

EMERGING TRENDS IN INDIAN BANKING INDUSTRY

Sakshi

M.Phil Scholar

Kurukshetra University, Kurukshetra

ABSTRACT: The banking industry plays a crucial job for the improvement of any country's economy. The development of banking industry depends upon the facilities granted by them to the clients in different perspectives. The developing drift of banking industry is found noteworthy after the financial and economical betterment in India. Nowadays, India contains a reasonably well created banking framework with diverse classes of banks –public segment banks, private segment banks, foreign banks, – both the traditional and modern era, co-operative banks and regional rural banks with the Reserve Bank of India as the wellspring starting of the framework. These days banking segment acts as a spine of Indian economy which revolved as a supporter amid the period of boom and recession. From 1991 different patterns and advancements in banking segment are credited. It moreover showed the different changes were caused to move forward their facilities to convince the clients.

KEY WORDS: Current trends, financial segment, developments, security, banking industry etc.

INTRODUCTION:

The banking framework in India is altogether distinctive from other Asian countries since of the country's interesting social, geographic, financial and economical characteristics. India includes a huge population, a different culture, huge area and extraordinary inequality in wage, which are stamped among its areas. There are giant levels of lack of education among a huge rate of its people but simultaneously, the nation encompasses a huge supply of administrative and mechanically progressed endowments. Between around 35 and 40 percent of the population of India dwells in metro and urban cities and the rest is spread in a few semi-urban and rustic areas.

The country's financial and economical arrangement system combines communist and capitalistic highlights with an overwhelming predisposition towards public segment venture. India has taken after the way of growth driven exports instead of the export driven growth of other Asian economies, with accentuation on self-reliance through import substitution. These characteristics are showed within the system, area, structure and differing qualities of the country's banking and financial division. The banking framework had to serve the objectives of financial and economical arrangements articulated in progressive five year advancement schemes, especially focusing on the evenhanded wage dissemination, adjusted territorial financial and economical development and the decrease and disposal of private division monopolies business models in exchange and industry.

In arrange for the banking industry to act as a tool of state arrangement, it was exposed to different nationalization plans completely different stages (1955, 1969, and 1980). As an outcome, banking prevailed globally confined and simultaneously few Indian banks had opened their branches in overseas in worldwide monetary areas, since of distractions with

household needs, particularly gigantic department extension and pulling in more individuals to the structure. Additionally, the segment had doled out the part of giving assistance to other financial and economical divisions such as small-scale businesses, trades and agribusiness and banking exercises within the developed commercial areas like urban and a constrained number of semi-urban areas.

The banking structure's universal segregation was too because of severe department authorizing controls on foreign banks previously working within the nation as well as section confinements confronting modern foreign banks. A measure of correspondence was needed for any Indian bank to open a branch of their bank in foreign countries. These highlights had cleared out the confusion of Indian banking division's shortcomings and qualities. An enormous challenge confronting Indian banks was how beneath the current proprietorship system, to achieve operational proficiency appropriate for contemporary financial intermediation. On the other side, it had generally simple for the public segment banks to recapitalize, provided the increments in nonperforming resources because their Government overwhelmed proprietorship system had diminished the clashes of intrigued that private banks would confront.

OBJECTIVES:

- ✓ To study about the rising trends in banking sector.
- ✓ To explore the current patterns and improvements in banking segment.
- ✓ To show the innovative and technological improvements in Indian banking segment.

RESEARCH METHODOLOGY:

The nature of study is conceptual. Data was collected from secondary sources like reports of RBI, journal, magazines and online websites.

RECENT TRENDS IN INDIAN BANKING SEGMENT:

Nowadays, we are having a reasonably well created banking framework with diverse classes of banks – private segment banks, public segment banks, regional rural banks, foreign banks and co-operative banks. The Reserve Bank of India is the predominant of all the banks. The RBI's (Reserve Bank of India) most vital objective is to preserve money related steadiness in India and for this purpose the RBI utilizes monetary policy to preserve cost steadiness and a satisfactory flow of credit. The rates utilized by RBI to realize the repo rate, bank rate, cash reserve ratio and reverse repo rate. Decreasing inflation has become one of the foremost critical objectives of RBI at a few point of time.

Development and enhancement in banking segment had risen above limits all over the globe. In 1991, the Government unlocked the entryways for the foreign banks to begin their activities in India and impart their wide extent of prerequisites, subsequently giving a solid competition to the household banks, and making a difference for the clients in providing the leading facilities of the banks. The Reserve Bank offered to move towards the leading universal banking facilities will advance hone the prudential standards and fortify its administrator component.

There had been impressive advancement and expansion within the trade of prime commercial banks. A few of them have locked in within the ranges of leasing, credit cards, customer credit, internet and phone banking, merchant banking, mutual funds etc. A number of banks had already established their branches for leasing, merchant banking and mutual funds and numerous more are within the preparation of doing so. A few banks had

started factoring trade. So, following are the current trends which we can see in the functioning of each and every bank in India.

