exchanges have an effect on stock market.

#### **VI CONCLUSION**

It has been mentioned that fairness in a marketplace has substantial effects on its liquidity. NSE is superior in this department on many counts. To begin with, the impetus for founding NSE had been to buck the trend of slack regulations and to challenge BSE's near monopolistic hold on Indian's capital market scene. The separation of management from membership in NSE ensures that

a trading member's interests shall not override the interests of the exchange as a whole. Such protection<sup>19</sup> is not assured in BSE, where membership is an automatic privilege of ownership and management. Another count on fairness from NSE lies in its rules for order matching priority. In NSE, strict price priority followed by time priority is observed. In the BSE however, a jobber with a history of large number of transactions can influence the priority of order matching.

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# Criteria and Indicator (C&I) approach for sustainable management of natural forests in India

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## ABSTRACT

*Forests of India have been managed scientifically since 19<sup>th</sup> century. Forest policy of India has been guiding the sector to manage natural forests of the country sustainably. During the early and mid twentieth century, forests were managed on the principles of sustainable yield management. In the later stages of the century, the sector adopted progressive yield management to meet the requirements of forest industries besides demands from railways and domestic sector. Forests of India have been losing its productivity due to many reasons. One of the known reasons is being the poor investment and non-participation of local community in the management, who have been the bonafide users of forests. Due to loss of forest productivity, non-continuous flow of goods and services, these local communities are losing their livelihood base. Ecological and economic aspects of forests have been addressed under the comprehensive forest division level plan (working plan). But the monitoring of various initiatives of forest development and societal benefit is found to be lacking in the current system of forest management. The current system of forest accounting is not reporting the true contribution of the sector to the national economic development. Looking to these gaps and requirement of a monitoring system, the country has initiated Criteria & Indicators (C&I) approach for managing the forests sustainably. The C&I framework developed, helps to enhance stakeholders participation and define the sustainability of the forests by them. When data are collected for these indicators, and analyzed, it provides the direction of change. At the same time, it also helps to identify those aspects of management which requires more input and additional efforts. The paper demonstrate the use of C&I framework with help of a case study. The study not only enhances our knowledge about the forest resources, but also achieving the goal of sustainable forest management in the country.*

**Key words:** Criteria & Indicator, Sustainable Forest Management, Sustainability

## I INTRODUCTION

Over the last several years, there has been considerable interest both in defining and in finding ways to measure sustainable forest management (SFM), as well as to adopt and verify managerial performance measures designed to achieve SFM on the ground. Forests are symbol of healthy nation and people's interaction with nature. Keeping in view all the pillars of sustainability i.e. ecologically resilient, socio-culturally acceptable management and economically viable forest resources and their management, the real challenge exists is involving stakeholders and defining the threshold values of sustainability and monitor them to arrive the direction of changes over the years. This will help the management for sustainable development of resources. Therefore sustainable management of forests has been the key issue of concern at national as well at global level particularly in reference to biodiversity conservation, climate change and subsequent ecosystem services of forest protected ecosystem. There is established fact that forest ecosystems have intrinsic values that underpin their social, cultural and economic importance. Thus the sustainable forest management deals with ecologically sound practices that maintain the forest ecosystem integrity, productivity, resilience and biodiversity. Therefore, the ecosystem-based forest management is an integrated management approach addressing the natural landscapes and

watershed catchments, ecological processes, wildlife species and human activities. In light of these, the usefulness of Criteria and Indicators (C&I) as a tool to monitor and assess forest condition has been recognized world-wide and considerable initiatives have been taken up at various levels to promote sustainable forest management, which is also considered as an integral part of sustainable development. Present paper deals with the development of functional monitoring system for assessment of sustainable forest management by applying C&I framework at forest management unit level.

## II C&I FRAMEWORK

India has developed a national generic set C&I framework to manage the natural forests of the country sustainably. The framework has evolved through multi stakeholder consultation, which includes grassroots and policy level institutions and eminent experts and academicians. The generic set was widely tested and revisited several time to accommodate the forest diversity of the country. Main conceptual tools for guiding the assessment of SFM are: Principles, Criteria & Indicators, norms and verifiers. The national generic set has three principles, 8 criteria and 37 indicators.

**(a) Principle:** It is defined as “a fundamental truth or law as the basis of reasoning or action”. Principles are seen as providing the primary framework for managing forests in a sustainable fashion. Therefore, principles are general in scope & they outline the philosophy upon which the initiative/forest management standard is based.

**(b) Criteria:** Criterion is defined as “a standard that a thing is judged by” or “an identifiable element of sustainability against which forest management can be assessed”. Criteria set out the key elements or dimensions that define and clarify each principle or a ‘second order’ principle, one that adds meaning and operationality to a principle without itself being a direct yardstick of performance.

**(c) Indicator:** Indicator may be of any variable or component of the forest ecosystem or the relevant management systems used to infer attributes of the sustainability of a resource and its utilization. Indicators present an aggregate of one or more data elements with certain established relationships and when periodically measured they give trend/progress made by the natives.

**(d) Norms/ Sustainability:** Set or arrived in the context of decisions about, what type of system is to be sustained and over what spatio-temporal scale? Norm of an indicator can be arrived through consultation, or using the reference value or taking the average value of reference period, it can be even arrived based on scientific study or literatures (Adopted from Allen and Hoekstra, 1994).

**(e) Verifiers:** Verifiers may be data/ information, procedures needed to determine satisfaction of the conditions postulated in the indicator concerned. Verifiers provide specific details that would indicate or reflect a desired condition of an indicator; they may add meaning and precision. Some of the procedures needed to determine satisfaction of the conditions postulated in the indicator concerned (Means of verification), may need to be developed.

Annexure – II, provides the generic set of C&I for sustainable management of natural forests in India.

### III MONITORING SFM

Application of C&I framework is done at forest management unit level. In India forest division is considered as forest management unit (FMU) due to its operation. Working Plan is prepared and mobilized at division level and the fund allocation is made as per the working plan prescription. Therefore it is appropriate for the country to consider the forest division as FMU for monitoring the change and take appropriate decision to achieve the objective of sustainable development forest resources in the country. Collection of temporal data is done at FMU level with the participation of all stakeholders. There are few indicators requires the observation of the grassroots like Joint Forest Management Committee (JFMC) and their continued cooperation. The capacity developed at JFMC level will help to observe and report on those indicators. Looking to the heterogeneity in terms of units used for data sets and periodicity, a simple and robust method and having scientific base has been proposed to monitor the trend of SFM in India. Following are the stepwise approach of assessing the sustainability of forests at FMU level.

**(a) Tabulation of data:** Temporal data on identified indicators at the FMU level is reported in a simple data collection format and tabulated and entered in excel sheet. Annexure –II, provides an example of one of the FMU, i.e. South Seoni (Madhya Pradesh).

**(b) Scoring of indicators:** Performance of indicator is measured against the norm or sustainability of indicators, which have been arrived through multi consultation approach. The norms once decided will not be changed or re-defined frequently and should be maintained for one cycle of management. Therefore score of an indicator reflects the achievement made towards sustainability. This will be used to identify the gap in the intervention/ management made hence corrective measures is made in the future interventions.

**(c) Assigning weightage to Criteria:** Equal weightage was assigned to all the eight criteria, since these criteria are equally important to achieve the sustainable development of forests. Hence, all the criteria are assigned a weight of 12.5 to make total of 100.

**(d) Assigning weightage to indicators:** Each indicator is weighted as per its perceived importance within the criterion, which is specific to the FMU and community wisdom. Total of weight of indicators of each criterion was again fixed at 100 only.

**(e) Developing Sustainability Index:** Calculation of Sustainability Index (SI) was based on the following equation:

$$SI = \frac{\sum \{(WC_1 \times C_1), (WC_2 \times C_2), \dots, (WC_n \times C_n)\}}{\sum (WC_1, WC_2, \dots, WC_n)}$$

Where, SI – Sustainability Index,  $WC_n$  = Weight of the nth criterion,  $C_n$  = Score of the nth criterion  
Where  $C_n$  is calculated as

$$C = \frac{\sum \{(WI_1 \times I_1), (WI_2 \times I_2), \dots, (WI_n \times I_n)\}}{\sum (WI_1, WI_2, \dots, WI_n)}$$

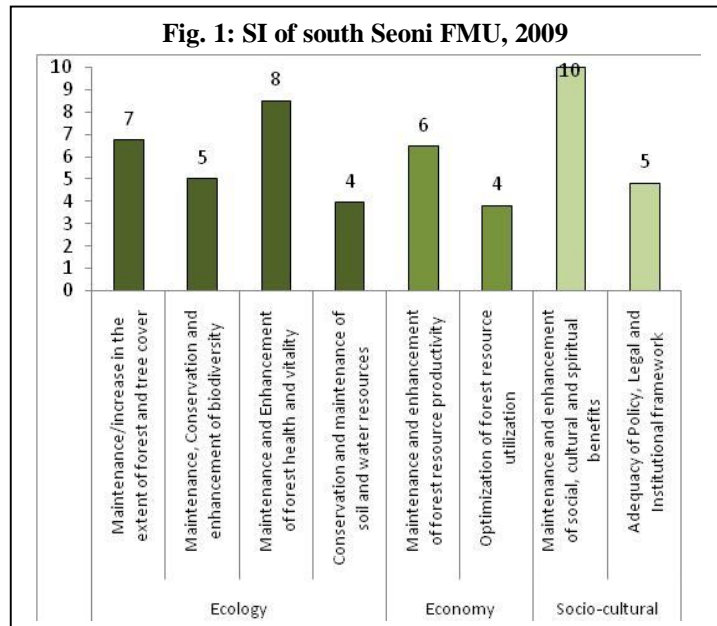
Where,  $WI_n$  = Weight assigned to nth indicator under the respective Criteria.  $I_n$  = Score of the nth indicator under the respective criteria.

The value of SI reflects forestry conditions, and higher value indicates the better situations. The lower value of the SI during the assessment year can be evaluated with the help of poor performing indicators. These poor performing indicators can be addressed with collective intervention to make it performing indicators.

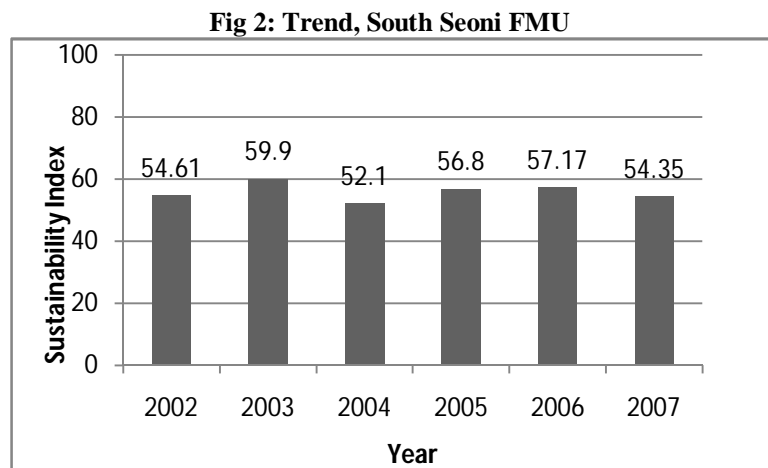
#### IV CONCLUSION

The indicators evolved at FMU level are of quantitative and qualitative in nature. Quantitative data were collected from department records, published data, and interaction with community and field observations. Whereas the qualitative data, which is also important looking to the social aspects attached with forest situation in the FMU were collected through community interaction. Periodicity of the data varies with the indicators. These are ranging from once in every year to 10<sup>th</sup> year. Variation is justified due to its gestation period and periodicity of such data collected and reported by the government agencies. In many cases the indicators evolved at FMU do not have adequate data. The qualitative data collection and reporting require a systematic approach in quantifying and use it in the SI calculations. Fig.1, indicates the performance of criterion in a particular year. Criteria 4 and 6 are performed poorly due to poor performance of identified indicators under the respective criterion.

It is also evident that few indicators are not observed at FMU level due to non-compliance and lack of man power to collect and report data during reported year. In the case of south Seoni FMU (Fig.



2) it is evident that in the year 2004, 11 out of 32



indicators performed below in comparison to the previous year and hence influenced the overall SI of the FMU. The SI is one of the best ways of communicating the sustainability of the forests at FMU level to policy makers to improve the efficiency.

**Annexure – I: National generic Set of C&I for Sustainable Management of Natural Forests in India**

<b>Indicator</b>	<b>Norm/ Sustainability</b>
<b>Principle- I: Ecologically/ environmentally secured forests</b>	
<b>Criterion 1: Maintenance/increase in the extent of forest and tree cover</b>	
1.1a: Area of forests under different legal classes (RF, PF, UF and others)	Entire forest area is notified as RF and PF
1.1 b: Forest area under different working circle/ management plan	Entire forest area is covered under WP/ Management plan
1.2 Percentage of forest with secured boundaries	Map showing forest boundary is available and boundary demarcation in the field
1.3 Change in area of forest cover	The base year status of forest cover is maintained or improved
1.4 Change in tree cover outside forest area	Documentation of ToF and appropriate recommendations made for further increase
<b>Criterion 2: Maintenance, Conservation and Enhancement of Biodiversity</b>	
2.1 Protected area network	Average 5% land area and 15% of forest area or as may be applicable in States
2.2 Species diversity	Base year documented species diversity is maintained or enhanced
2.3 Genetic diversity	Documented and maintained/ conserved
2.4 Status of Biodiversity conservation in forests	Implemented the state guideline/ strategic plan
2.5 Status of species prone to over exploitation	Sustainable and responsible management practices have been prepared and implemented
2.6 Status of non destructive harvest of wood	Stump size and finishing as per the silvicultural prescription
<b>Criterion 3: Maintenance and Enhancement of Forest Health and Vitality</b>	
3.1 Status of regeneration	As per the base year assessment or about 1500 seedling per ha in Dry area and not exceed 4500 seedling per ha in humid area
3.2 (a) Area affected by forest fire	Fire incidents have reported and appropriate measures have been taken and reported positive results
3.2 (b) Area damaged by natural calamities	Preparedness and mitigation strategy plan is available
3.3 Area protected from grazing	Regulated grazing as per the WP
3.4 Area infested by invasive weed species in forests	Plantation (AR/ANR) area are free from weeds
3.5 Incidences of pest and diseases	Appropriate action taken and controlled
<b>Criterion 4 : Conservation and maintenance of soil and water resources</b>	
4.1 Area treated under soil and water conservation measures	Soil erosion vulnerability assessment and intervened
4.2 (a) Duration of water flow in the selected seasonal streams	River flow pattern w.r.t annual rainfall has been improved
4.2 (b) Wetlands in forest areas	No reduction in wetland from the base year
4.2 (c) Water level in the wells in the vicinity, (up to 5 km) of forest area	Water level w.r.t annual rainfall has been improved
<b>Principle- II: Economically Viable forests</b>	
<b>Criterion 5 : Maintenance and enhancement of forest resource productivity</b>	
5.1 Growing stock of wood	No undue reduction in growing stock w.r.t Base year
5.1b: Growing stock of bamboo	Number of clump and clump size is maintained or increased w.r.t base year
5.2 Increment in volume of identified species of wood	MAI of important tree species is maintained or increased w.r.t base year
5.3 Efforts towards enhancement of forest productivity through quality plantation activities	About 10% of the total forest area should be brought under production forestry by raising quality plantation
<b>Criterion 6: Optimization of forest resource utilization</b>	
6.1 (a) Recorded removal of timber	Harvest should not exceed the accretion (growing stock/ MAI)
6.1 (b) Recorded removal of fuel wood	Quantified data on removals and sharing of with the community is available
6.1 (c) Recorded removal of bamboo	Quantified data on removals and sharing of with the community is available
6.2 Recorded removal of locally important NTFPs	NTFPs by all means should not exceed the annual yield or as indicated in the Working Plan