- **BANK NET:**

Bank net could be to begin with national level framework in India, which was contracted in February 1991. It is communication framework built up by Reserve Bank of India on the premise of proposal of the committee scheduled by it beneath the chairmanship of the official chief T.N.A. Lyre. Bank net had two stages: Bank net-I and Bank net- II.

- **INTERNET:**

Web may be a mesh of computers. In this promoting technique, any message and any information can be exchanged and accepted around the globe. In no time, internet can do numerous works for us, like the net can work as electronic mailing framework. It had eruption of remote database, which may be a daily newspaper, magazines of another nation. Clients can transmit their thoughts through Web and can make link with anybody who could be connected with internet.

On web, one can transmit any kind of data like numerals, letters, diagrams, picture, video and any kind of audio like music recording. Internet could be a quick creating net and is of most extreme imperative for public division undertaking, Research Institutions, financial Institutions and educational organization etc.

- **TELE-BANKING:**

Tele banking is a major development in banking sector, which given the service of 24 hour banking to the client. Tele banking depends on the voice handling service accessible on bank computers. The caller more often than not a client calls the bank anytime and can ask about the balance in his account or other exchange details happened previously. In this framework, the computers at bank are associated to a phone interface with the assistance of a modem. Voice processing service given within the software. This computer program recognizes the voice of caller and gives him appropriate reply. Some banks utilize telephonic replying machine but usually constrained to a few brief capacities. This can be as it were phone replying framework and presently known as Tele-banking. Tele banking is getting to be well known since inquiries at Automated Teller Machines are presently getting to be as well long.

- **AUTOMATED TELLER MACHINE:**

Automated Teller Machine (ATM) is an electronic machine, which accessed by the client himself to operate the functions of withdrawals, deposits and other financial exchanges. ATM could be a step of advancement in providing facilities to clients. ATM service is accessible to the clients 24 hours a day. The banks provided an ATM card to clients. It is usually a plastic card, coded magnetically which can be easily recognized by the ATM and it had the client's name.

Each cardholder is given with a confidential personal identification number (PIN). When the client needs to utilize the card, he needs to embed his plastic card within the opening of the machine. After the card may be acknowledged by the ATM, the client enters his PIN. After setting up the verification of the clients, the ATM takes after the client to enter the sum to be pulled back by him. After preparing that exchange and finding adequate equalizations in his account, the yield space of ATM grant the specified cash to client. When the exchange is completed, the ATM expels the customer's card.

- **PHONE BANKING:**

Clients can presently dial up the bank's outlined phone number and he by dialing his ID number will be accomplished to induce network to bank's designated computer. The computer program given within the machine associated with the computer inquiring him to

dial the code number of facility needed by him and appropriately answers him. By utilizing Automatic voice recorder (AVR) for straightforward inquiries and exchanges and staff phone terminals for complicated questions and exchanges, the client can really do whole non-cash relating banking on phone: Anytime, Anyplace.

- **MOBILE BANKING:**

Mobile banking service is an expansion of web banking. The bank is in affiliation with the cellular facility suppliers provide this service. For this facility, mobile phone ought to either be SMS or WAP empowered. These services are accessible indeed to those clients who had credit card accounts with the bank.

- **INTERNET BANKING:**

Web Banking empowers a client to do banking exchanges functions through the bank's website with the help of internet. It could be a framework of retrieving accounts and common data on bank services, products and different facilities by a computer or mobile phone while the client sits in his home or office.

Moreover, it is typically called virtual banking. It is just like escorting the bank in to your home whether by computer or by mobile phone. In conventional banking one should approach the department in individual, to deposit money, to deposit a cheque, to withdraw cash or ask an articulation of accounts etc. but now internet banking had modified the way of banking.

Presently everybody can easily work out all these sort of exchanges through website of bank on his mobile phone or computer with the help of internet. All these sort of exchanges are encoded utilizing advanced multi-layered security design, consisting firewalls and filters. The client can be rest guaranteed that his exchanges are assured and secret.

- **CASH DISPENSERS:**

Taking out your deposited money is the fundamental facility provided by the branches of banks. The money given to client by cashier or teller of money dispensers is an interchange to save the time. The functions performed by this machine are so economical as compared to manual functions and this machine is inexpensive and quick as compared to Automated Teller Machine. A plastic card issued to client, which had coated magnetically. After fulfilling the conventions, software permits the machine to perform the exchanges functions for needed sum.

- **CHIP CARD:**

The client of the bank is given an uncommon sort of credit card which had a special code and client's name etc. The credit sum of the client account is recorded on the card with magnetic strategies. The software in the bank's machines or bank's computer can easily recognize these magnetic spots. At the time, when client utilizes this credit card, the credit sum recorded on the card begins diminishing. After utilize of number of times, at one organize, the total amount gets to be nil on the card. At that point of time, the card lost its utility. The client should deposit money in his bank account for availing the service of again utilizing the card. Once more the credit sum is recorded on the card with the help of magnetic strategies.

- **ELECTRONIC CLEARING SERVICE:**

In 1994, RBI scheduled a committee to investigate the computerization within the banks additionally to evaluate the electronic clearing Service. The committee prescribed in its final report that electronic clearing service or credit clearing service ought to be mould accessible to all Government organizations or corporate institutions for doing monotonous

little worth remittance like discount, compensation, interest, monthly installments, salary, pension, commission and dividend.

it was too prescribed by the committee that one more function of electronic clearing service which is debit clearing may be launched for pre-authorized charges for remittance of insurance premium, segments of leasing, utility bills, and financing institutions. RBI had taken vital movements to launch these plans, at first in Chennai, Mumbai, Calcutta and New Delhi.

- **SOCIETY FOR WORLDWIDE INTER-BANK FINANCIAL TELECOMMUNICATIONS :**

SWIFT is an acronym of society for worldwide inter-bank financial telecommunications. It is a co-operative society was established in May 1973 with 239 engaging banks from 15 nations with its central command offices at Brussels. It had begun working in May 1977. Reserve Bank of India and 27 other public segment banks along with 8 foreign banks in India had gotten the association of the SWIFT. SWIFT gives fast, reliable, dependable and fetched compelling mode of communicating the financial information around the globe. Nowadays, more than 3000 banks are the participants of this system. To serve to the improvement in information, SWIFT was overhaul within the 80s and this form is pronounced as SWIFT-II.

Indian banks are snared to SWIFT-II framework. SWIFT can be a strategy of the advanced information communication of universal notoriety. This technique is super economical, dependable and secure method of money exchange. It encourages the communication of information regarding the interest installment, fixed deposit, debit-credit articulations, foreign trade etc. This facility is accessible all through the year, 24 hours a day. It guarantee against any misfortune of disfigurement regarding exchange. It is evident from the above stated advantages of SWIFT that it is exceptionally advantageous in viable client facility. SWIFT had expanded its scope to clients like dealers, institutions and other organizations.

- **REAL TIME GROSS SETTLEMENT :**

Real time gross settlement system acts as a money exchange framework. Settlement in real time implies the exchanges occurred nearly promptly and gross settlement implies exchange is cleared one to one premise not at all like national electronic fund transfer (NEFT), where the exchange occurred in large size at a given point of time amid the whole day. It is typically primarily utilized for exchange which is huge in value and ought to be cleared promptly. In this procedure the bank that gets cash must credit the sum within the account with in 30 min after accepting it. Facilities of RTG's window for exchange are accessible to banks from 9.00 am to 4.30 pm in a week and 9.00 am to 4.00 pm in Saturday's for clearance at from RBI's segment.

CONCLUSION:

Within the days to come, banks are supposed to romp a really valuable part within the financial and economical improvement and the rising market will produce the trading openings to saddle. As banking in India will gotten to be increasingly information backed, capital will appear as the finest resources of the banking segment. Eventually banking is individuals and not fair numerals. Conclusively, the banking segment in India is advancing with the expanded development in client base, because of the recently enhanced and inventive services provided by banks.

The financial and economical development of the nation is a pointer for the development of the banking segment. The Indian economy is anticipated to develop at a rate of 7-8 % and the nation's banking system is anticipated to contemplate this development. The

responsibility of it resides within the potential of the Reserve Bank of India as a central administrative specialist, whose approaches had protected Indian banks from intemperate clouting and creating major risk capitations. By the government assistance and a cautious re-examination of subsisting trade techniques can made the platform for Indian banks to gotten to be greater and more powerful, subsequently making the platform for developments into a worldwide client foundation.

REFERENCES:

- Reddy, Y.V. (2010). Banking Sector Reforms in India: An Overview. Reserve Bank of India Bulletin, June.
- Jayaratne, J. & Strahan, P.E. (2010). The finance-growth nexus: evidence from bank branch deregulation. Quarterly Journal of Economics, 111, 639-670.
- Mittal, A. & Gupta, S. (2013) Emerging role of information technology in banking sector's development of India. Acme International Journal of Multidisciplinary, 1(4).
- Walter, Ingo & Gray, H.P. (1983). Protectionism and international banking, sectoral efficiency, competitive structure and national policy. Journal of Banking and Finance, 7, 597-607.
- The Government of India (2008) Report of the Committee on Banking Sector Reforms (Chairman: M Narasimham).
- Reddy, Y.V. (2010): Credit Policy, Systems and Culture. Reserve Bank of India Bulletin, March.
- <http://www.hsbc.comhk/personal/way-to-bank/e-cheque.html>
- <http://info.shine.com/industry/banking-financial-services/8.html>
- <http://searchwindowserver.techtargget.com/definition/electronic-funds-transfer-EFT>
- http://www.time4education.com/career_in_banking.asp
- <http://www.yourarticlelibrary.com/essay/role-of-banks-in-the-development-of-indianeconomy/42577/>
- <http://www.axisbank.com/bank-smart/internet-banking/transfer-funds/rtgs>

EMPLOYEE: A VALUABLE RESOURCE (CONCEPTUAL STUDY)