6.3 Direct employment in forestry activities	Forest dwelling community benefited due to wage generation from forestry and allied activities
6.4 Demand and Supply of Timber and important Non-Timber Forest Produce	Assessed and evolved mechanism to meet the demand
6.5 (a) Import and Export of wood and wood products	Efforts made to increase the export and reduction in the import
6.5 (b) Import and Export of NTFPs	- do -
6.6 Value and percentage contribution of forestry sector to Gross Domestic Products (GDP)	Progressive and increase in the share
<b>Principle- III: Socio-culturally acceptable and Institutional measures are helping sustainable management of forests</b>	
<b>Criterion 7: Maintenance and enhancement of social, cultural and spiritual benefits</b>	
7.1 (a) Number of JFM committees and area (s) protected by them	Should match the JFM resolution or minimum 50% of the forest area should be under JFM
7.1 (b) Status of empowerment of JFMCs	Regular meetings and participation of average 60 percent members
7.1(c): Labour welfare	Welfare means are in place and followed
7.1d: Status of compliance of Forest Right Act (FRA)	Registration of all the claims and settled the genuine claims
7.2 Use of indigenous knowledge	Documented the ITK and incorporated in the microplan
7.3 Extent of cultural/sacred groves	Documented and interventions to conserve them
<b>Criterion 8: Adequacy of Policy, Legal and Institutional framework</b>	
8.1 (a) Existence of policy and legal framework	Adequate legal framework for sustainable management of forests
8.1 (b) Status of approved working plan	Regular working plan revision and valid reason for deviation of implementation of the plan
8.2 Number of forest offences	All the cases booked and taken to court of law
8.3 Status of Research and Development	All the problems addressed with appropriate of transfer of technology to field
8.4 Human resource capacity building efforts	About 60 percent of the staff are trained
8.5 (a) Forest Resource Accounting (FRA)	All tangible benefits have been reported and progressive and positive
8.5 (b) Budgetary allocations to the forestry sector	Regular budgeting and submitted for the approval
8.6 Existence of Monitoring and Evaluation mechanisms	M&E is in practice for all the development projects
8.7 Status of data collection, information, utilization and dissemination	FMIS is in operation
8.8 Adequate manpower in FMU	Deficit of employees is not exceeding 1/3 <sup>rd</sup> of the sanctioned man-power

**Annexure - II: Data on identified Indicators of the FMU (South Seoni)**

Indicators	2002	2003	2004	2005	2006	2007
<b>Criteria 1: Maintenance/increase in the extent of forest and tree cover</b>						
1.1 Total Forest Area (ha)	-	119327.39	119327.39	119327.39	119327.39	119327.39
Reserved forest	-	93673.49	93673.49	93673.49	93673.49	93673.49
Protected forest	-	25653.90	25653.90	25653.90	25653.90	25653.90
Unclassified forest	Nil	Nil	Nil	Nil	Nil	Nil
1.2 Area under various Forest types						
Teak	33899.52	31868.57	31868.57	31868.57	31868.57	31868.57
Bamboo	32010.90	34003.72	34003.72	34003.72	34003.72	34003.72
Miscellaneous	60661.55	50966.67	50966.67	50966.67	50966.67	50966.67
Others	6769.36	15705.56	15705.56	15705.56	15705.56	15705.56
1.3: Forest area under encroachment	51.49	51.49	51.49	51.49	51.49	51.49
1.4 Percentage of forest with secured boundaries No. of boundary pillars	1423	1524	1615	2122	2122	2122
1.5 Change in area of forest cover - dense, open and scrub forests, pastures and deserts						
Dense Forest (ha)	-	82835.24	82835.24	82835.24	82835.24	82835.24

Open forest (ha)	-	29226.11	29226.11	29226.11	29226.11	29226.11
Blank forest (ha)	-	2350.54	2350.54	2350.54	2350.54	2350.54
1.6 Change in tree cover outside forest area	589910	616410	616410	616410	616410	616410
<b>Criterion 2: Maintenance, conservation and enhancement of biodiversity</b>						
2.2 Species diversity						
(a) Number of animal species	430	430	430	430	430	430
(b) Number of plant species	1123	1123	1123	1123	1123	1123
2.2 (a) Status of locally representative animal species	<i>Hystrix indica, Petaurista petaurista, Panthera pardus, Panthera tigris tigris and Muntiacus muntjak.</i>					
(b) Status of locally representative plant species	<i>Annona squamosa, Anogeisus latifolia, Butea monosperma, Chloroxylonsvietenia, Emblica officinalis, Terminalia arjuna, Adina cordifolia, Aegle marmelos, Bauhinia racemosa, Boswellia serrata, Buchanania lanzan, Cochlospermum religiosum, Dalbergia latifolia, Emblica officinalis, Kydia calycina, Nyctanthus arbortristis, Ougeinia oogeinis, Semecarpus anacardium, Soyimida febrifuga, Sterculia urens and Strychnos nux-vomica</i>					
<b>Criterion 3: Maintenance and Enhancement of forest health and vitality</b>						
3.1: Status of regeneration						
Established seedlings (Avg. no./ha)	-	1179.96	3304.19	1679.91	1416.91	1416.91
3.2 a. Area affected by forest fire (ha)	345.08	110.31	437.63	Data not available	Data not available	243.85
3.3 Area protected from grazing (ha)	82572.39	79414.39	79110.39	79110.39	79110.39	79110.39
<b>Criterion 4: Conservation and maintenance of soil and water resources</b>						
4.1 Area treated under soil and water conservation measures	Data not available					
4.2 (a) Duration of water flow in the selected seasonal streams (Months)	9	9.5	9.5	9	9	9
(b) Water level in wells in the vicinity, (up to 5 kms) of forest area (mtr) in summer	23	25.3	24.5	23	23	23
<b>Criterion 5: Maintenance and enhancement of forest resource productivity</b>						
5.1 Growing stock of wood						47.302 m <sup>3</sup> /ha
5.3 (a) Efforts towards enhancement of forest productivity area brought under Hi-tech plantations. (ha)						
Forest Plantation (ha)	380	185	391	215	50	90
<b>Criterion 6: Optimisation of forest resource utilization</b>						
6.1 (a) Recorded removal of timber Timber (m <sup>3</sup> )	21279	24293	9090	9320	6605	Data not available
• Utilisation of wood						
Timber (Poles in no.)	33039	51803	20815	21117	29920	Do
Fuel wood	11575	13883	8354	8547	11428	Do
Bamboo (Number)	1069424	1267723	1210323	1230408	1762529	Do
(b) Recorded removal of fuel wood (no. of stacks)	24535	25335	10326	12533	11899	Do
Utilisation of fuelwood	11575	13883	8354	8547	11428	Do
(c) Recorded removal of bamboo						
• Bamboo harvested						

Commercial	5416	7059	7359	9433	8110	Do
Industrial	5622	9770	9171	9296	9815	Do
Total (NT)	11038	16829	16530	18729	17925	Do
• Utilisation of Bamboo (Nistar)	1069424	1267723	1210323	1230408	1762529	Do
6.2 Recorded removal of locally important NTFP.						
Production and harvest of non-wood forest products Tendu Leaf (Std. bags)	40794.93	46565.21	58750.82	28540.52	40727.11	Do
6.7 Contribution of forests to the income of forest dependent people (%)	11.8	11.8	11.8	11.8	11.8	11.8
Criterion 7: Maintenance and enhancement of social, cultural and spiritual benefits						
7.1 (a) Number of JFM committees and area(s) protected by them						
Number of JFMCs	524	524	524	524	524	524
Area protected (ha)	123304.28	123304.28	123304.28	123304.28	123304.28	123304.28
(b) Status of people's participation in management and benefit-sharing						
Participation of members in JFM meetings (%)	48.6	51.75	51.75	51.75	51.75	51.75
7.3 a. Extent of cultural/sacred groves						
No of tree species traditionally/religiously protected	12 Numbers: Mahua ( <i>Madhuca indica</i> ), Achar ( <i>Buchanania lanzan</i> ), Bhilva ( <i>Semecarpus anacardium</i> ), Sitaphal ( <i>Annona squamosa</i> ), Peepal ( <i>Ficus religiosa</i> ), Neem ( <i>Azadirachta indica</i> ), Amla ( <i>Emblica officinalis</i> ), Bahera ( <i>Terminalia bellirica</i> ), Harra ( <i>Treminalia chebula</i> ), Saaj ( <i>Terminalia tomentosa</i> ), Salai ( <i>Boswellia serrata</i> ) and Goolar( <i>Ficus glomerata</i> ).					
Criterion 8: Adequacy of policy, legal and institutional framework						
8.1 (a) Existence of policy and legal framework	Yes					
(b) Status of approved working plan	Yes	Yes	Yes	Yes	Yes	Yes
8.2 Number of forest related offences (Nos)	1560	1257	2235	1631	1839	Data not available
8.4 Human resource capacity building efforts (Nos)	1002	2020	1212	3668	Data not available	Data not available
8.5 (a) Forest Resource Accounting Net benefit (INR)						
Recorded						9534853
Unrecorded						23206926
All						32741779
(b) Budgetary allocations to the forestry sector						
Total budget of FMU (Rs. in lakhs)	7429000	6476000	9988000	6956800	1274160	Data not available
Allocation of fund for forest protection (INR)	371450	323800	499400	347840	63708	Data not available

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# **Kuka Movement in Punjab: An Overview**

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## **I INTRODUCTION**

The present study assesses the British resistance in Punjab by the Namdharis. We will also discuss the social-religious evils in the society of Punjab and how Namdharis try to uplift the social status of the Sikhs with the object of preparing the ground for the attainment of a political goal. During the study we see that the Namdhari Movement had influenced almost every section of the Punjabi society and belong to all castes people joined their struggle against the social vices, religious hypocrisy and political slavery. The so-called 'dregs of the people' had strengthened the movement and gave it a character of the mass movement though the officials apprehended real danger from the people of note.

## **II THE BACKDROP**

After the annexation of the Punjab, the Sikh religion was losing its characteristic vigour and its votaries were relapsing into beliefs and dogmas from which their new faith had extricated them. Absorption into ceremonial Hinduism seemed the course inevitably set for them.<sup>1</sup> Religiously and socially, the condition of the land of the five rivers,<sup>2</sup> as well as the rest of India was no better. Ever since the days of Banda Bairagi, the Sikh community stood divided. The passage of invaders like Nadir Shah and Ahmed Shah Abdali through the Punjab,<sup>3</sup> the nature of political activity under the Misdars, and the persecution of Sikhs by the Mughal Kings or their Governors, all these tended to produce social and religious indiscipline and moral laxity among the followers of Guru Gobind Singh. The times of Ranjit Singh and his successors witnessed further landslides on the road of religion and morality. The Brahmanic influences, costly ceremonialism, emotional depravities, individual treacheries and violence, the practice of Sati, sale of daughters, infanticide, etc., became wide spread.<sup>4</sup>

After the annexation of the Punjab, a flood of Christian Missionaries had moved into the province. The Sikhs and the Afghans were the two communities from which some trouble could be apprehended and therefore, the best means to them was to bring them under the folds of Christianity. Amritsar being the centre of Sikhs and Peshawar that of Pathans, thus wrote Sir Edwardes to Sir John Lawrence, "There are two obligatory points, the Peshawar Valley and Manjha. The rest are mere

dependencies. Holding these two points you will hold the whole Punjab."<sup>5</sup> The British intentions are clear. The first great missionary movement in the Punjab proper was the establishment of the American Presbyterian Mission at Ludhiana in 1834. The Ludhiana mission as it thus came to be called later on, occupied a number of stations in the Central Punjab south of the Ravi.<sup>6</sup> Social laws of property were being altered for the progress of an alien church. The sanctity of Harmandir (now called the Golden Temple) was endangered. Beef was being hawked about in the holy city of Amritsar under the laws of the Christian Government.<sup>7</sup> The Church Missionary Society began operations in the Punjab in 1851 and developed stations comprising a group round Amritsar and Lahore, and a long line of frontier stations strictly from Simla to Karachi in Sind. Other Missionaries were the Methodist Episcopal the Church of Scotland, the Moravian the American United Presbyterian, the Zanana Bible and Medical Missions, and the Salvation Army, besides the missionary work conducted by the various Roman Catholic orders."<sup>8</sup> The British Government themselves took an undue and unreasonable interest in these missionary activities. Sir John Lawrence, the Chief Commissioner of the Punjab used to contribute Rs 500 a year towards these activities, and even the young Prince, Maharaja Dalip Singh, was made to embrace the new faith<sup>9</sup> and converted into Christianity. The official interest of the Government is manifesto from Queen Victoria's own letter to Lord Dalhousie, Dated November 24, 1854 expressing the hope that the development of the railway communication in the country would facilitate considerably the spread of Christianity in these lands.<sup>10</sup>

## **III PERIOD OF RENAISSANCE & REFORMATION**

The latter half of the 19th century in the history of our country as a period of renaissance or reformation or both. This is mainly for the reason that there emerged during this period a large number of movements which exercised far-reaching influence on the modernization of our complex social fabric. They were not confined to any single community, but had within the orbit of their influence nearly all important sections of the Indian population. Among the Hindus there were the Brahmo Smaj (which had originated earlier, but reached its climax only after 1860), Prarthana

Smaj, Arya Smaj, Ramakrishna Mission and the Theosophical Movement. The Muslims had the Wahabi and Aligarh Movements.<sup>11</sup> So far as the Sikhs are concerned, there were two well-known movements among Sikhs-the Nirankari and the Namdharis.<sup>12</sup> It was in the above political and religious circumstances that Kukaism was initiated in order to dispel darkness, to denounce social weaknesses, to meet the challenge of an overpowering Western imperialism, and to forge the bonds of religious purity and brotherhood.<sup>13</sup> Impelled by similar circumstances, and inspired by the action of the Tenth Guru, the Namdhari Guru Ram Singh, a disciple of Guru Balak Singh of Huzroo,<sup>14</sup> entered upon a similar resolve of religious purity and political freedom through the pathways of perpetual sacrifice and self-denial.

In the Punjab many Sikh patriots tried to regain sovereignty for the Sikh and the rest of the country. Several attempts and movements started to gain the old glory of the Khalsa. One being Namdhari Movement known as the Namdhari or Kuka, which was started by Baba Ram Singh<sup>15</sup> Namdhari after Anglo-Sikh wars. The Namdhari Sikhs played a prominent role in the freedom movement of India.<sup>16</sup> They were in the forefront of freedom struggle at a time when the British were consolidating their hold over the country. During the early days of British rule in Punjab the Namdhari Sikhs organized themselves into a well-knit group of Saints soldiers in the true tradition of Sikh Gurus and offered a taught resistance to British rule in Punjab. Nearly one month before the outbreak of the rebellion of 1857.<sup>17</sup> Guru Ram Singh raised a new flag to be upheld, uttered a new pledge to be fulfilled and saw a new vision to be realized. Guru Ram Singh founded, on April 12, 1857, a socio-political sect called 'Namdhari' in the Punjab. These Namdharis, while reciting Sikh Mantras or repeating the Name, often developed emotions, screamed and shouted, turbans in their hands and hair streaming in the air, hence called Kukas or the shouters.<sup>18</sup> The Kuka Movement preceded not only the other Sikh movement but, as a matter of fact, almost all other movements mentioned above, with the possible exceptions of the Brahmo Smaj and the Wahabis. But it was not merely among the first to appear; it had what is more important a character of its own, which marked it off from the other movements of the period. Whereas the other movements devoted themselves entirely to social and reform activities, with the main emphasis on re-examination of the prevailing thought and practice in the light of both western impact and rediscovery of the Ancient Indian glory and wisdom with a view to regeneration of the country's social and religious life, the Kuka Movement concentrated on these reforms primarily with the object of preparing the ground for the attainment of a political goal.

The Kukas, unlike the rest, took an integrated view of the problem facing the country and visualized the various questions, social as religious and political, in their true and proper perspective. To them the programme of social and religious uplift was of basic importance but not less so was the question of freedom. Namdharis were instance, the concepts of unity of God, equality of all human beings, fraternity as the basis of all human relations and emancipation of women, besides that of fight against all forms of tyranny, social, religious, economic and political, reinforced by a long and deep-rooted tradition of such a fight running through the larger part of the Sikh history. The Namdharis were essentially Sikhs, and they drew inspiration from the Sikh Gurus<sup>19</sup>, especially from Guru Nanak and Guru Gobind Singh.