Deepak Kakkar Assistant Professor
Department of Commerce
Mukand Lal National College, Radaur

Employees give an identity to the organization and make it distinct from others. In the organization, engagement of employees in the workplace resulting in the right conditions to give of their best at every moment, committed to their organisation's objectives and vision, motivated to contribute to organisational success, with a best sense of their own well-being. It is a measurable degree of an employee's emotional attachment to their job work, and organization that profoundly influences their willingness to learn and perform at work. Thus engagement is distinctively different from employee satisfaction, motivation and organisational culture. The employees are the real assets of an organization. They are the ones who contribute effectively towards the successful functioning of any organization. Role of employees was described in the academic literature by

Schmidt et al's A modernized version of job satisfaction, His definition of engagement was "an employee's involvement with, commitment to, and satisfaction with work. Employee engagement is a part of employee retention."

Smith et al's This integrates the classic constructs of job satisfaction. and organizational commitment.

Harter and Schmidt's most recent meta-analysis can be useful for understanding the impact of employee's engagement in the organization. Employee engagement is the level of commitment, involvement, satisfaction & enthusiasm, an employee has towards their work, organization and its values. An engaged employee is aware of business context, and works with colleagues to improve performance within the job for the benefit of the organization by utilizing their natural talents.

According to a study conducted by **Hewitt Associates** in 2009, the software giant HCL Technologies was ranked as the best Indian employer in that year. The reasons being, creation of a positive work culture and its long term approach in the midst of challenging conditions. The other companies who made to the list of top employers were Hindustan Zinc, Taj Hotels, Resorts and Palaces, Cisco Systems, ITC Welcome Group, Eureka Forbes, LG Electronics India, Domino's Pizza India and Marriott Hotels India.

Infosys in year 2011 plans to have its own radio in establishing a healthy and quick interaction and communication amongst employees. The company also plans to host talk shows where top management would interact with the employees. Besides this, the company also has a social networking portal like Facebook. Named as Bubble, it helps employees connect to their colleagues, seniors, subordinates and top management. Infosys had also created Infosys Television.

The Concept of the role of Employee as a valuable factor for the development of any organisation is rapidly gaining popularity, use and importance in the workplace. Research and consultancy firms, led by the high-profile Gallup organization, are focusing their efforts increasingly on surveys of employee engagement that aim to improve levels of engagement. This is because corporate results have reportedly demonstrated a strong link

between some conceptualizations of engagement, worker performance and business outcomes while there is much interest in engagement, there is also much confusion. There is no consistency in definition, and engagement has been operationalised and measured in many diverse ways. Engagement may be a global construct as it appears to be a combination of job satisfaction, organizational commitment and intention to stay. Indeed, some argue that engagement is a multidimensional construct, in that employees could be emotionally, cognitively or physically engaged. However, despite this confusion in the literature, many companies and research firms see engagement as a powerful source of competitive advantage. Corporate results have demonstrated a strong link between some conceptualizations of engagement, worker performance and business outcomes. This is because corporate results have reportedly demonstrated a strong link between some conceptualizations of engagement, worker performance, job satisfaction, employee turnover and business outcomes. Great organizations win business by engaging the complex emotions of employees and customers. It is the psychology of how each employee connects with customers and with the organization, it is an instant, and constant, competitive edge. Gallup defines it as a significant predictor of desirable organizational outcomes such as customer satisfaction, retention, and profitability some of the management literature defines it as 'a positive, two-way relationship between employee and their organization' where both parties are aware of their own and the other's needs, and support each other to fulfill these needs. Engaged employees and organizations go the extra mile, and both reap mutual benefits.

Role of Employee

Role of employee is a concept that has begun to grab the attention of the corporate world for past few years. When put simply higher levels of employee engagement in organisation mean higher profitability of the organisation. Employee engagement is critical. Highly productive organizations have understood this fact a long ago where mediocre and low performing organizations have just started taking it seriously. It makes sense to engage employees in organization operation and make them find a meaning in what they do. Those employees who do not understand what they contribute towards the success of their organisation will not stick to it for long. They would rather consider leaving in a few months or years as and when they are offered a high-paying job. It is a long term process and goes through various phases describing the level of the engagement of employee, involvement, attachment and belongingness between employee and employer. The way of role of employee make a continuous cycle that each organisation aiming to achieve increased profitability must undertake. The organization must work to develop and nurture engagement, which requires a two-way relationship between employer and employee. Thus measurement of employee engagement is a barometer that determines the association of a person with the organization. Thus it is largely the organization's responsibility to create an environment and culture conducive to this partnership, and a win-win equation. The opposite of employee engagement is a zombie employee. A zombie employee is a disengaged employee that will stumble around the office, lower morale and cost the company money. More recently employee engagement has become an area of focus within organizations for the purpose of retention as a means of avoiding expensive employee replacement costs resulting from staff who voluntarily quit their jobs.