In 1847 Baba Ram Singh started preaching against bad habits among the Sikhs.<sup>20</sup> In 1857, on the Baisakhi day, Ram Singh founded his movement, the Namdhari, in his own village, Bheni, where four Sikhs received baptism at his hands to start with. He fixed preaching centres in different parts of the province,<sup>21</sup> and in each one of them he appointed a Deputy called Suba, to carry on the preaching business. Besides, the Subas were also appointed in Gwalior, Hyderabad Deccan, Banarees, Lucknow, Nepal and Kabul. The institution of Subas was completed by 1864, and they went about preaching Ram Singh's message from place to place.<sup>22</sup> In the beginning, the districts of Sialkot, Amritsar, Hoshiarpur and Ludhiana formed chief centers of Namdhari activities, but later they spread to Ferozepur, Lahore and Gujranwala as well. Not only Sikhs joined this movement in great numbers, Hindus were also attracted towards it and by 1871 as it was revealed by Giani Rattan Singh in the court of Mr. Cowan, the Kukas numbered ten lakhs of whom only one third were Kesadharis, the rest being all Sehjdharis. Ram Singh never told his followers to beg about and move about unemployed as mendicants. The Kukas were to be found in all sorts of profession. They were business-men, traders and merchants, and employed in Government and private services. They were found especially in Police and Army, where it was difficult to ascertain their numbers, because they joined these services with a purpose and never revealed their Kuka affiliations.<sup>23</sup>

Writing in an article published in 1935, thus commented Dr. Rajendra Prasad,<sup>24</sup> the Ex-President of India: "Guru Ram Singh considered political freedom a part of religion. The organization of the Namdharis became very strong. The principles of boycott and non co-operation, which Mahatma Gandhi introduced so vigorously in our freedom movement were expounded by Guru Ram Singh for the Namdharis." The Guru's non co-operation movement was based on the

following five principles: (1) Boycott of Government services. (2) Boycott of educational institutions run by British Government. (3) Boycott of law established by them. (4) Boycott of foreign clothings. (5) Disobedience of Government orders, which one's conscience abhorred. The Namdharis were so steadfast in these principles that even after the independence.<sup>25</sup> The Punjab in nineteenth century had two dominant religions Hinduism and Islam. The Sikhs had been a thin minority. They were generally regarded as a part of the Hindu religion.<sup>26</sup> However, the Kukas were strict in wearing the five Sikh "Ks" (The Kesh, Kachha, Kara, Kirpan and Kangha) like Guru Gobind Singh<sup>27</sup> and in other Sikh essentials. In their social beliefs, the Kukas were against child-marriage. They condemned infanticide and dowry system. The Namdharis in fact were religiously denied the right to spend more than Rs. 13 on a marriage. This practice obtains among them even in the present times, and in a recent Kuka conference at Delhi, many couples were married at Rs. 1.40 each. The Kukas gave strictly equal status to women and believed in inter-caste marriage between caste Hindus and Untouchables. The first such inter-caste marriage was performed among the Kukas on January 4, 1863.<sup>28</sup> Giving an account of the Kuka Articles of Belief, in 1863 Mr. Kinchant wrote, The leading feature of the doctrines Ram Singh preaches are: "He abolishes all distinctions of caste among Sikhs; advocates indiscriminate marriage of all classes; enjoins the marriage of widows; enjoins abstinence from liquor and drugs; but advocates much too free intercourse between the sexes; men and women rave together at his meetings, and thousands of women and young girls have joined the sect; he exhorts his disciples to be cleanly and truth telling. One of his maxims says: it is well that every man carries his staff and they all do. The Granth is their only accepted volume. The brotherhood may be known by the tie of their Pagris, Sidha Pag by a watchword and by a necklace of knots made in a white woolen cord to represent beads and which are worn by all the community." They had no respect for tombs and temples and were also iconoclasts.<sup>29</sup>

#### IV EMERGENCE OF KUKA

The unfurling of a flag and the establishment of a society called 'Sant Khalsa' in 1857 were not merely steps to tone up social and religious life, but also the inauguration of a political movement. The movement was to be run on the lines of Guru Gobind Singh, who had first created and militarized the Khalsa, and then employed it in his prolonged struggle against the Mughal imperialism of Aurangzeb. The greatest stress was placed upon 'Khande da Amrit' introduced by Gobind Singh and observance of the associated strict discipline

substituting heavy 'lathis' (sticks) for the disallowed 'kirpans' Obviously, the flag and the lathi cannot be the insignia of a peaceful movement concentrating merely on religious and social problems. Fixation of a common secret watch word and uniform dress for all, which made the Sant Khalsa a closely-knit and compact organization, is another pointer to a similar conclusion.<sup>30</sup>

The Kukas or as they are sometimes called the "Sunt Khalsa" (Khalsa saints) have a private post of their own, which appears to be admirably organized. Confidential orders are circulated much in the same way as the fiery cross was carried through a Highland clan in Scottish bygone days. A Kukahs, on the arrival at his village of another of the same sect with a dispatch, at once leaves off, whatever work he may be engaged upon; if in the midst of a repast, not another morsel is eaten; he asks no questions, but taking the missive, starts off at a run and conveys it to the next relief, or to its destination. Important communications are sent verbally and are not committed to writing. In carrying messages they are said by Major Perkins to make great detours to avoid the Grand Trunk Road.<sup>31</sup> The political and military successes were, however, accompanied by developments which a later revived Sikhism was to regard as serious deviations from the teachings of the Gurus.<sup>32</sup> The Kukas also enlisted themselves in great numbers in the state police and in the army, and got there by a military training to be used when required. When in such services, the Kukas did not reveal their identity. A special Kuka regiment was raised by the Maharaja of Kashmir, which later at the British intercession, was disbanded. To make his political programme a success, Bhai Ram Singh spread his sphere of activity in Nepal, Bhutan, Kashmir and several other States.<sup>33</sup> Much more important incident was the revelation in the month of November 1869, of Baba Ram Singh's secret efforts to have his followers trained militarily in the State of Jammu and Kashmir. A reference to this is found in the official report for the year 1869-70. It mentions<sup>34</sup>: "In November reports were received the Maharaja of Kashmir was raising a Kuka regiment and that each recruit received a certificate from Ram Singh before setting out for Kashmir." The events of the years immediately following clearly proved that what was called calm or "thanda" in 1869 was really the proverbial calm before the storm. The period (1868-1870) of calm, ended in 1871 with the Kuka attacks on the butchers of Amritsar and Raikot, followed, not long afterwards, by much bigger raids on Malodh and Maler Kotla. They were now openly on the war-path. Infact, their aim was cow-protection, long established cultural value of Indian civilization.<sup>35</sup>

The fact that the introduction of kine killing was the work of the British was driven home by the way they backed the butchers engaged on the business. In 1864 and even twice or thrice before that, there were some slight disturbances caused by the Amritsar butchers' audacity to sell beef openly in the city. Against the offending butchers several complaints were lodged with the authorities, but no stern action was taken. Only nominal punishments were inflicted, which, too, not unoften were remitted on appeal. The Hindu and Sikh inhabitants of the city started an agitation having for its object the complete suppression of cow-slaughter in or about the holy city. Several affrays took place between the two communities during the months of April and May 1871.

Amritsar being the religious capital of the Sikhs, the quickly mounting activities of the cow-slaughterers there created a widespread dissatisfaction among the Sikhs as well as among the Hindus living in the Punjab and even outside.<sup>36</sup> The Kuka movement planned as an attack on the butchers in Punjab was in reality an attack on the British Government.<sup>37</sup> and if this contention is correct then the killing of some butchers on 15th June, 1871 by a band of Kukas inside the slaughter-house at Raikot and outside the city of Amritsar was symptomatic of the anti-British attitude. A vivid description of how Kukas resorted to butchers- killing is given in the following account: A band of ten Kukas - Fateh Singh of Amritsar, Beela Singh Sandhu of Narli, Hakim Singh Patwari of Maura, Lehna Singh Tarkhan, of Amritsar, Jhanda Singh of Thathi, Lenha Singh and Mehar Singh of Lopoke, Lachhman Singh and Bhagwan Singh of Mehran and Gulab Singh-was shortly afterwards formed to destroy the butchers of Amritsar.<sup>38</sup> Weapons were supplied by Lal Singh, a police constable serving at Amritsar. When the case was still under trial at Amritsar, the butcher murder at Raikot took place. The murderers were apprehended, tried and condemned to death. They were all Kukas. One of the four convicts, named Gulab Singh, offered, if pardoned, to give up the names of all who had been concerned in the Amritsar murders. His offer was accepted and on the promise of pardon he gave up the names of his nine companions. With him Lieut. Colonels McAndrew and Baillie arrived at Amritsar on the 2nd August and enquiry into the truth of his statements commenced immediately. The next day, Fateh Singh, Hakim Singh and Lehna Singh were arrested. On the 5th August Beela Singh was brought in by the police and a day or two after Lehna Singh of Amritsar was apprehended. Four people, namely Jhanda Singh, Mehar Singh, Bhagwan Singh and Lachhman Singh could not be arrested. According to the version prevalent among the Kukas, there were no arrests by the police, for the Kukas voluntarily surrendered themselves to

the authorities. The old case was now withdrawn and all the thirteen accused committed to the Sessions were released.

Exactly one month after the Amritsar incident another band of Kukas fell upon the slaughter-house of Raikot in the district of Ludhiana. This slaughter-house situated about 150 yards outside the city wall, not far from the gurdwara named after Guru Gobind Singh. The Sikhs of Raikot and elsewhere had a special grouse, because birds carried the bones and bits from the slaughter-house and perching on the temple walls would often throw them down into the Gurdwara enclosure. In the attack of the 15th July 1871 three people were killed and nine wounded, four of them seriously. However, the chief butchers, Ranjha and Buta, both escaped.<sup>39</sup> After the investigation into the Raikot murders it became clear that Baba Ram Singh was the main force behind the butcher-killing movement.<sup>40</sup> The Government officials were deeply concerned about it. On 8th August Lt. Col. Baillie wrote a memorandum holding Ram Singh responsible for all the murders and strongly recommended that he should be expelled from the country. The Government of the Punjab, after careful consideration, was of the view that the witnesses being all Kukas, it was not possible to depend upon them for the trial of Ram Singh and that the stage of his expulsion from the country had not yet arrived. The political case against Ram Singh stands thus: "He is the actual as well as the nominal leader of a sect which in its nature as a revival of the Khalsa is antagonistic to the British power". Mr. Macnabb wanted the immediate action against Ram Singh to be taken under Regulation III of 1818. He ruled out the method of punishment by trial, because it was a political and not legal matter and regarded the alternative course of giving a stern warning to Ram Singh as unlikely to answer.<sup>41</sup>

Ever since the executions of the Kukas involved in the Amritsar and Raikot cases, in particular that of the renowned Suba Gyani Singh, there had been a lot of agitation in the minds of the whole community. Whatever the consequences, they were not to be deflected from the patriotic path once chosen. The emotions were stirred deeply not only against the British Government, but also against the states of Nabha, Jind and Patiala, which had acted as the puppets of the foreign government in hunting down their heroes of the Raikot butcher case. They decided now to come out in the open and abandon their former strategy of attacks under cover of the night's darkness. A band of prospective martyrs was organized under the leadership of Hira Singh and Lehna Singh of Sakrowdi. Explaining the background of the attacks on Malodh and Maler Kotla.



Mr. Macnaob writes: "Prophecies of the overthrow of the English and the restoration of the Khalsa rule have been circulated among the Kukas and there was a general rumors that this year 1872 was to witness some great display of the Kuka Guru's power. Kukas sold their land and got rid of their property so as to be free to take part in the coming strife which was expected to take place in (Cheyt) April but was precipitated by the action of certain Subahs who, on the plea of taking vengeance for the death of Gyani Singh formed the plan of sending a body of 100 men to seize the capital of Maler Kotla State, where arms and horses would be found and distributed to the rest who should join. Under the plan that was finally adopted, Maler Kotla was to be the first target. It was a "notoriously weak and misgoverned state. The old ruler had died and the succession of the new ruler<sup>42</sup> was disputed. The administration was in the hands of a Regency Council. It was, therefore, thought that there would not be much difficulty in getting money, arms and horses from there, which were so necessary to the success of their whole plan. Additionally, they were urged to the action by the supposed merit of an attack on the traditional enemies of the Sikhs as well as the butchers of the place, who had insulted Gurmukh Singh, a local man, by slaughtering an ox in his very presence. After this an attack was to be made on Nabha, Jind, and Patiala, the railroad between Ludhiana and Ambala was to be broken up.

The long-contemplated attack on Maler Kotla was made on the morning of 15th January at about 7 o'clock. The authorities there had already got information about the designs of the band. Mr. Cowan, the Deputy Commissioner of Ludhiana, had warned, through their agents, the rulers of Maler Kotla, Patiala and Jind that the Kukas were out for some mischief in their areas. They were put slightly off guard at 7 a.m. when the Kukas about 25 in number suddenly scaled a damaged wall and entered the palace of the ruler. Their object of going into the palace was to get hold of arms, money and horses. After this occurred some severe fighting between the two parties, in which several casualties were suffered by both the sides. Despairing of being able to get any more arms, money or horses, the Kukas decided to leave Kotla.<sup>43</sup>

## V CONCLUSION

Lastly we can say that the Kuka Movement (Namdhari) was one of the remarkable Indian movements of the second half of the 19th century. Its inception took shape under the very shadow of the Revolt of 1857. This Revolt, the largest since the advent of the British rule in India, was unprecedented also in the terrible revenge taken by

the victorious imperialists. The Punjab did not escape the revenge of the infuriated Britisher. Between Ambala and Delhi hundreds of Indians were condemned to be hanged before a court-martial in a short time and they were most brutally and inhumanly tortured while scaffolds were being erected for them. It was the religious, social or political sphere, in each case the inspiration was derived from the Gurus, particularly Guru Gobind Singh. The western ideas, already in wide circulation in the country, held little charm for the Kukas, for the ideas of unity of God, brotherhood of men, equality of sexes and liberty, commonly considered the gift of the west, were present in Sikhism. Therefore, they believed that the need of the hour was not to hanker after European ideas, but to assimilate and practice what was already with them. There were four focal points in Kukatism, namely the Name (i.e. constant embrace of God), social equality, order of the Khalsa, and Sikh nationality. The first two were the central fibers running through the Sikh religious and social doctrine and related to the teaching of all Gurus. The last two were the special gifts of Guru Gobind Singh, representing the fruit of the tree planted by Guru Nanak. As in the political sphere, in the social and religious spheres too, the Kuka Movement represented a progressive force and may rightly be said to have paved the way for the subsequent Singh Sabha Movement.

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# Adoption of Web 2.0 Tools in Research for Growth

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## ABSTRACT

*Over the past 15 years the Web has transformed the ways in which we search for information and use it. In more recent years, we have seen the emergence of a new array of innovative tools that collectively go under the name of 'Web 2.0', in which the information user is also increasingly an information producer (i.e., prosumer), by sharing or creating content. The success of Web 2.0 tools for personal use is only partially replicated in the professional sphere and, particularly, in the academic environment in relation with research and teaching. To date, very few studies have explored the level of adoption of Web 2.0 among academic researchers in their research and teaching activity. It is not known in what way how and how much Web 2.0 is currently used within research communities, and we are not aware of the drivers and the drawbacks of the use of Web 2.0 tools in academia, where the majority of people is focused either on research or on teaching activities. To analyse these issues, i.e. the combined adoption of Web 2.0 tools in teaching and research, the authors carried out a survey among teaching and researching staff and librarians of the different Engineering colleges Bhopal. The purpose of our survey was to explore the level of adoption of Web 2.0 tools among the academic communities. We were interested in investigating how they were using these tools in the creation of scientific knowledge both in their research and teaching activity. We were also interested in analysing differences in the level of adoption of Web 2.0 tools with regard to researchers' position, age, gender, and research field. Finally, in our study we explored the issue of peer reviewing in the Web 2.0 setting. In particular, we investigated whether social peer review is regarded by researchers as a viable alternative to the current closed peer review system (single-blind or double blind). On the basis of sample this study can only be regarded as exploratory, but we still believe that they represent a complementary perspective with respect to previous studies.*

**Key Words** - research activity; social tools; teaching; user behaviour; Web 2.0

## I INTRODUCTION

Seven years after its birth, the Web 2.0 has become a consolidated virtual "reality". Due to their ease of use, social media have become pervasive and extremely popular among web users. This social phenomenon is mainly fueled by personal needs and motivations, but Web 2.0 tools are now also beginning to devolve their communicative power in people's professional lives.

In the academic context, it is extremely interesting to explore how social tools support science research and teaching and how the adoption of these tools is affecting the traditional four phases of the scholarly communication system: creation, certification, dissemination and preservation. The broad adoption of Web 2.0 technologies by research communities is also a big challenge both for publishers and libraries. They may feel threatened in their respective roles by the disintermediation brought along with the adoption of these technologies. As a consequence they should find strategies to cope with this phenomenon. Particularly, the main challenge for libraries is learning to use social tools not only to develop new services in the environment of social media and to "connect with researchers, but also to enhance the research process" (McMahon et al., 2012).

In this paper we will explore how the research communities are using Web 2.0 tools in their research and teaching activities, whether there are any relevant disciplinary or generational differences in their use, what tools they adopt more willingly, what contents they are trying to convey

through the use of social tools, what benefits they derive from their use, and what the main obstacles are to their adoption.

## II SCHOLARLY COMMUNICATION IN THE WEB

Since the beginning of the 1990s, Internet has deeply innovated the way in which scientists do research. The innovative tools of communication and network sharing (such as e-mail, discussion forums, newsletters and, most recently, digital repositories — e.g., the physics preprint ArXiv or the biologists' database GenBank) and *collaboratories* (Finholt, 2003) have strongly reconfigured the different phases of scholarly communication (i.e., creation, certification, dissemination, preservation and research evaluation). The Web as a platform acts as a glue for the scholarly communication phases, reduces barriers to entry, speeds up scientific communication and collaboration, fosters the interdisciplinarity and cross-fertilization of science, and increases the democratization of knowledge by offering new tools and models for the dissemination of science (i.e., the open access paradigm which advocates for an open and seamless dissemination of knowledge).

The Web 2.0 has empowered all the above-mentioned innovations. Not all scholarly communication phases and functions are affected in the same way by the Web revolution. The two phases which show major changes are the creation of scientific knowledge (Bukvova, 2010; Ponte & Simon, 2011) and research dissemination.

Preservation, certification and evaluation are less deeply affected by the Web changes as more formal elements predominate in these phases, particularly in the latter two. Nevertheless, some interesting experiments are showing the path to a more innovative approach both in research certification and evaluation. With regard to certification, experiments of open peer-review are being carried out by some e-journals. With regard to the research evaluation, new approaches are based on usage metrics (Journal Usage Factor). These innovative measures integrate with the more traditional citation based ones (i.e., the Impact Factor, H-index). Yet “these initiatives still lack the necessary institutional awareness” (Ponte & Simon, 2011, p. 150) and do not substitute the citation metrics.

The full potential and the innovative communication models offered by the technology, particularly the combination of the Open Access/Open Data paradigm with the most advanced tools of the Web 2.0, are also reconfiguring the traditional relationship between science and society and provide new impetus to the concept of “citizen science”. Notwithstanding this increasing consolidation of Web 2.0 technologies in the scholarly communication, it is still difficult to understand whether or not this remains a niche phenomenon with generational and disciplinary biases. It is also important to know whether social media bring some benefits to the research and teaching workflow, and if so, what kind of benefits.

#### **(a) Web 2.0 technologies in research and teaching workflow: a literature review**

To date, many articles have generically dealt with the topic of Web 2.0 in the scholarly communication and research workflow (Kalb et al., 2009; Mahapatra, 2010; McMahon et al., 2012). More specifically, the topic of the adoption of the Web 2.0 tools by academic research communities has already been explored in a few surveys conducted in different countries. One of the first studies on the way in which researchers are making use of Web 2.0 tools in the course of their researches was carried out by the Research Information Network in the UK in 2009 (RIN, 2010). The study developed a composite methodology combining an online survey with an in-depth, semi-structured interview with a sample of 56 survey respondents, including a total of fifteen semi-structured interviews with service developers and twenty interviews with Web users. 1,282 valid responses were obtained from the online survey. Findings show that 45% of the respondents are occasional users of Web 2.0 tools. Researchers tend to use mostly well-known generic tools such as Google Scholar (73%) and Wikipedia (69%) while a significant minority also use social networking services such as YouTube (29%), Facebook (24%) and Twitter (10%). Overall, however, the RIN study highlights a low level of uptake among the UK research community of Web 2.0-based services.

In 2010, another relevant study on the use and impact of Web 2.0 tools on research workflows was carried out by CIBER at UCL and funded by the Emerald Publishing Group. The CIBER study was carried out internationally

online and received 1,923 complete answers from academics. Findings are aligned with the RIN study as the results show that the most established Web 2.0 tools are also the most popular ones: tools of collaborative authoring (e.g., Google Docs) are by far the most popular (62.7%), followed by social conferencing tools (e.g., Skype, 48.3%) and by scheduling and meeting tools (e.g., Google Calendar and Doodle). In order to share images and videos, 69% of respondents used YouTube, 14% used SlideShare and 12% Flickr. The preferred bookmarking service was Delicious. The most used social bookmarking platform was Facebook. The CIBER study also highlights subject differences in the use of the Web 2.0 technologies: natural and computer scientists were the most frequent users of social media, while social scientists and humanities researchers, albeit attracted by the new communicative tools, stay behind. With regard to age, there is a statistically clear distinction between researchers under- and over-35 years old. Yet “it is very difficult to detect any general overall pattern” (Rowlands et al., 2011, p. 188).

A third survey on the adoption of Web 2.0 technologies in the research workflow was carried out by Ponte and Simon (2011) among researchers of different disciplines in Europe from May to August 2010. The authors obtained 345 full responses. Findings show that researchers massively used search engines (Google Scholar was used by 99.7% of respondents). Among Web 2.0 tools, wikis (42%), blogs (38.6%) and social networks (34.8%) are fairly popular. Social bookmarking (25.8%) and micro-blogging (17.7%) are less used.

A similar Web survey was conducted in Finland in November 2009 by Gu and Widen-Wulff (2011) among a targeted sample of Abo Akademi University academic staff. Findings show that researchers are well-acquainted with Web 2.0 tools. However, “respondents use more multimedia sharing and social networks in everyday life than in research or teaching work” (Gu & Widen-Wulff, 2011, p. 768). Researchers tend to use different social tools according to their scope in research.

Another stream in the literature focuses more directly on the application of a single Web 2.0 technology in the education environment, in particular wikis (Chao, 2007; Parker & Chao, 2007), blogs and microblogs (Churchill, 2009; Ebner & Maurer, 2009).

To date, no survey has explored the use of social media in both research, library and teaching activity. This was the first goal of our study. Moreover, we were intrigued by the rapid change in the modes of communication and in the use of Web 2.0 technologies. It was, therefore, interesting for us to explore if, two years after the last survey, there had been relevant changes in the adoption of Web 2.0 technologies in research and learning activities. Finally, as impact of learning and using the technology is influenced by culture-related aspects (Collis, 1999), we decided it was interesting to us to conduct a survey on the use of social media in a well-developed and technology-oriented country like India.

### III METHODOLOGY AND FINDINGS

Many definitions of Web 2.0 can be found in the literature (O'Reilly, 2008; Siemens, 2008). For the purpose of our survey, we decided to adopt Anderson's Web 2.0 definition: "Web 2.0 encompasses a variety of different meanings that include an increased emphasis on user-generated content, data and content sharing and collaborative effort, together with the use of various kinds of social software, new ways of interacting with web-based applications, and the use of the web as a platform for generating, re-purposing and consuming content" (Anderson, 2007).

The survey was conducted in July 2013 through an online questionnaire, which was divided in three sections:

- (i) personal information
- (ii) Web 2.0 tools and their adoption in research activities
- (iii) Web 2.0 tools and their adoption in teaching activities.

The questionnaires were sent by internal mail to different head of the departments and librarians of engineering colleges of Bhopal city. Out of these approximately 60 were received. Out of 60, 12 were completely filled. So they were analyzed.

The final respondents in terms of research discipline, they were heterogeneously and not evenly distributed among the fields of arts and humanities (2 respondents), social sciences (1 respondents), computer science (5 respondents) and business, marketing and management (1 respondent), library science(3). Age varied considerably, with the majority being between 25 and 45 years.

The survey questions can be found in Appendix A. Below, replies are grouped according to the two main topics that were addressed by the enquiry and will be discussed in detail in the following two subsections.

#### (a) The adoption of Web 2.0 tools for research activities

For research activities, most respondents (n=8) use Web 2.0 tools regularly for their professional activities, 3 respondents use them, but only rarely, and only 1 respondent stated to use them solely for personal, private purposes. The most used social networking platform is LinkedIn as indicated by almost all respondents (n = 9), while Facebook is used only by 3 respondents. For this question multiple answers were possible: this explains why the total amount of answers exceeds the number of accepted respondents (that is those who completed the questionnaire), although 2 of the registered 12 did not indicate any social platform. Because the survey was filled out anonymously online, we were not able to investigate further how and for which research activities such social platforms are actually used. Besides these platforms, Wikis and blogs seem to be rather popular: 6 respondents declare to be using Wikipedia and 4 use institutional Wikis, whereas scientific blogs are used by 5 of the respondents, with 4 of them using their personal blog and only 2 the personal blog of one of their colleagues. These were also

questions for which multiple answers were possible. Micro-blogging platforms are used by a very restricted number of respondents who are all using Twitter, with one respondent indicating specifically to be using the Twitter account of the university.

Social bookmarking or reference management tools are not that well known, according to the number of answers received to this question. Only 2 respondents replied, each of whom indicating a different answer: one using Mendeley, and one CiteULike.

Collaborative project platforms are not used at all, maybe even not known, given that only one person filled out this question. Other kinds of collaborative platforms include all Google-related products, i.e., Google Calendar, Google Docs, GTalk, along with Skype and YouTube as indicated in Fig 1.

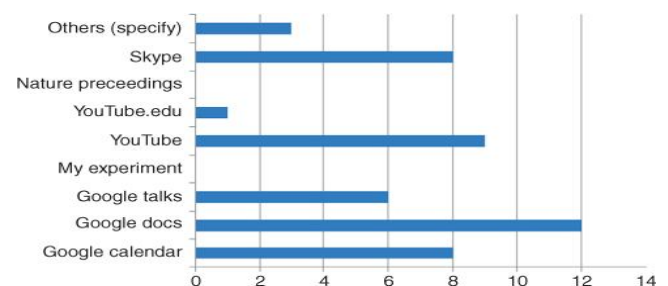


Fig 1: Collaborative platforms and tools used.

When we look at the reasons why adopting Web 2.0 tools is considered positive from a research point of view, respondents indicate that such tools:

- (i) are free to use (mentions: 100%);
- (ii) are easy to use as there is only a minimum set of skills required to be able to use them (11 mentions);
- (iii) help them keep in touch with their colleagues (9 mentions);
- (iv) help them work in a collaborative way (8 mentions), with only 1 respondent not agreeing with this statement;
- (v) help them share and disseminate fast ideas and research results (6 mentions);
- (vi) help them to keep updated in their own research field (6 mentions); however, four respondents claim that Web 2.0 tools do not help them at all in remaining up-to-date in their research;
- (vii) help them save time and costs (i.e., travelling is less necessary...). 6 respondents find that Web 2.0 can be used as a replacement for personal travels because of the possibility to have conference calls, of sharing resources remotely as indicated earlier, or of communicating synchronously. However, 3 respondents do not see these possibilities.

At the other side of the spectrum, the reasons for not adopting Web 2.0 tools in their research activity are:

- (i) the fact that the use of Web 2.0 tools conceals a sum of technologies and concepts which are still insufficiently defined; however, the majority of the respondents (8 mentions = 67%) disagree with this statement;
- (ii) being very busy and finding that using these tools takes too much time; this answer was indicated by only 3 respondents; most respondents (9 mentions) disagree with this statement;
- (iii) the low quality of the content shared; only 2 respondents agree with this statement;
- (iv) privacy concern: only indicated by 1 respondent;
- (v) the fact that Web 2.0 tools promote amateurishness by opening contents to non-academic users was not claimed by anybody: no single respondent believes that the democratic character of the Web has opened up the doors to non-professionalism;
- (vi) not trusting Web 2.0 tools and platforms: all respondents do not agree with this statement;
- (vii) the fact that in their own research field collaboration is not a *modus operandi* (so researchers mainly work by themselves); all respondents disagreed.

#### (b) The adoption of Web 2.0 tools for teaching activities

The situation is somewhat similar when we look at the teaching activity. Nine of our respondents declare to use Web 2.0 tools regularly in their teaching activities, and only 3 use them seldom. No one among our respondents states not to use them at all, neither for professional nor for personal goals, or to use them only for personal goals.

Among the tools that are mentioned, we find many Google products, Dropbox, blogs, YouTube, CiteUlike and Moodle. Surprisingly, also Skype and Twitter are used as a teaching tool.

When asked for the purpose of use, the respondents indicated:

- (i) for communication and information sharing;
- (ii) for giving, submitting and grading of assignments;
- (iii) for collaboration and discussion with and among students;
- (iv) for polls, examples, networking, presentations and viewing of streaming videos such as tedtalks6, film clips;
- (v) for referencing to Web sites or any other study material that are used as showcases for students' projects.

**Table 1** shows how the respondents assessed the main advantages of Web 2.0 tools for teaching. As can be seen, the possibility of posting teaching resources (videos, slides, etc.) received most positive mentions (definitely agree – 2, agree – 9, neutral – 1). The immediate feedback from students is regarded nearly as positive. Nine respondents agree or definitely agree with this statement.

With regard to the main reasons for not adopting Web 2.0 tools in their teaching activity, respondents indicate:

- (i) lack of time (5 mentions),
- (ii) lack of expertise (3 mentions),

- (iii) nobody finds that there are privacy concerns involved in the use of Web 2.0 tools.

**Table 1:**  
Advantages of Web 2.0 tools for teaching.

	Totally disagree	Disagree	Neutral	Agree	Definitely agree
Immediate feedback from students	0	1	2	8	1
Posting of teaching resources (video, slides, etc.)	0	0	1	9	2
Creation and sharing of bibliography with students	1	1	4	5	1
Creating a more accessible, portable, durable and interactive educational portfolio	0	1	3	7	1
Creating a very good classroom environment	0	1	4	7	0
Better identifying students' interests and the use of teaching resources	0	2	6	4	0
Helping students to develop capabilities in communication and collaborative works	0	0	3	9	0

## IV DISCUSSION OF THE RESULTS

According to the results of our survey, full awareness of the benefits of Web 2.0 tools in research activity is still to be acquired while the use of Web 2.0 technologies in teaching activities appears to be consolidating.

**Social networks :** LinkedIn is increasing its popularity and has become the most used social networking platform for professional activities, even exceeding the popularity of Facebook. This result highlights a change in the researchers' use of social media as they are beginning to

use Web 2.0 tools that are more professional-tailored at least in the category of social networks. This is in contrast with what was reported by CIBER: “Researchers seem to be largely appropriating generic tools rather than using specialist or custom-built solutions” (**CIBER & Emerald Group Publishing, 2010**). Still Facebook is by far the most popular social network among students. This should be kept in mind by educators when choosing a platform to reach out to their students. In particular, they should consider the impact of the Network Effect. This is a generic term “used to describe the increase in value to the existing users of a service in which there is some form of interaction with others, as more and more people start to use it. [...] This network effect is driving the continual improvement of Web 2.0 services and applications as part of the architecture of participation” (**Anderson, 2007**, p. 20)[7]. The network effect has both social and economic implications. It explains why faculty find it easier and more effective to interact with students on Facebook rather than to aggregate them in the institutional Virtual Learning Environment (**Anderson, 2007**, p. 21).

**Wikis** :Wikipedia is by now a well-established and reputed reference resource. **Park (2011)** also gives evidence to the fact that citations to Wikipedia are increasing quickly in scholarly publications. Overall, wiki-style technology is becoming very popular in the research workflow and more and more integrated in the institutional research environment as 50% of our respondents declared to be using institutional wikis for research purposes.