Andrew J. Wefald, in his study “An Examination of Job Engagement, Transformational Leadership, and Related Psychological Constructs”, he sought to critically examine the concept of engagement as well as provide empirical evidence regarding its place in the homological network of job attitudes. Both theoretically and empirically, engagement has been linked to personality and leadership variables; however, no research to date has attempted to examine all three concepts together. This research additionally sought to link engagement, personality, and leadership in a theoretically based model. Participants at mid-sized financial institution completed a survey comprised of demographic items, attitude measures, a leadership measure, and a personality measure. Results indicated that the Schaufeli and Britt measures of engagement substantially overlap with job satisfaction and affective commitment; however, the Shirom measure (called vigor) is not redundant with job satisfaction or affective commitment. Hypothetical models of engagement, personality, and leadership were not good fits with the data; however, two modified models (one with Schaufeli's engagement and one with Shirom's vigor) had marginally acceptable fits. Further, hierarchical regressions indicated a strong connection between engagement and leadership and between engagement and personality. He investigated the factor structure of W. B. Schaufeli et al.'s measure of engagement and academic engagement's relation to academic satisfaction and found the Employee Engagement and Job Satisfaction to be highly related constructs. The Previous researchers found a 3-factor structure of engagement that comprises vigor, dedication, and absorption. The authors administered to a sample of university students a questionnaire on their level of engagement in academic work and various other measures. The results did not confirm the 3-factor structure. He investigated the factor structure of W. B. Schaufeli et al.'s measure of engagement and academic engagement's relation to academic satisfaction and found the Employee Engagement and Job Satisfaction to be highly related constructs. The Previous researchers found a 3-factor structure of engagement that comprises vigor, dedication, and absorption. The authors administered to a sample of university students a questionnaire on their level of engagement in academic work and various other measures. The results did not confirm the 3-factor structure, which three dimensions of workplace spirituality (transcendence, community, and spiritual values) relate to employee engagement through four psychological conditions (meaningfulness in work, meaningfulness at work, safety, and availability). **Categories of role of employee** There are three different type of people in organization based on their level of commitment, involvement & satisfaction. **Engaged Employee** --"engaged" employees are builders. They want to know the desired expectations for their role so they can meet and exceed them. They're naturally curious about their company and their place in it. They work with passion and they drive innovation and move their organization forward by performing at high levels. **Not Engaged Employee**--"not-engaged" employees tend to concentrate on tasks rather than the goals and outcomes they are expected to accomplish. They want to be told what to do just so they can do it and say they have finished. They focus on accomplishing tasks versus achieving an outcome. **Actively disengaged Employee**--the "actively disengaged" employees are the "cave dwellers." They are "consistently against virtually everything." they're not just unhappy at work; they are busy acting out their unhappiness. They sow seeds of negativity at every Opportunity.

Main Factor Influence the Role of Employee in the Organization

➤ **Attract**

The first phase of the employee engagement cycle is attracting the best talent from the

industry. This phase involves creating a positive impression about the work culture and employee career as a potential employer. It is all about carefully creating an authentic, genuine and crafted image as an employer. This is although an indirect yet the first impression that attracts a big pool of candidates to apply for the job vacancies in an organisation. The first phase is the most important phase of the employee engagement cycle. Another aspect spreading the reputation of an organisation is its employees. They are not only the employees but also are regarded as internal customers. Their job and career satisfaction speaks about their workplace. Therefore, they should not be taken for granted. Besides attracting the talent from the outside, it is important to keep the existing employees attracted towards the organisation.

➤ **Acquire**

The acquire image involves more than one thing. It includes (1) the way the potential candidates are interacted while advertising a position; (2) keeping the promises that were made while hiring them and (3) providing the new joiners a right kind of work culture. When an organisation advertises a position, interested candidates apply. The way their applications are created, the reaction of the organisation and the manner in which they are approached speak a lot about the image and work culture of an organisation. Hiring the best talent not only serves the purpose. During their honeymoon or initial period with the organisation, the company must try to keep all the promises that were made during the selection process. Besides this, they should feel happy and satisfied when their expectations are tested against the reality. Providing the right kind of culture also plays an important role in keeping them engaged. The whole idea is to prepare them to perform their best by giving them challenging tasks right from the beginning. It's like developing a habit or culture right from the time they decide to work with the organisation.

➤ **Advance**

Continuous moving the talent is the last but an unending phase. It not only involves promoting the employees to a higher designation along with salary increments but also growing them in other tangible and intangible ways. Job rotation can help them grow in experience, responsibility and belongingness but only when it is done right. Advancing the employees in every aspect, be it monetary or non-monetary, is the key to retain people and develop their overall personality.