Wikis in education can be used to accomplish different objectives. According to **Parker and Chao (2007)**, educational wikis support two learning approaches: the constructivist paradigm and the cooperative/collaborative learning paradigm. The latter is particularly effective if the wiki refers to a community of practice. Although wikis can have manifold applications in education, they are particularly well-suited to support collaborative writing: “a wiki as a writing tool maximizes the advantages of reflection, reviewing and publication, and of observing cumulative written results as they unfold” (**Parker & Chao, 2007**, p. 61). Wikis are also frequently used for project based learning and documentation and for building collaborative bibliographies.

Unfortunately, as the scope of our survey was general, we were not able to investigate deeper how and for which learning activities wikis are actually used at different academic institutions.

**Blogs** :Blogs are used for different purposes in the research lifecycle: to disseminate research results, to identify research opportunities and collaboration, to review the literature, to collect research data. (**CIBER & Emerald Group Publishing, 2010**.)

Blogs were originally designed to support personal diaries. They differed hugely from wikis as wikis were conceived as multiple collaborative tools. Notwithstanding this, only 3 out of 12 respondents publish a personal blog while 42% of respondents declared to post comments on scientific blogs (e.g., ScienceBlog.com, Nature.com Blogs, Research

Blogging, RealClimate). It can be a very time-consuming task indeed for researchers to publish regularly in a blog, but we presume that this result can be better explained by the fact that the blogosphere is increasingly becoming a relevant tool in the dissemination of new ideas, and blogs increasingly form a powerful social community-building tool. As a matter of fact, “blogs provide considerable scope to widen the audience for scientific papers and to assist in the process of public understanding of science and research” (**Anderson, 2007**, p. 35).

Blogs are also more and more integrated in scholarly publishing (Nature.com Blogs, the PLoS ONE blog’s EveryONE, BioMed Central blogs) and, therefore, they are more naturally conceived by researchers as a collaborative tool for disseminating ideas.

Micro-blogging platforms (mainly Twitter) are still used by a very restricted number of respondents. This result is aligned with the CIBER UCL study findings and can be explained by the fact that micro-blogging tools are really a new kind of social media and have yet to reach their full take up among researchers. Recently, Twitter is increasingly used to disseminate comments during conferences and seminars.

Blogs in education are also widely used. As a matter of fact, blogging facilitates and contributes to students’ learning. However, the extensive use of blogs by students requires facilitator’s figures to stimulate them to take part in the coursework (**Churchill, 2009**). Hence, educators’ personality and their capacity to involve students in the teaching and learning activities appear strategic.

**Drivers** :Ease of use and openness of Web 2.0 technologies[8] are the two main reasons for adopting such tools in the research process. Keeping in touch with colleagues is the third important driver to the adoption of social media for research purposes. To date, these tools do not substitute but complement the more traditional ones (journals, repositories, search engines) for keeping up-to-date in the profession (50% stated that Web 2.0 tools supports their professional awareness).

The possibility to receive an immediate feedback from students, to share coursework and teaching resources and to help students develop capabilities in communication and collaborative works are the main drivers in the adoption of the Web 2.0 tools. Indeed, the importance of feedback to and from students for learning in progress has been emphasized as a relevant pedagogical intervention (**Salter, 2008**).

**Obstacles** :Respondents declared to trust social media; trust is one of the main characteristics of Web 2.0 and one of the key components of its success. To our surprise, respondents declared that they are not concerned about privacy. However, privacy and Intellectual Property Right are both relevant issues in Web 2.0. **Zimmer (2008)**, for example, by citing Elmer (2004), warns about the dangers of such an environment: “where the collection of personal information is a prerequisite of participation inevitably entrenches power in the hands of the technology



designers". Privacy issues related to the Web 2.0, however, are much more complex, and boundaries between concern and not-concern are blurred. Kate **Raynes-Goldie (2010)**, for example, gives evidence of the fact that students are more worried about controlling access to personal information (social privacy) rather than about how social networks might use that information (institutional privacy). Lack of time is also not considered to be an obstacle when the use of social technologies refers to the research activity, but it may represent a drawback for their adoption in teaching and learning activities.

## V CONCLUSION

The concepts, projects, and practices of Web 2.0 as a whole, insofar as we have surveyed them, are extremely fluid. In research activities, frequent use of social media is rare; only the use of LinkedIn is significant. The selection and uptake of Web 2.0 tools is mainly dominated by the Network Effect, and technologies are subject to alternating dooms.

In teaching and learning, the use of Web 2.0 technologies is consolidating, both at the personal and institutional level, and it presents interesting perspectives. Nevertheless, educators should choose Web 2.0 tools very carefully according to their teaching needs, course aims and personal attitudes. In teaching activities much more than in research, the adoption of social media should always be subject to a more general teaching planning to support the development of young people's skills in creativity and innovation and lifelong learning.

Although the majority of our respondents disagree with the statement that Web 2.0 technologies are not clearly defined, we derived the impression that terminology and differences among the Web 2.0 technologies and tools are neither clear nor consistent. Moodle or Dropbox are not *strictosensu* Web 2.0 technologies, but they were cited by our respondents. This terminology confusion is also a logical consequence of the fact that Web 2.0 technologies are mainly in beta version and open source and are extremely innovative.

Finally, further and deeper studies are necessary to explore if and how social media support the critical thinking and conscious selection of information.

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## APPENDIX

### Questionnaire on the level of adoption of the Web 2.0 tools among research communities

The questionnaire is divided in 3 sections:

1. Personal information
2. Web 2.0 tools and their adoption in research activities
3. Web 2.0 tools and their adoption in teaching activities

It will take you about ten minutes to fill it out. We thank you for your collaboration.

#### 1. First section: Personal information

##### 1.1 Position

##### 1.2 Discipline/field of research

##### 1.3 Age

#### Section 2: Web 2.0 tools and their adoption in research activities

2.1 Do you use Web 2.0 tools (microblogging platforms, social networks, software for collaborative reference management ) for sharing information and knowledge creation in your research activity?

1. Yes, I use them regularly
2. Yes, I use them, but seldom
3. No, I use them only for personal goals
4. No, I never use them neither for professional nor for personal goals

2.2. What are the most common Web 2.0 tools you adopt in your research activity?

1. Social networking platforms
  - Facebook
  - LinkedIn
  - Academia.edu
  - Others (specify)
2. Wikis
  - Wikipedia
  - Institutional wikis
  - My colleagues' personal wikis
  - Other scientific wikis (specify)
3. Blogs
  - My personal blog
  - Other scientific blogs (e.g., ScienceBlog.com, Nature.com Blogs)
  - My colleagues' personal blogs
4. Microblogging platforms (e.g., Twitter)
5. Social bookmarking and reference management tools
  - Delicious
  - Connotea
  - CiteULike
  - Mendeley

- Zotero
- 6. Collaborative project platforms
  - Mavenlink
  - Others (specify)
- 7. Other kind of collaborative platforms and tools
  - Google Calendar
  - Google Docs
  - Google Talks
  - My Experiment
  - YouTube
  - YouTube.edu
  - Nature Precedings
  - Skype
  - Others (specify)

2.3 What are the main advantages in adopting Web 2.0 tools in your research activity?

(For each item the respondent should choose between “I totally disagree”, “I disagree”, “Neutral”, “I agree” and “I definitely agree”)

1. They help me work in a collaborative way
2. They help me share and disseminate fast ideas and research results
3. They help me keep in touch with my colleagues
4. They are easy to use (minimum skills required in using them)
5. They are free to use
6. They help me keep updated in my research field
7. They help me save time and costs (i.e., travelling is less necessary....)

2.4 What are the main reasons for not adopting Web 2.0 tools in your research activity?

(For each item the respondent should choose between “I totally disagree”, “I disagree”, “Neutral”, “I agree” and “I definitely agree”)

1. I am very busy and it takes me too much time to use these tools
2. I do not trust Web 2.0 tools and platforms
3. Privacy concern
4. Web 2.0 tools promote amateurishness by opening contents to non academic users
5. It hides behind it a sum of technologies and concepts which are still insufficiently defined
6. Low quality of shared contents
7. In my research field collaboration is not a modus operandi (I work by myself)

#### Section 3: Web 2.0 tools and their adoption in teaching activities

3.1 Do you use Web 2.0 tools in your teaching activity?

1. Yes, I use them regularly
2. Yes, I use them, but seldom
3. I use them only for personal goals

4. I never use them neither for professional nor for personal goals

3.2 What Web 2.0 tools do use in your teaching activity?

3.3 List some examples of the use you make of it.

3.4 What are the main advantages in adopting Web 2.0 tools in your teaching activity?

(For each item the respondent should choose between “I totally disagree”, “I disagree”, “Neutral”, “I agree” and “I definitely agree”)

1. They help me have an immediate feedback from my students
2. I use them to post my teaching resources (video, slides etc)
3. I use them to create and share bibliography with my students
4. I use them to create a more accessible, portable, durable, and interactive educational portfolio
5. They help me create a very good classroom environment
6. They help me better identify students' interests and use of teaching resources
7. They help my students to develop capabilities in communication and collaborative works

3.5 What are the main reasons for not adopting Web 2.0 tools in your teaching activity?

1. Lack of time
2. Lack of expertise
3. Privacy concern

4. Do you think the use of social tools will increase in the next five years in your research and teaching activity?

5. Comments

# **The Problems and Challenges of Co-Operative Sectors in India**

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## **ABSTRACT**

*This paper tries to analyze the cooperative sector in India with respect to its weaknesses, new challenges and the thrust areas to cope up with the globalization which came along with globalization. The era of 1990s saw a dramatic change in the Indian economy, when the new economic Policy introduced the concepts of Liberalization, Privatization and Globalization in the country. This altered the Indian economy and affected all the sectors of the economy. Since the ancient times, the cooperative sector has been one of the building pillars of the Indian economy.*

**Keywords:** Co-Operative Sector, Indian Economy, Globalization and Privatization etc.

## **I INTRODUCTION**

The origins of the urban cooperative Sectors movement in India can be traced to the close of nineteenth century when, inspired by the success of the experiments related to the cooperative movement in Britain and the cooperative credit movement in Germany such societies were set up in India. Cooperative sectors are based on the principles of cooperation, - mutual help, democratic decision making and open membership. Cooperatives represented a new and alternative approach to organization as against proprietary firms, partnership firms and joint stock companies which represent the dominant form of commercial organization. Cooperatives include non-profit organizations and businesses that are owned and managed by the people who use its services or by the people who live hybrids such as worker cooperatives that are also consumer cooperatives and multi-stakeholder cooperatives such as those that bring together civil society and local sectors to deliver community needs and tier cooperatives whose members are other cooperatives.

## **II OBJECTIVE OF THE RESEARCH**

- (a) To analysis the problems in co-operative sectors.
- (b) To Study the challenges in co-operative sectors.
- (c) A compare study of co-operative sectors and public sectors.
- (d) To study the Internal and external structural weaknesses of cooperative institutions, combined with lack in proper- policy support and their positive impact resulting in mismanagement, inefficiency and corruption in financing to cooperatives.

## **III RESEARCH METHODOLOGY**

- (a) The research methodology used is direct observation and survey done. The research design used in this research is the descriptive research design. Primary data are used for the research purpose and collected. The sources of primary data are Questionnaire and Personal Interviews.
- (b) The secondary data had been collected by Articles, case Study, Newspapers, various magazines, Research journals, Reports, websites, which are already been passed through the statistical process.

## **IV OBSERVATION AND DESCRIPTION**

- (a) It is observed that Co-operative sectors are doing their best to give quality service to customers as given below:
- (b) Customer relations are maintained by Branch Managers & Officers. However, special customer relation Executives/Officers is not there.
- (c) Co-operative sectors having problem of inconsistency in the quality of service. This is because human beings can't behave with same consistency.
- (d) Staff problem:-In Co-operative sectors employees feel secured & that is why they least bothered about giving satisfaction & delight to customers.
- (e) Service Culture is not developed in the Co-operative sectors.

(f) Technical problems: System failure is one of the basic problems. So officers and counter staff and sometimes manager have to face problems and there is unnecessary wastage of time of customers.

(g) Customers when they face problem like long queue, they shout and may create misguidance in the minds of other customers who are there at that time.

#### **Following are the basic causes of all these problems**

- (i) Customers in the Co-operative sectors are finding inconsistency in the quality because Co-operative sectors employees do not show consistency in their behavior.
- (ii) Customer orientation is lacking in Co-operative sectors.
- (iii) Employees' salary is not linked with customer satisfaction and it is offered to all even they give quality or not.
- (iv) Market, i.e. customers in India is heterogeneous. It means customers are from different background-cultural, social, economic, educational etc. So there expectations differ. Co-operative sectors have segmented the market but new way is required to look at this issue. It is very much essential to have precision in marketing in the light of competition from other sectors.
- (v) Illiteracy and fear of Co-operative sectors environment is a major hurdle in attracting rural masses. Similarly nature of job, migratory nature of people creates problems in Co-operative sectors related to products and services.

### **V STRATEGIES TO OVERCOME PROBLEMS RESISTANCE OF CUSTOMERS/ POTENTIAL**

#### **(a) Customers for Co-operative sectors**

Co-operative sectors industry is in service industry. So service characteristics, as given below, make Marketing of Co-operative sectors Services difficult.

**(b) Perish ability:** Co-operative sectors services are perishable. Similarly Co-operative sectors have funds are there to give as a loan, but there are no applicants. So interest lost by the Co-operative sectors for a particular time period is a loss forever. So Demand Management in Co-operative sectors is more difficult than goods.

**(c) Intangibility:** Co-operative sectors services cannot be seen, touched or felt. So advertising or promotion is very difficult. Marketers reach customers through Mouth publicity through

satisfied customers. It is the total resultant experience from bank which creates an impact.

**(d) Heterogeneity:** Co-operative sectors services cannot be standardized like goods. Co-operative sectors Marketing is an interactive Marketing. i.e. customers will have constant interaction with the service provider. So behind back of all services are employees i.e. human beings and they are complex and volatile. So Quality Control and standardization of Co-operative sectors Services are challenges before Marketer.<sup>9</sup>

**(e) Inseparability:** Customers have to approach Co-operative sectors to get services so he/she can be affected by other customers. So how to protect the customer from other customers ' adverse effect is also a challenge.

**(f) Competition:** Today Co-operative sectors have thrown to competition to other sectors. Customers have now a wider choice because they are in the buyer's market.

**(g) Illiteracy:** 25% people of rural India have either fear about handling work in Co-operative sectors. The reasons are being illiteracy, lack of knowledge about bank formalities, etc.<sup>10</sup>

### **VI FINDINGS AND SUGGESTIONS**

- (a) To awareness of the customers and members in rural areas.
- (b) The Corporate sectors should be updating a new technology.
- (c) The funds should provide for the investment purpose to customers in rural areas.
- (d) To face the big problems corporate sectors in rural areas because not available sufficient facilities.
- (e) Employees should not proper guide to customers in rural areas.
- (f) To facilitate smooth conduct of elections and general meetings the law should have provision for proxy voting in order.

### **VII CONCLUSION**

In a developing country like India and other countries that big problems and challenges faced by different area in corporate sectors. Focus on the paper mainly issues of rural area related to cooperative sectors. Considering the low living standards of normal people, perfect market and issues of considerations it is the primary duty of the government to ensure that it's all people has easy access to cooperative sectors. The need of cooperative sector in the era of liberalized, privatized and globalized environment is to seize every opportunity available to it. Thus, the future

vision of cooperative sectors will have to be based on efficiency parameters relating to promotion of excellence, improvement of operational efficiency and strengthening of financial resource based.