Importance of Employees

A highly engaged employee will consistently deliver beyond expectations in the workplace. Engaged employees will stay with the company, be an advocate of the company and its products and services, and contribute to bottom line business success. They will normally perform better and are more motivated. There is a significant link between employee engagement and profitability. They form an emotional connection with the company. This impacts their attitude towards the company's clients, and thereby improves customer satisfaction and service levels it builds passion, commitment and alignment with the organization's strategies and goals, increases employees' trust in the organization creates a sense of loyalty in a competitive environment. A high-energy working environment, boosts business growth makes the employees effective brand ambassadors for the company. Highly engaged employee will consistently deliver beyond expectations. Thus employee engagement is critical to any organization that seeks to retain valued employees. The **Watson Wyatt** consulting companies has been proved that there is an intrinsic link between employee engagement, customer loyalty, and profitability. As organizations

globalize and become more dependent on technology in a virtual working environment, there is a greater need to connect and engage with employees to provide them with an organizational 'identity.' These are all good things that prove that engaging and involving employees make good business sense and building shareholder value. In contrast organizations with least engaged employees are much more likely to have high employee turnover, low customer loyalty, less productivity and earnings. Negative workplace relationships may be a big part of why so many employees are not engaged with their jobs. Employee engagement also affects the mindset of people. Engaged employees believe that they can make a difference in the organizations they work for. Confidence in the knowledge, skills, and abilities that people possess – in both themselves and others – is a powerful predictor of behavior and subsequent performance. Thus, consider some of the results of the Towers Perrin survey cited earlier:

Drivers of Role of the Employee

While it is possible to measure engagement itself through employee surveys, this does not assist in identifying areas for improvement within organizations. There are a range of factors, known as drivers that are thought to increase overall engagement. By managing the drivers, an organization can effectively manage engagement levels of its employees. Drivers such as communication, performance clarity and feedback, organizational culture, rewards and recognition, relationships with managers and peers, career development opportunities and knowledge of the organization's goals and vision are some of the factors that facilitate employee engagement. Role of Employee has transcended from being the latest business buzzword to being recognized by organizations as a tool that positively influences business performance. This linkage between organization performance and employee engagement was researched by ISR in 2006 by means of world-wide survey. The **ISR(International Survey Research)** study reveals that companies with high engagement scores saw an increase of more than 25% in EPS (Earnings per Share), while companies with low engagement scores saw a decrease of 11% in EPS. The results confirm the belief of many that engagement positively influences business performance. Hence, it is vital for companies to understand what "causes" employee engagement if they want to influence the "effect" i.e. employee engagement. By understanding these drivers and leveraging them, organizations can try and manage engagement levels of their employees. So what drives employee engagement? Several theories have been propounded that focus on the rational and emotional aspects of engagement. Some even focus on the tangible and intangible aspects of engagement. **Mercer's** 'What's Working' studies reveal that engagement drivers differ by geography, by industry and even by time.

While there is no one panacea for leveraging employee engagement, there are some broad drivers which are presented below:

- **Employee perceptions of job importance** - An employee's attitude toward the job's importance and the company had the greatest impact on loyalty and customer service than all other employee factors combined.
- **Employee clarity of job expectations** - If expectations are not clear and basic materials and equipment are not provided, negative emotions such as boredom or resentment may result, and the employee may then become focused on surviving more than thinking about how he can help the organization succeed.
- **Career advancement/improvement opportunities** - Plant supervisors and managers indicated that many plant improvements were being made outside the suggestion system,

where employees initiated changes in order to reap the bonuses generated by the subsequent cost savings.

- **Regular feedback and dialogue with superiors** - Feedback is the key to giving employees a sense of where they're going, but many organizations are remarkably bad at giving it." What I really wanted to hear was 'Thanks. You did a good job.' But all my boss did was hand me a check.
- **Quality of working relationships with peers, superiors, and subordinates** - if employees' relationship with their managers is fractured, then no amount of perks will persuade the employees to perform at top levels. Employee engagement is a direct reflection of how employees feel about their relationship with the boss.
- **Perceptions of the ethos & values of the organization** - Inspiration and value is the most important of the six drivers in our engaged Performance model. Inspirational leadership is the ultimate perk. In its absence, [it] is unlikely to engage employees.
- **Work/Job Role** - Employees must see a link between their role and the larger organization goal. Understanding this linkage provides an intrinsic motivation and increased engagement. Most employees will come to work on time without possessing a sense of belonging and will try and complete assigned tasks even without possessing that sense achievement on completion of task. However, an employee that sees a clear linkage on how his/her role contributes to the organization will go the extra mile and help create organization wealth.
- **Work Environment/Organization Culture** - The bond between an employee and the organization is cemented when the employee identifies with the culture of the organization. An employee is engaged and motivated to stretch beyond the call of duty if he/she finds the work environment enabling and supportive.
- **Rewards and Recognition** - The bottom line is that people work to earn which helps fulfill ambitions. Equitable pay coupled with rewards and recognition programs enhances motivation and leads to commitment and engagement.
- **Learning and Training Opportunities** - As Lawyer put it - "People Enjoy Learning." This is especially true in the case of today's millennial workforce that constantly looks at enhancing knowledge and skill. Skill and Knowledge enhancement is not just important for the employees but providing a learning culture is essential for organizations to remain relevant in the constantly changing business landscape.
- **Performance Management** - An effective performance management system contributes positively to employee engagement. Goal setting lies at the root of any performance management system. Clearly articulated goals, a fair and just means to judge performance and timely, rational feedback are critical elements in creating a bond between the employee and his/her organization.
- **Leadership** - It is a well recorded fact that most resignations happen because the employee is not satisfied with his/her 'boss.' An organization that spends time and effort in grooming leaders who are aligned to its goals, culture and people invests well. New age industries have a young and dynamic workforce that looks for autonomy in decision making, increased responsibility and accountabilities.