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# Changing Dimensions in Higher Education – An Issue In Context with Changing Environment (Towards Knowledge-Based Economy: Lessons for India)

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## **ABSTRACT**

*India has a huge population of uneducated children and the Constitution provides for free and compulsory education up to the age of 14. The country also has the dubious distinction of one of the highest levels of illiteracy in the world. The system of public education at all levels is in advanced stage of disrepair and disarray. Clearly, governments both at the Center and in the States need to allocate far more resources and attention on ensuring that future generations are equipped sufficiently to operate in a knowledge economy. As one is seeking to provide quality education, the process of accreditation as it exists in the country is assessed. Some indications of the level of public spending on higher education are also provided. Education is a trillion Dollar industry worldwide. Education industry groups are, therefore, attracted by the prospects of liberalization and globalization of this industry. They seek more international deregulation and generally support WTO efforts. As demands for higher education grow the world over, the governments are also finding it difficult to provide adequate budgetary allocation. For a public service such as education GATS at Doha was a stepping stone so that there is no discrimination against foreign corporations entering the service market. Further, after the fizzling of the dot.com bubble, corporations are looking forward to other service sectors for investments, education being one of them. Higher Education provisioning is now globalised and in many ways, a commercialized affair and the way that the State had in the goings on is vastly diminished. According to the International Finance Corporation (IFC), the growth is now soaring: 2 million universities students-approaching 2% of the world's total of around 100 million studying outside their home country in 2013. Since the late 1990s the higher education market is growing by 7 per cent a year. The Economist Survey on higher education further indicates that annual fee income alone is estimated at \$ 30 billion. While private profit seeking companies have entered the education business, even government-controlled universities are seeking independence from governmental authority. In this paper, some indications of the level of public spending on higher education are also provided. A case is also made to highlight the need for promoting a knowledgebased economy. International experiences in managing the money that is engaged in funding higher education have been studied to derive lessons for India as a major constraint to private sector provisioning of higher education is the availability of adequate funds.*

**Key words:** Knowledge Economy, Education Industry, Education GATS, International Finance Corporation (IFC), Public Spending

## **I INTRODUCTION**

India has a huge population of uneducated children and the Constitution provides for free and compulsory education up to the age of 14. The country also has the dubious distinction of one of the highest levels of illiteracy in the world. The system of public education at all levels is in advanced stage of disrepair and disarray. Clearly, governments both at the Center and in the States need to allocate far more resources and attention on ensuring that future generations are equipped sufficiently to operate in a knowledge economy. As one is seeking to provide quality education, the process of accreditation as it exists in the country is assessed. Some indications of the level of public spending on higher education are also provided.

Education is a trillion Dollar industry worldwide. Education industry groups are, therefore, attracted by the prospects of liberalization and globalization of this industry. They seek more international

deregulation and generally support WTO efforts. As demands for higher education grow the world over, the governments are also finding it difficult to provide adequate budgetary allocation.

International experiences in managing the money that is engaged in funding higher education have been studied to derive lessons for India as a major constraint to private sector provisioning of higher education is the availability of adequate funds. It is imperative that we continue to produce a critical mass of highly skilled manpower at an accelerated pace. An enabling academic and economic setting is a key factor determining the fate of our nation in the wake of the knowledge sector boom.

## II INTERNATIONAL SCENARIO

Two parallel developments in the world economy are worth noting, especially for their influence on provisioning of higher education: the growth of the Internet and consequently, e-education and second, the expanding role of World Trade Organization (WTO) in determining the trends in world economics. Never before was information so readily available at the press of a button, the Internet has changed the way the world behaves, does business, and thinks. Even school children search the web for study material to support their homework. Today, academicians do not need to spend much time on library research poring over bulky tomes and taking copious notes. They have the facility of faster and surer access to a much wider range of information through the Internet, not just to read but to print or save or forward to others as might suit their purpose.

Internet research has come to be recognized as an essential study tool in all higher education courses in developed countries. On-line Universities, which do not require physical infrastructure, have facilitated greater accessibility to education than ever before.. While popular perception values a degree from a regular college over one from an On-line college, the greatest advantage of an online university or college, that a student need not commute or live on campus tilts much of the debate in its favor. This is especially true for certain kinds of courses designed to cater to the needs of students who do not have financial backup or family support. According to the results of a special survey '*Higher Education: Free degrees to fly*' (see *Economist, February 26th-March 4th, 2005, pp63-65*), higher education is already a global business. World Trade Organization (WTO) and Higher Education: WTO Secretariat is that higher education is akin to 'private consumption' directly benefiting the consumer by way of higher income. In April 2002, Universities from Latin American countries, Portugal and Spain adopted a Declaration at the III Summit of Iberian and Latin American Universities in Porto Alegre, Brazil in which they declared education as a 'public good' and requested their governments not to make any commitment on this issue within the framework of WTO. However, overtime the perception of higher education as a commercial service is gaining acceptance. The WTO Secretariat in September 1998 has mentioned that with the rapid changes in higher education 'education also exists as a private consumption item with a price determined freely by the providing institutions'. As a result, they have stated that more and more paying students are attracted to these institutions including foreign students. In 1994, over 140 countries approved the

GATS (Global Agreement in Trade & Tariffs), the predecessor to the WTO, which was created later in 1995 to expand trade liberalization internationally. Under Article 3 of WTO the definition of Service is laid down. It is felt that these rules apply to any service except those supplied in exercise of governmental authority. Some people feel that this article excludes public universities. However, the rule further defines that it excludes only those services, which are supplied neither on commercial basis nor in competition with one or more suppliers. Amongst the 12 sectors defined by the WTO as service 'education services' also falls as one. Another important issue of GATS and WTO, which is fundamental to its principles, is the notion of National Treatment. This implies an obligation to treat both foreign and domestic service suppliers in the same manner. It has been contended that this would imply, if implemented rigidly, that a foreign educational institution of, say, distance education, can demand subsidies similar to those received by public universities in an individual country.

### **(a) Principal goals in educational services**

- (i) Ensure right of US companies to establish operations in foreign markets including the right to wholly own these investments.
- (ii) Ensure that U.S companies get 'national treatment' by getting foreigners same Rights as domestic investors.
- (iii) Promote pro-competitive regulatory reform focused on an adequacy of appropriate And consistent rules.
- (iv) Remove barriers to generate cross border trade.
- (v) Remove obstacles to free movement of people and business information. Academic Community Perception Higher education shall be equally accessible to all on the basis of merit keeping in mind Article 26.1 of the Universal Declaration of Human Rights.
- (vi) Higher Education should uphold education's role of service to society.
- (vii) Quality of education is a multi-dimensional concept, which should embrace all functions, and activities, that is, teaching, academic programs, research and scholarship, staffing, students, infrastructure, and academic environment.
- (viii) Higher education institutions should be committed to transparent internal and external evaluation conducted openly by independent specialists.
- (ix) The potential of Information Communication Technology (ICT) should be fully utilized. Equitable access to these should be assured through international cooperation and support to countries that lack capabilities to acquire such tools.
- (x) Higher education should be considered a public service.

- (xi) While diverse sources of funding are necessary, public support for higher education and research remains essential to ensure balanced achievement of its educational and social missions.
- (xii) Partnership should be forged between higher educational institutions and responsible state authorities.
- (xiii) The international dimension of higher education is an inherent part of quality. Networking which has emerged as a major means of action should be based on sharing, solidarity, and equality among partners.

Education is a Trillion Dollar industry worldwide. Education industry groups are, therefore, attracted by the prospects of liberalization and globalization of this industry. They seek more international deregulation and generally support WTO efforts. As demands for higher education grow the world over, the governments are also finding it difficult to provide adequate budgetary allocation. GATS cover educational services of all types for all countries whose educational systems are not exclusively provided by public sector or those systems that have a commercial purpose. Hardly any country has education exclusively in the public sector domain and therefore, almost all the world's educational systems come within the purview of GATS.

#### **(b) The Lesson for India: A Road Ahead**

Insofar as India is concerned, on-line education, which is very crucial for the Indian population, is heavily dependent on reliable high-speed Internet coverage. As a pre-requisite to expansion of online education services, it is essential that various parts of the country be connected with high speed Internet. As more and more cities in India are coming within the ambit of high speed cybernetwork, the concept of e-education, especially at higher levels should be viewed seriously. Most Indian Universities make little use of the Internet in improving administrative efficiency. Broadband subscribers currently total to just 0.61 million as compared to the target of 3 million set for December 2012. E-learning has clearly percolated even to the school level. India's education policy has largely missed out on taking advantage of this technological revolution in education. E-learning is not only inexpensive, but also convenient. It also does not force the student to relocate or forgo earnings from full time or part time employment that the student may be engaged in.

### **III KNOWLEDGE ECONOMY THE INDIAN CONTEXT**

India's higher education policy of the 1950s, which envisaged schools of excellence, especially in technology and sciences, has finally paid off rich dividends. The creation of IITs, IIMs, Schools of Science, Schools of Law, a large number of advanced training and research institutions have now been well and widely accepted. Doctors trained in India have been the backbone of the British Medical Service for many decades. Indian scientists have found positions of importance in research laboratories of the US and other developed countries. But it was the IIT engineers who have finally struck gold during the dot.com boom of the 1990s and brought the final recognition and testimony for Indian competence. Of about 140,000 graduates of IIT so far, roughly 40,000 have gone to the US. They have been given the credit of creating 150,000 jobs and \$80 billion in market capitalization. It is said that when a new IT company is launched, investors inquire if there is an Indian in it. In the second meeting of IIT Alumni in the US, prominent persons like Jack Welch of GE, Larry Summers, President of Harvard University, and Tom Friedman, the globalization columnist of New York Times were present. The states of Virginia and Maryland declared the month of May 2005 as IIT – Indian American Heritage Month. Further, 55 US Members of the House of Representatives co-sponsored Resolution 227 honoring 'the economic innovation attributable to graduates of the Indian Institute of Technology'. Now in the era of reverse brain drain, the IIT graduates increasingly prefer to return remain in the country. It is stated by some that Bangalore today has 150,000 software engineers compared to 130,000 in Silicon Valley. According to Computer wise, the top 50 global IT service firms alone target raising India's headcount from 173,000 in September 2004 to 500,000 by end of 2005. (See Sheshbalaya, Yale Global online: [www.yaleglobal.yale.edu](http://www.yaleglobal.yale.edu)) According to NASSCOM, India had a total of 650,000 IT professionals in 2002 and by February 2005, they were to rise to 813,500. According to Brainbench Inc., India ranked behind the US in the number of certified software professionals (145,517 against 194,211). The Indian figure was 30 times larger than Europe's top country Germany (4802) and one hundred times China's (1325). India, therefore, does have an overwhelming lead in software. Further, leading US IT firms have their CMM Level 5 certification in India, rather than in the US. The High Technology leadership of the US is now coming under threat from India. In a paper published by Richard Freeman of Harvard University quoted by Sheshabalaya, the employment at General Electric Company's Global



Research Headquarters in New York is being surpassed by their own facility, the Welch Centre at Bangalore. (See Ashutosh Sheshabalaya, *'Rising Elephant-the Growing Clash with India over white-collar jobs and its Challenge to America and the World'*, Macmillan India, 2005 India, is therefore, not just at the lower end of the software and research business, but is now in a leading position of the scientific and financial research revolution. This is also confirmed by the massive market value of IT firms on US stock markets which indicate that the investment community endorses this view. According to current thinking an estimated \$356 billion worth of global financial services will relocate to India in the next 5 years, producing a cost saving of \$ 130 billion for top 100 financial service firms. From R&D and scientific research, Indian commercial research market has further widened to financial and economic research. It has been said that Wall Street is also outsourcing white-collar jobs to India as a reaction to the local scandals, which erupted in 2002 and 2003. Already McKinsey & Co. and AT Kearney Inc., have shifted bulk of their research to India. J.P.Morgan, Moran Stanley, Deutsche Bank, etc. are all considering the same. In India both public and private institutions operate simultaneously. In 2000-01, of the 13,072 higher education institutions, 42 per cent were privately owned and run catering to 37 per cent of students enrolled into Higher education, that is, approximately 3.1 million out of total 8.4 million. It is also likely that most of the growth in the rapidly expanding higher education sector took place in private unaided college or in self-financing institutions. Since grant-in-aid to private colleges is becoming difficult, many governments/universities have granted recognition/affiliation to unaided colleges and many universities have authorized new 'self-financing' courses even in government and aided colleges. It is felt that as of now more than 50 per cent of the higher education in India is imparted through private institutions, mostly unaided.

The growth of higher education in India has been phenomenal. Starting with 1950-51, there were only 263,000 students in all disciplines in 750 colleges affiliated to 30 universities. This has grown by 2005 to 11 million students in 17,000 Degree colleges affiliated to 230 universities and nonaffiliated university-level institutions. In addition, there are about 10 million students in over 6500 in vocational institutions. The enrolment is growing at the rate of 5.1 per cent per year. However, of the Degree students only 5 per cent are enrolled into engineering courses, while an overall 20 per cent in sciences. The demand for professional courses is growing rapidly. Government has created 221 Universities of which (6 are central Universities while 156 are state Universities). There is also a concept of Deemed

University. This status is given by UGC to colleges of exceptional excellence.

There are 39 Deemed Universities plus seven open universities. There are 9703 colleges in India that provide mostly bachelors or sometime Master's level of education. Of these, only 550 are engineering and technical colleges, 655 medical and 600 management institutions. With India emerging as a global hub for commercial R&D (*India Today International*, 3 Oct 2005), R&D within the scope of Higher Education has gained greater importance. It has been stated that 150 international firms have set up R&D centers in India and in 2004 US patents office granted over 1000 patents to Indian units of US companies. Indian companies have also started to increase their R&D budgets. The demand for high quality researchers will require expansion of postgraduate research and PhDs in Indian institutions of higher learning. According to Saikat Chaudhory, a Management Professor at Wharton, India needs to improve its research atmosphere in its universities. This is perhaps, already happening. If we look at that the CSIR, the number of US patents granted to it has jumped to 196 in 2005 from just 6 in 1990-1. Indian Research Councils should now have the potential to raise research funds through industry and perhaps, capital markets. A mention must be made of SPREAD – Sponsored Research and Development of the ICICI Technology Financing Group which is helping finance commercial R&D. Similarly, Nirma Labs provides up to Rs 20 lakhs as grant. We need to expand such support to R&D activities.

**Open University System:** India has also developed an Open University system to encourage distance learning. Indira Gandhi National Open University (IGNOU) was the pioneer and now there are seven open universities in India offering over 500 courses. IGNOU has about 11,87,100 students on its rolls. Modern communication technology can be harnessed to effectively provide education through this medium. A distance education Council has been set up and a common pool of programs is available for sharing.

**Public Expenditure on Higher Education in India:** India has developed one of the largest system of Higher Education in the world with over 230 universities and 6500 vocational colleges catering to about 10 million students. Most of these are publicly funded although some may be privately run.

The financing of higher education, however, is often reprioritized due to competing demands for budgetary funds from primary and secondary education sectors. As a proportion of GNP Higher Education was only about 0.19 per cent in 1950-51. By 1980-81 it went up five fold to 1 per cent but by

mid-1990s it dropped to 0.4 per cent. In the government plan outlay the share of higher education doubled for 9 per cent in the first five year plan to 18 per cent in the second. It increased to 25 per cent in the fourth but has now come down to 15 per cent in the seventh five year plan. In the eight five year plan it was around 8 per cent. It may be stated that the non-plan expenditure in education is huge compared to plan expenditure.

**Promoting Knowledge-based Economy: The Need**  
According to BPO watch newsletter, India has within its reach, an unprecedented opportunity to become the back-bone to global enterprises by delivering 'end solutions'. This is based on a study '*Beyond Cost Reduction: Risks & Rewards of Services Sourcing*', conducted by H. Wadhwa and Harpreet Khurana at the Columbia Business School. The study provides an idea about the potential of 'Knowledge hubbing' out of India. However, according to the Colombia

#### IV BUSINESS

School study, as more high-end processes are outsourced to India, attrition at India centers is becoming an increasing problem. This is a manifestation of the shortage of quality skilled manpower availability in India. Unless India and the Indian Government takes seriously, the issues involved in providing higher education and increasing its accessibility, especially in subjects and areas where it is required most, we will fall behind and lose our lead. The Indian Institute of Technology (IITs) proved that India could produce world class talent in terms of technical professionals. While Indian Doctors and other professionals have already been recognized in developed countries like the UK, USA or developing economies like UAE, Dubai and other Gulf countries, the dot.com boom proved the quality of Indian institutions of higher learning especially the IITs. The US Congress has passed a special resolution giving credit to the role of IIT alumni in USA. The UK and more recently, Singapore and the Gulf have started wooing qualified Indians in a big way for their intellect, efficiency and business-like work culture. The IITs have led the way for the establishment of an Indian meritocracy globally by providing world class technical education to a select 3 per cent of its applicants. The Indian Institute of Management (IIM) graduates in Singapore today are ranked in the same league with products of Yale and Harvard Business Schools in terms of quality.