Other Factors - Clear and open communication, quality of interaction with peers, collaboration, organization policy, organization performance are all contributing factors to

employee engagement. The highly productive and the most reputed companies across the world have understood the fact that it was employee engagement that made them stand apart from all other companies.

Different companies had taken different initiatives to enhance the level of engagement among employees towards their jobs and the organisation. Some offer custom-made incentives while some stick to provide extra facilities like crèche for kids, schools for children of employees, pick and drop, provision of food, movie tickets and many other things. Each company has its own reasons to establish a specific type of reward-motivation programme depending upon their financial status, region in which they are operating and level which they function at and the backgrounds of the employees. In the year 2015, an annual study conducted by the research arm of **Kenexa**, a leading global HR solution provider, revealed that Indian giants rank highest as compared to their peers in other countries when it comes to employee engagement and effective leadership. When compared on the national level, India with 71% employee engagement ratio secured the topmost rank while Japan was at the lowest position with 38% ratio. This was a surprising fact as it is believed that Indian companies have miles to cover in order to achieve what global companies have done already. Factors that made India stand apart from rest of the countries were employee recognition, emphasis of improvement of quality, show of genuine responsibility of organisation towards employees and opportunities to grow. The research conducted by Kenexa included India, US, UK, Brazil, Australia, Canada, Denmark, China, France, Finland, Germany, Japan, Spain, Russia, Sweden, The Netherlands, Switzerland, Italy, Mexico and Gulf countries. The most surprising fact is that the Indian companies took creative and unique initiatives to enhance the level of engagement and involvement of their employees. Indian giants like Mahindra & Mahindra, Mercer, KPMG and Wipro offer democracy to choose their wages and perks depending upon their lifestyles. It is done to decrease as well as prevent dissatisfaction amongst employees. It has worked out very well and companies are successful in drawing and retaining the best talent. The trend began in these IT giants can now be seen in FMCG, banking and other industries.

BIBLIOGRAPHY

Aurya Prakash Pati & Pankaj Kumar (July 2010) "The Indian Journal of Industrial Relations" Employee Engagement: Role of Self-efficacy, Organizational Support & Supervisor Support,

TARA SHANKAR & JYOTSNA BHATNAGAR (JULY 2010) "The Indian Journal of Industrial Relations" Work Life Balance, Employee Engagement, Emotional Consonance/Dissonance & Turnover Intention, VOL. 46, NO. 1, PP NO.74-87

Jyotsna Bhatnagar & Soumendu Biswas (October 2010) The Indian Journal of Industrial Relations, Predictors & Outcomes of Employee Engagement Implications for the Resource-based View Perspective Vol. 46, No. 2, pp no.273-288

Dr. Shulgana Sarkar (May 2011) Global Management Review, A STUDY ON EMPLOYEE ENGAGEMENT AT MANUFACTURING INDUSTRIES Volume 5 Issue 3, pp no.62-72

J. Josli & J.S. Sodhi (July 2011) Indian Journal of Industrial Relations, Drivers of Employee Engagement in Indian Organizations, Vol.-47. No. 1, pp no. 162-182

RabiyaSange& R.K. Srivasatava (January, 2012), Synergy Vol. X No. I, pp. no.37-50

Kumar Alok& D. Israel(January 2012)Indian Journal of Industrial Relations, Authentic Leadership & Work Engagement,Vol. 47, No. 3, pp. no. 498-510

Surya Prakash Pati (July 2012)The Indian Journal of Industrial Relations, Development of a Measure of Employee Engagement .Vol. 48, No. 1, pp. no. 94-104

Solomon Markos (December 2010) International Journal of Business and Management, Employee Engagement: The Key to Improving Performance, Vol. 5, No. 12;, pp. no.89-96

Dr. Padmakumar Ram & Dr. Gantasala V. Prabhakar(March 2011) Interdisciplinary Journal of Research in Business, The role of employee engagement in work-related outcomes, Vol. 1, Issue. 3, (pp.47-61)

An International Double-Blind, Peer Reviewed, Refereed Open Access Journal - Included in the International Indexing Directories Page 67 .

Websites:-

www.tatadocomo.com/ediscclaimer

This website give information regarding the company

en.wikipedia.org/wiki/Employee_engagement

This website give information regarding employee engagement

http://en.wikipedia.org/wiki/Perceived_organizational_support

This website give information regarding organizational support

<http://www.scontrino-powell.com/2011/supervisor-support-a-key-ingredient-in-effective-leadership/>

This website give information regarding supervisor support.