#### V RECOMMENDATIONS

The road ahead for India is directly linked to creation of quality Higher Education Institutions in a big way to meet the challenge of the knowledge Hub, which India is fast becoming.

(a) The Government resources for higher education are simply not enough. Government supervision of higher education is dismal, to say the least.

(b) Recourse to quality private higher education, both university and non-university is essential.

(c) India needs to have a proactive demand based policy towards private higher education including foreign institutions/universities desirous of setting up campus in India or entering into jointventures. India could offer tax concessions/fiscal incentives for setting up campuses.

(d) The issue of raising the fees upwards to meet the cost of education is critical if we are to maintain and sustain the quality of our government and aided institutions as private institutions are already using a higher fee structure. In a competitive setting there is no reason why the fees should not meet a reasonable proportion of the cost of education. A figure of 20 per cent of recurring cost is considered reasonable in the international scale, although in some countries (ala South Korea) it could go up to 40 per cent.

(e) The need for financing of higher education for students, especially those coming from low income households needs special attention. Like in the United States, we may also evolve a guarantee system, where students coming from low income households are eligible for a student loan without parental security or guarantee so that there is no discrimination due to the financial background of the student. Subsidization of the interest rate for students should be based on his and his family income. For this innovative financial mechanism needs to be evolved incorporating some of the salient features of the systems existing in UK, USA.

(f) Broad-band services and provision of computers is an essential requirement of higher education.

A Committee for this purpose needs to be constituted to look into providing broad band connectivity to all students along with low priced computer accessibility.

(a) Open Universities need to be encouraged to offer quality programs at the least cost. This becomes the most cost-effective way of providing higher education, including technical and vocation education.

(b) In view of the expanding role of WTO, higher education would soon become an item under it. We should encourage foreign universities to come to India to set up independent operations or collaborate with existing Indian Institutions,

colleges/institutes. There is no need for government approvals in FDI in education.

(c) While a regulatory set up is required to ensure that there is no cheating or hoax, fixation of fees should not be in state control. On the issue of admissions, private player may be given the discretion for admission, but will have to justify merit. Perhaps a Tribunal on Admission Disputes can be set up for those aggrieved by the admission policy of an institution.

(d) It is also important that a lobby or association of non-aided private colleges be organized, which could then articulate the needs and demands of such institutions and provide a platform to counter the tendency of the bureaucracy to dominate its workings. It could create appropriate pressure for the dropping of the bill in private professional education in its present form.

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# Research and Innovation: Present Scenario

## “A Study on Special Education Programme at Primary Level under SSA Schools in District Betul of M.P. State- An Evaluative Study”

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### ABSTRACT

*Over the past decade, there has been a momentous and dire increase in the incidence and prevalence of children with developmental disabilities. This has raised concerns and stirred the interest of significant people like parents/carers, teachers, doctors, allied health professionals, and all those related to the cause of improving the quality of life of these children. There has been some remarkable work in this field with increasing awareness among parents/carers, professionals and the community in general. Lot of the focus has been on developing systems and resources to enhance the process of rehabilitating these children and including them in the mainstream society. Over time, various professionals and organizations have experimented, in their own respective areas of interest and Specializations, on a variety of methodologies in a quest to find the optimal strategy of working with children to enhance their quality of life. There are presently many schools/organizations and governmental and non-governmental clinics/hospitals and various other systems that are providing undoubted quality of rehabilitation services. We are also witnessing a rapid growth in the number of institutions and organizations dedicated to the advocacy of the cause. In spite of all the goodwill, hard work and dedication of the people involved, we still seem to be inadequately equipped to support this surge. It leads a question to the society that which type of the system we need? In the specific reference of the Special Education we are trying to cope up with the child's specific need.)*

## I INTRODUCTION

Clearly, schools are not equipped to deal with the full range and impact of the problems presented by the students of the 1990s. A broad range of collaborative and coordinated services that link schools and other agencies are needed both in and beyond schools (Council of Chief State School Officers, 1989; National Commission on Children, 1991; Rigsby, Reynolds, & Wang, 1995). To facilitate access to quality education, UNESCO and Government of India proposes to set up an International Centre for Special Needs Education in New Delhi to cater to the Asia Pacific Region.

In many of the schools there is no infrastructure at all. In our country most of the population is residing in rural areas where the school facilities are in poor condition. Building, sanitation, electricity and the availability of teaching staff is also a problem.

Sarva Shiksha Abhiyan (SSA) is an effort to universalise elementary Education by community-ownership of the school system. It is a response to the demand for quality basic Education and also an attempt to provide an opportunity for improving human capabilities to all children, through provision of community-owned quality Education in a mission mode. There is also another goal to bridge social, regional and gender gaps, with the active participation of the community in the management of schools.

The status of SSA programme in Madhya Pradesh is also not very satisfactory. The status of elementary Education in terms of major educational indicators is as-

- (a) The status of enrolment of children at primary and upper primary levels in terms of Gross Educational Rate (GER) is as follows:

Table : 1

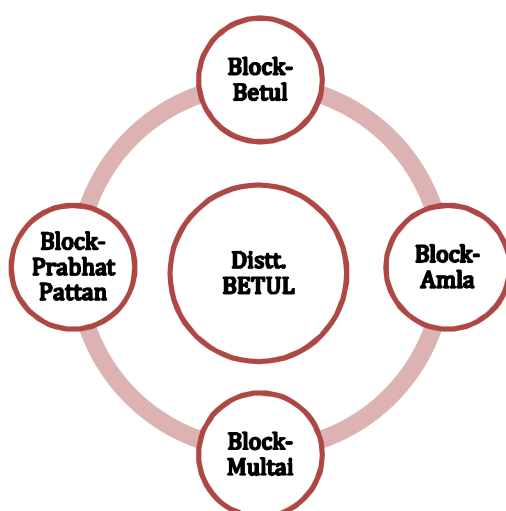
Age Group	Population (in lakhs)			Enrolment (in lakhs)			GER (in %)		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
5+ to 11 year	60.25	55.22	115.47	62.79	57.66	120.46	104.23	104.41	104.32
11 to 14 year	25.95	22.03	47.98	25.36	21.44	46.80	97.73	97.32	97.54
5+ to 14	86.20	77.25	163.45	88.15	79.10	167.25	102.27	102.39	102.33

(Source: IPMS)

- (b) The status of out-of-school children, which is also the target for bringing children back to school is as :

Table : 2

Age group	Out-of-school children 2006-07 (in lakhs)			Out-of-school 2007-08 (in lakhs)		
	Boys	Girls	Total	Boys	Girls	Total
5-14 years	1.49	1.48	2.97	0.92	0.89	1.81



In the light of the above data and information it is clearly stated that the SSA programme is going well in the state of Madhya Pradesh. But the question arises here is the ground level reality of the Special Education programme under SSA. It is a question of high priority, that if the dropout rate is high as per the above data then why and how the students with Special needs come up to the school? There must be some lacuna or shortcomings in ground level reality.

Therefore, it is felt that this study needs its importance to evaluate the Special Education programme under SSA in the selected district (s) of Madhya Pradesh. Hence, this study was selected for the study

## II OBJECTIVES OF THE STUDY

On the basis of the nature of the study, the objectives of the study were-

To study the opinion of the teachers working in the 'SSA' schools towards the facilities available in 'SSA' schools in distt. Betul of M.P. State.

## III METHODOLOGY

### (a) Design

The selected study was primarily a survey type of evaluative research involving systematic observations of variables by the use of standardized tools and systematic procedure.

It was designed that the different types of questionnaire will be used to get the data from the field. Since there was no such standardized tool available to meet the objectives of the study. It was further decided that only district Betul will be considered for the study.

### (b) Population for the study

All the SSA schools working in India were considered as a population of the study.

### (c) Sampling Design and Sample of the Study:

With the available time and resources of the researcher, coverage of all SSA Schools for selection of samples was not convenient and possible. Therefore, purposive sampling techniques were considered to shortlist the Blocks.

Sr. no	Block	No. of Villages	No. of Primary schools	No. of Govt. Schools	No. of Private schools	No. of SSA schools
3	Prabhat pattan	9	17	8	9	4
5	Multai	13	17	9	8	7
8	Amla	13	21	10	11	6
9	Betul	19	37	17	20	13
	Total	54	92	44	48	30

Considering the evaluative nature of the study and systematic observations of the opinions of teachers, it was planned to select 25 Govt. Primary and Private Primary SSA schools from the Blocks Betul, Amla, Multai and Prabhat Pattan of District Betul randomly.

Randomization of the sample was adopted only to choose the blocks for the study and all the schools under these blocks were considered for the study.

All the teachers working under the selected SSA schools and the parents of all the beneficiaries were taken as a sample of the study.

### (d) Tools and Approach

For the purpose of current study no standardized tests were available but some suitable tools were taken into consideration and adopted for the study. Mainly they are teacher/researchers made tests. The tools taken for the study are as under-

- (i) Teachers Opinion on the Facilities available in Special Schools (TOFAS-2) adopted by Rana (2009) developed by Sharma (2005) was taken into consideration for evaluating some of the aspect in the study.
- (ii) To study the opinion of the teachers towards the facilities in the schools, a questionnaire adopted by Sharma and Mahapatra (2009) was taken into consideration.



- (iii) The weightage of the various items of the scale has been assigned according to the relative importance of the factors considered in the scale and only those items were selected in the scale which was found empirically suitable for the purpose of the study.

**(e) Information about TOFAS-2**

Each scale has its own selected items. This has to be responding in 5 point rating 5, 4, 3, 2 and 1. Researcher herself went to the field and handed over the scale and the questionnaire to the 34 teachers and 88 parents available in 3 blocks among the 4 selected.

The questionnaire was distributed to the teachers of the selected blocks for the study. The following table shows the status of the teachers taken for the study.

Table 3 : Blockwise distribution of Distt Betul

Samples	No. Of samples taken	No. Of samples filled the questionnaire	Excluded sample's questionnaires (half filled and partially filled)	Actual filled questionnaire	Numbers of filled in questionnaire taken
Teachers	57	45	11	34	34

Table : 4 Blockwise responds for TOFAS-2

Blocks selected for study	Blocks responds for TOFAS-2	Participation of teacher per block
Betul	Yes	12
Prabhat pattan	Yes	10
Multai	Yes	12
Amla	No	00

The researcher helped the teachers to understand the items of the scale, wherever needed. The completely filled up questionnaire were taken up for the study and the half filled and blanked (more than 50% part) were dropped out from the scoring.

**(f) Scoring**

After getting the responses of the subjects the responses are scored in the manner. In the questionnaire of the opinion of the parents towards the facilities available in the ASHA Special School, five grades have been decided to the responses as 5,4,3,2 and 1. All of the grades are shown as following-

- 5= Not at all  
4= Very Little  
3= up to some extent  
2= A lot  
1= Can't Say

**(g) Information Schedule (I.S.) of evaluating the facilities in SSA schools:**

The schedule containing most of the common factors to be considered for the evaluation of the facilities available at the school campus. The schedule was develop to cover most of the factors as under-

Sr. No	Items/Factors	Details coverage
1	Schools	1. 25 schools each from all of the 4 selected blocks
2	Age	1. 6-8 yrs 2. 9-12 yrs 3. 13-16 yrs
3	Sex	1. Boys 2. Girls
4	Disability conditions of the children	1. Orthopaedic handicapped 2. Hearing impaired 3. Visually handicapped 4. Mental retarded
5	Status of the Assistive Devices/Aids and Appliances	1. Allotted 2. Not allotted
6	Types of the aid/appliances	1. Crutches/tri-cycle/ wheel chair 2. Hearing aids 3. Braille kit/blind kit 4. Educational kit 5. No aids
7	Year	1. 2007-08 session 2. 2008-09 session
8	Class of enrolment	1. First 2. Second 3. Third 4. Fourth 5. Fifth
9	Enrolment status	Enrolment status per session as decided for the study
10	Drop out status	Drop out status per session as decided for the study
11	Barriers present in the school campus	1. Physical barriers 2. Accessibility barriers
12	Facilities present in the school campus	1. Physical facilities 2. Accessibility facilities

**(h) Scheme of Data Analysis**

Data collected through the sources were analyzed by using both parametric and non parametric statistical techniques. Information collected through questionnaire from the beneficiaries had been analyzed accordingly. Percentage and Chi-square techniques were applied on the questionnaires to analyze the data.

#### **IV OBJECTIVE WISE OVERALL FINDINGS**

Analysis of the opinion of the Teachers of children with Special needs towards facilities/Barriers available in 'SSA' schools

(a) A 70%-80% of the teachers of the SSA schools were found satisfied with the facilities available in the schools and there was no significant difference found between their opinions on the facilities. Most of the teachers reacts that a healthy and sustainable environment of working is found in these SSA schools.

(b) Some teachers were reacted and needs to be improve the conditions such as:

- (i) Psychological lab must be equipped and needs improvements.
- (ii) Teachers should be given chance to lead the staff meetings rather than the administrative staff and the issues related to academics should be discussed in meetings etc.

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# The Concept of Social Justice in Indian Constitution

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## ABSTRACT

*India a secular and democratic country is regarded as a model of pluralistic society, which is reflected in its cultural, pluralized of various religion, castes, languages and regions. About 82% of the Indian Population follows Hinduism and 15% Islam. Its plurality is visible in four fold Verna system (Brahmin, Khstiya, Vishay, shudra) and about 5000(five thousand) Castes and sub castes. Now the segmental excepts of the traditional four fold Verna system is reflected in terms of four major caste groups created by the Modern participatory Democratic political system such as the scheduled caste (Sc 16.73%) the scheduled Tribes (St 7.95%) other backward classes (OBC 52%) and the rest as upper caste or forward caste (estimated 23%). These four modern caste categories also include social segment of the minorities <sup>2</sup> The Judicial pronouncement with regal to backward classes of citizens has created round on two points. The first is the identification of backward classes of people and second is fixation of quota of reservation in employment of government services. To achieve the goal of social justice state is empowered to provide reservation to the weaker section of society but the reservation is not absolute and unconditional, it cannot be motivated to achieve political goal.*

## I INTRODUCTION

The human being is considered invaluable living being of nature therefore it is the purpose of state to provide full honour and dignity to human being. In India there was discrimination among people on various grounds such as, discrimination on the ground of Caste, religion, race, sex and place of birth. After the independence, our constitution came in to force and abolished such discrimination and established equality. Although social justice has not been defined properly in any Act or Law but it means and requires the abolition of all sorts of inequalities which result from inequalities of wealth, opportunity, race caste and religion thus in India there are many Act which has been passed to eradicate such discrimination Part IV of constitution Art 39 provided many provisions like equal pay for equal work. The citizens, men and women, equally have the right to an adequate means of livelihood. Art 23 provides abolition of exploitation and forced labour. The workers should be provided full remuneration in lieu of their work is the object of Minimum Wages Act 1948, and Workmen Compensation Act 1923. To establish social justice discrimination is not prohibited only on economic basis but also declares invalid on the racial and caste grounds. There are many provisions which prohibit discrimination on racial end caste basis like Art 17 of the constitution which declares abolition of untouchability.

The Civil Right Protection Act 1955

The Schedule Cast, Schedule Tribe Abolition of Atrocities Act 1989.

To establish social justice Legislature and Judiciary both has made serious aoffers in India. According to Supreme Court.

“Social justice and equality are complementary to each other, So that both can maintain their own vitality. The rule of law is thus a patent instrument of social justice to bring about equality<sup>1</sup>”

The Rule of law as laid down by Prof. Diecy requires equality in eye of Law and all persons should be subjected to the jurisdiction of common court. The Rule of law the important tool to establish social justice.

The question of the validity of reservation for scheduled castes and tribes, other backward classes came up before the Hon’ble Supreme Court in M.R Balaj Vs State of Mysore<sup>3</sup> where an order of Mysore government reserving 68 percent of the seats for scheduled castes, scheduled tribes and backward classes was challenged. In this case it was held that the impugned order made a classification based only on caste without regard to other relevant factors and that such a classification was not permissible of social justice is not only object of constitution but also under the ILO Declaration on Fundamental principles and right adopted by International Labour Conference in June 1998 which supported rights of workers. Further in order to ensure social justice Indian legislature enacted a law “The Employment of manual scavengers and construction of Dry Latrines (Prohibition Act 1993) to eliminate the dehumanizing practice of employment of manual scavengers and for protecting and improving the human environment to make it obligatory to construct water seal latrines in new constructions, The aim of Act was to abolish the practice once for all, by declaring the employment of manual scavengers to remove human excreta an offence, and to prohibit the construction of dry latrines.

The purpose of reservation was motivated to establish equality among peoples but it was observed for last many years that reservation policy was misused to achieve political goal hence Hon'ble Supreme court of India has imposed restriction and held that son of IAS IPS officers not entitled to other backward quota job.<sup>4</sup> Again Supreme Court has imposed ban in order to prevent the misuse of reservation policy and laid down a principle that if someone converts his caste or religion to get the benefit of reservation then he shall not be entitled for benefit of reservation.<sup>5</sup>

## **II RESERVATION OF SERVICE IN PRIVATE COMPANIES**

As the world and India is entering in globalization so pressure to provide the reservation in private companies is increasing and Government bent upon this policy that reservation should be provided in private sector but industrial undertakings are resisting it.

## **III RESERVATION ON RELIGIOUS GROUNDS**

Despite the prohibition of reservation only on religious grounds in article 15 and 16 of constitution some states like Andhra, Karnataka, Kerala provided reservation with a view to achieve political goal therefore Hon'ble High court of Andhra Pradesh quashed such reservation.<sup>6</sup>

## **IV CONCLUSION**

As Indian constitution preamble obviously guaranteed that Supreme law was motivated to establish equality in the field of Social, Economic and Political. Social and economic equality could be achieved when all sorts of discrimination whether based on social, religions or other be abolished. So that all peoples of various sections could take part in main stream of development. But it was not the purpose of constitution framer to provide reservation unrestricted and unlimited. It was made for definite period and definite grounds but political parties made reservation in contravention of art 14 and 15 of constitution. The political parties provided reservation sometimes specially on casts basis and sometimes specially on religions basis which has no nexus with spirit of constitution hence Supreme Court laid down important guidelines to restrict the abuse of reasonable reservation are as follow:-

- (i) That reservation should not be for unlimited time.
- (ii) That reservation cannot be made arbitrary.

- (iii) That reservation cannot made especially on caste and religion basis.
- (iv) That reservation cannot be provided to the son of IAS and IPS personnel who are come within purview of creamy layer.
- (v) That conversion of caste with view to take benefit of reservation is not legal and the parson who comes with in reservation quota after conversion would be disentitled for reservation.

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# Impact of Information Technology in Libraries

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## ABSTRACT

*Due to invention of printing press there has been an explosion in the recorded knowledge. This explosion has needed to arrange the documents. Documentalist and computer expert make a system to arrange the document. These documents spread over the world through computer technology. This technology known Information Technology. Information Technology is currently taking center stage and transforming a whole world into a global village with a global economy. Information Technology reduce the time, distance, space, and so many things. This paper discussed the impact of Information Technology in libraries.*

## I INTRODUCTION

In ancient time the libraries were considered as store house of books, but now a days the definition of libraries has been changed. Libraries are shifted from macro documents to micro documents. The method of information storage are also changing from book form to electronic form. Recently the libraries are shifted from traditional to digital, electronic, virtual libraries. The present day is characterized by reducing distance, shortening of time zone, digitized storing and manipulation of information. Now a days the research is shifted from print documents to digital resource of information.

### (a) Information Technology

- (i) Information is the data which can be transmitted between individuals and each individual can make whatever use he can of it.<sup>1</sup>
- (ii) Information means a part/bit/para/page of knowledge which is use full to users or desire by users.
- (iii) Technology means use of computers for storing, retrieving and transmission of data.
- (iv) Information Technology means the application of computer technologies for storing, gathering, processing, retrieving and dissemination of knowledge/information.

According to Webster's New Encyclopedia—"Information Technology is the collective term for various technologies involved in the processing and transmission of information they include computing, telecommunication and microelectronics."<sup>2</sup>

According to A L A Glossary—"Information Technology as the application of computers and technologies to the acquisition, organization, storage, retrieval, and dissemination of information."<sup>3</sup>

According to British Department of Industry – It defines "Information Technology as The acquisition, processing, storage and dissemination of vocal, pictorial, textual, and numerical information by microelectronics based combination of computing and telecommunication."<sup>4</sup>

Information Technology includes Computers, Fax, Bar-Coding, Web Camera, Networking, Disc, E-mail, Reprographics etc.

### (b) Information Technology in Libraries

Now a day a lot of technologies has been developed for various type of work of libraries. Acquisition, classification, cataloguing, circulation, distribution of budget, bar-coding, remaindering, bill-payment, stock verification, are the works of library done by Information Technology.

### (c) Internet

The internet is a global network of computers that communicate using a common language. Internet may also be termed as network of several globally dispersed LAN'S that follows different protocols. The internet is a system of linked networks that are worldwide in scope and facilitate data communication services such as remote login, file transfer, electronic mail, world wide web, and news group. Internet is an ideal technology for carrying multimedia information across the network at high speed.

### (d) Library Network

Two or more libraries and other organizations engaged in a common pattern of information exchange for some functional purpose. They exchange their data for research and provide latest information to the users of library. Through the network users gets the desire information at one place. Library network is used by computer experts, engineers, researchers, scientist, librarians, professors, and all of the person who have knowledge of computer. Now a days library network is very essential for research and development.

(i) There are two type of network exist :-

(ii) LAN –Local Area Network

(iii) WAN :-Wide Area Network

(iv) In LAN a large number of computers are directly connected with in a building or in a adjacent building. LAN helps to resource

sharing such as data in hard disk/CD-ROM/Optical disk.

- (v) WAN is characterized by the long distance over which they operate. WAN involves electronic communication among remote users.

## II IMPACT OF INFORMATION TECHNOLOGY IN LIBRARY

The IT has wide ranging impact on library and information work. Information activities have undergone rapid transformations from conventional methods, consequent upon introduction of new technologies. This summarized with the help of a table.<sup>5</sup>

**Table 1**

Sl. No	Information Activity	Conventional Method	New Technology
1.	Generate, Originate	Writing, Typing	Word Processing, Text editing, Character Recognition, voice Recognition
2.	Preserve, Store	Paper-Print Media	Electronic Publishing, Magnetic Storage, Videotext, Tele-text. Computer disk, ROM
3.	Process	Classification, Cataloguing, Indexing	Electronic data processing, Artificial intelligence/ Expert systems.
4.	Retrieval	Catalogues, Indexes	Database management system, Information retrieval off-line, On-line.
5.	Disseminate/ Communicate	Lists, Bibliographies, Abstracts, Hard Copies	Electronic mail, Electronic document delivery, Computer conferencing, Telefacsimile, View data
6.	Destroy	Physical weeding	Magnetic erasers, Optical erasers, re-use the medium
7.	Verification	Manually or check list	By Barcoding

## III INFORMATION TECHNOLOGY AND INDIA

India is emerging as a power full country in the field of Information Technology. In comparison to other countries India is producing maximum literature in computer science in the world. India has bypassed Japan to become the worlds third largest internet user after China and United States. Internet users are significantly younger than those of other emerging economies, global digital measurement and analytics firm COMSCORE has said in a report.

## IV CONCLUSION

After introducing of information technology in the libraries the working capacity and Quality of libraries has been increased. The services provide by libraries are become more easier and more economic. Information technology decrease the time zone and increase space in the libraries. Research and development units become more strong. Application of information technologies in libraries avoid duplication of work and providing users need base services. The author view that all the libraries should be computerized and share their resources through internet. In India some libraries are providing the internet services such as ERNET, DELNET, ALBINET, BONET, INFLIBNET, OCLC etc.

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# A Fresh Start for Head Start- A Case Study

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## ABSTRACT

*Decision making is always a crucial aspect for any business organization. Irrespective of level of operations one has to probe deep into all the obstacles that may come into the way and probable outcome of the final way opted for. However the business size affects the decision making process. Decision making is an imperative and eternal part of any business, be it innovating/inventing a product, expanding/narrowing the scope of business, entering into new segment/product, mobilization and deployment of funds, manpower requirement, finalizing the location, analyzing the right market, and what not. Previous experience is a major determinant that plays an important role for making a final choice. This case is about Harsh who after having worked hard for more than 31 years in the field of sesame seeds and oil business is now going through difficult times. He is looking to start with some new business. With the available resources and rich blend of experience he is planning to start a small or mid-sized business in his small city Bali. The case is qualitative and primary in nature and has developed by interviewing Harsh personally. Additional information has been gathered by visiting Bali in person in order to know about the population mix, life style and the business circumstances of the city.*

**Key Words:** Entrepreneurship, Decision Making, Risk Taking, Product Identification

## I TEACHING OBJECTIVES

The case deals with decision making problem. This case falls under category of open ended case styles. The case highlights the dilemma of Mr. Harsh who after running successfully his oil business for more than 31 years is right now stopped at the point to think about something new. He tried his level best to remain in his area of knowledge and expertise and to an extent was able to manage. But over a period of time, series of hurdles came into his way.

After discussing the case students will understand the concepts of:-

- (a) Entrepreneurship
- (b) Decision Making
- (c) Change management

## II PEDAGOGICAL OBJECTIVES

The case deals with decision making problem. This case falls under category of open ended case styles. The case highlights the dilemma of Mr. Harsh who after running successfully his oil business for more than 31 years is right now stopped at the point to think about something new. He tried his level best to remain in his area of knowledge and expertise and to an extent was able to manage. But over a period of time, series of hurdles came into his way.

After discussing the case students will understand the concepts of:-

- (a) Entrepreneurship
- (b) Decision Making
- (c) Change management

## III TEACHING APPROACH AND STRATEGY

- (a) This case is helpful for the under graduate and post graduate management students and can be used in subject of general management.
- (b) Group assignment can be given to the students and asked to do the analysis from their point of view.
- (c) For better understanding, group of students can interview shopkeepers or the small business owners and pose them various questions about requirements of such business, type of customers visits the market, pros and cons of small and mid-sized business.
- (d) Students should make a small project report or jot down the points and make a presentation on their learning and experiences post visits in such markets.

## IV ANALYSIS

This case is very much suitable for situation analysis and field assignment where students get exposure about the prevailing market scenario. Also they will learn the different situations a businessman confront while making decision to begin with new business.

## V THE CASE

On a hot day of June 2011 Harsh sitting in his office, was going through the commodity prices section in the financial dailies. He was shocked by the spurt in the sesame seeds prices. Since long, the price rise had adversely affected the oil business.

The further fueling up of prices will be adding on more challenges. This has forced him to think about some new business to start with. At the age of 50, he was struggling for the survival of his existing business. The situation came in front of him at this juncture of age about which he had never thought off. The foundation stone of sesame oil business was laid by his father and later on overtook by him. After working hard for 31 years the business grew in leaps and bounds was passing through a bumpy ride. Now it was question of earning livelihood for his family.

Bali a small town in Rajasthan had a good crop of sesame seeds in nearby villages and surrounding areas. Because of abundance of sesame seed people were using sesame oil for cooking and the demand of same was very high. Looking at this, In 1961 Harsh's father started the small oil mill on the ground floor of his house. He used to purchase raw material (sesame seeds) and after processing (crushing), was selling the finished produce (sesame oil) to the customers (semi wholesalers and retailers) in Bali. The byproduct of this process, oilcakes, was also sold in market as cattle feed. He was also making best out of waste.

In 1980, at the age of 19, Harsh entered into the business to help his father as well as to learn the trade. The business was growing as the demand was high. Looking at the infrastructure and the available machines Harsh and his father thought of substituting their income by using the available resources in alternative processes. They started using their machines for mustard oil extraction as well, which also had good market then.

In 1988, Harsh father expired, later on in 1990; Shyam his younger brother at the age of 23 teamed him in order to support him in the business.

Over a period of time businesses flourished and they were happy and satisfied with the business. But there were challenges waiting for them in future. Sesame seed prices were rising continuously because of its medicinal and other alternative uses and as a result the oil prices were also rising. Rising prices of sesame oil and easy availability of various other cooking oils like cotton seed oil, soybean oil and palm oil, triggered a shift in customers taste and preference towards refined cooking oils. To compete with the rivals and to retain the customers Harsh was doing all possible efforts even charging lower prices.

New millennium unfolded new challenges for the business. This era witnessed the customer shift and as a result major share of the market was captured by refined oils. This was because of high prices of non refined oils and also the propaganda of benefits of refined oils over non refined oil like cholesterol etc.

In 2001, the price rose further due to increased exports as a result of measures taken by the government to promote exports by giving subsidies in duties and charges and deregulation of exports. Sesame Seeds were now being used for many alternative uses like an ingredient in preparation of bakery products and sweets and for medicinal purpose etc. The outcome of all these was an upward swing in prices, making the survival of a small business of Harish very difficult.

Looking at the changing market scenario, Harsh started looking for alternatives for substituting income. In 2002, he ventured into trading of sesame seeds as the farming was done in the nearby villages of Bali only.

In mid of 2009, he started cleaning maize which was again a cattle feed supplements. Both businesses could substantiate his income. Being absence of entry barrier in the business more players joined the league and sold cattle feed at lesser price, brought cost down by mixing other material into it. Looking at the intensified price war at the ending of 2010, harsh decided to withdraw from cattle feed business. Meanwhile the commodity market was strengthening and making the existence of small traders difficult. Moreover it was a seasonal trade which could not generate constant cash flow.

At present Harish along with his younger brother Shyam is currently handling the business. Shyam is looking after the production and packing department and Harsh is handling sales and collection area. The credit period is 7 days. One worker with a salary of Rs.3, 000 is looking after the set up. A daily wagger female is hired as per the need for putting the seeds in cleaning machine and there after transferring into crushing machine. An amount of Rs. 10 per sack is paid to worker and within 2 hours 7 sacks can be easily cleaned. In trading business the transportation cost comes to 60 per sack and in a truck 125 such sacks can be loaded. The working capital required in business is Rs. 4-5 lac. Valuation of his existing oil crushing machinery is Rs.55, 000/-, sesame seeds cleaning machine is Rs. 10,000/-The income from business is Rs. 35,000-40,000 pm.

Having experience in food and agro products business, Harsh is looking out for some new avenues for the new beginning in the area of his forte. Harsh is not willing to invest a large amount in the new business but only the sale proceeds from existing business, if any and a small loan up to 5 lacs only if required. He is very sure about few aspects of his new business. One, he will indulge in business which has minimal government intervention, i.e. license requirement, Inspections and taxes etc. Two, business should be of same level of operation, funds and land requirement etc.

Three, business should be of same genre i.e. food or related business.

Harsh knows that he has to search some other avenue but not able to make up his mind on what will be the avenue!!!

**(a) EXHIBIT – I Various opportunities explored by Harsh:**

- (i) To start a *cleaning plant of wheat and other food grains and pulses*, for which machine cost was Rs. 10 lakh, construction cost was around 10 lakh and for it, land was required which was available in Industrial area and it was costing 30-40 lakh.
- (ii) Another option was to start a *readymade garment shop for kids*, for which investment was around 8.48 lakh, 5 lakh was for furniture and 3 lakh for stock, shop on rental basis would cost around Rs. 48,000 for a year. If shop is bought on own it would cost around 40 lakh. But not related with his area of expertise.
- (iii) Third one is purified water business. Total capital outlay would be around 5 lakh, machinery would cost 2.5 lakhs, other equipment i.e. tanks for storing water, water coolers and jars and other fittings and repairs. For distribution he would hire a passenger rickshaw which costs Rs. 50 per shift.

**(b) EXHIBIT –II - About Bali**

- (i) Bali is a small city and a district in a Rajasthan and covers 6 talukas. The total population of district and city is around 3.5 and 1 lac.
- (ii) The shop on rental basis is easily available in the market area of city for Rs. 3000-4000 depending upon the location. With an initial capital outlay of rs. 3-4 lacs a small venture can be set up. However buying a shop on own will costs around 30-40 lacs.
- (iii) The city is mainly consists of 10% of high, 60% of middle and 30% lower class locality. The population includes 50% of service class and 50% of business class people. Out of 50% of business community only 10% is in big business which includes printing and dying mills. The city is primarily known for its textile units.