<http://en.wikipedia.org/wiki/Self-efficacy>

This website give information regarding self-efficacy

<http://sustainabilityadvantage.com/2010/10/12/csr-efforts-correlate-with-employee-engagement/>

RELATIONSHIP BETWEEN EMPLOYMENT AND DEPENDENCY RATIO IN INDIA

Preeti

Ph.D Scholar, Department of Economics,
Kurukshetra University, Kurukshetra

Abstract employment is the major issues of any economy in the world. Today, dependency ratio also plays a very important role in Indian economy. the youth and old dependency ratio is increase in India. According to 2011 census, the dependency ratio is 65.7 percent. The study is use secondary data through the NSSO, CENSUS etc. The purpose of the study is find the relationship between employment and dependency ratio in India, to find out the various troubles faced by the increase of dependency ratio in India.

Key words Employment, Dependency Ratio, GDP

Introduction In research point of view, without visionary and well-policy structured government, countries never make significant contribution on the whole economy in general, virtually India is characterized the high population and dependency ratio which is one of the main causes for poverty and employment. Therefore, many economists and socialists put forwarded their emphasis on the control of population growth and thereby decreasing the dependency ratio. Indeed, age dependency ratio affects economic growth, poverty and employment in India. According to 2011 census, the dependency ratio is 65.7 percent and it is lowest ratio in all the plans. Now, these days, India has 2nd largest country in the world. Working population is huge number of people in these days in India. This paper has tried to find out the relationship between employment and dependency ratio in India.

▪ **Employment** Employment has featured as an important item in the development agenda in India. There is a continuing debate in India among economists and policy makers on the best measures of labour forces participation and utilization. Problem of employment and unemployment is a very grave and complex problem in India. Rapid growth of population is main reason of unemployment. Employment is the state of engagement of a person in a production work. It may be either self-employment or wage employment. Macro employment scenario in India from 1983 to 2009-10 as revealed the employment is growing constantly and unemployment together with its rate is coming down but the growth of employment is not in pace with population and labour force growth in India. The employment has growth at 0.05% during 2004-05 to 2009-10

Table 1

Five Year Plan	GDP Growth Rate (in per cent)	Employment growth (in per cent)
1 st Plan (1951-56)	3.6	0.39
2 nd Plan (1956-61)	4.3	0.87
3 rd Plan (1961-66)	2.8	2.03
4 th Plan (1969-74)	3.3	1.99
5 th Plan (1974-78)	4.8	1.84
6 th Plan (1980-85)	5.7	1.89
7 th Plan (1985-90)	6.0	1.26
8 th Plan (1992-97)	6.8	1.86
9 th Plan (1997-02)	5.4	1.14
10 th Plan (2002-07)	7.6	1.23
11 th Plan (2007-12)	8.0	1.82

Sources: Economic Survey of India.

Dependency ratio The number of non-working age persons in a community dependent on working age persons can be expressed as a ‘dependency ratio’ – the number of person aged less than 15 years and 60 and over divided by the number of persons aged 15 to 59. In India, dependency ratio was 652 persons per 1000 persons in 2011. It gives the proportions of persons whom the person is economically active age group need to support. It gives some working age person in order to provide for non-working age persons. The ratio can be further separated into two components, namely the young dependency ratio (person aged 60 and over divided by persons aged 15-59). In India, young dependency ratio and old dependency ratio were 510 and 142 persons per 1000 persons respectively 2011. Reduced in dependency ratio indicates a phase of population transition where a higher percentage of persons in the working age group may translate into higher per capital income for the economy.

Table 3

Census	Age Group of population (in per cent)			Dependency Ratio (in per cent)	GDP (at factor cost in current price) in crore
	0-14	15-59	60- 60 above		
1951	37.4	56.9	5.7	75.74	9547
1961	41.0	53.3	5.7	87.61	16220
1971	42.0	52.0	6.0	92.3	42222
1981	39.7	54.1	6.2	84.84	130176
1991	37.3	55.5	7.2	80.18	510954
2001	35.3	56.9	7.72	75.65	1925017
2011	30.7	60.3	8.94	65.7	7248859

Sources: Census of India.

According to table 3, dependency ratio is decreasing in India. These days, working population (15-59) is high and young and old age group is low. We can say that dependency ratio is decreasing in India. According to 1971 census, dependency ratio is 92.3 per cent. First of all, it is increase and after that it is decrease in India.

Relationship between employment and dependency ratio General theory tells us that lower the labor productivity lower the economic growth and higher the unemployment and poverty. On the contrary, high dependency ratio in India leads to lower productivity of such labor force As higher rate of economic growth pay the way the sustained and stable increase in productive capacity, employment opportunities with rising productivity are generated. GDP and employment correlation coefficient (r) is 0.08 and to interpret its value, there is weak positive relationship between them in India. In fact, this enables country to absorb more employees in the production and allied activities and thereby decreasing under and unemployment. In this process poor could definitely be able to achieve higher productivity and increase their income in their existing occupations or to obtain new jobs with better remuneration than before. As a matter of fact, employees getting better remuneration than before would make possible to spent more income on nutritional food, education and health care of their children which will enhance the productivity of workforce and also decrease the dependency ratio via education and awareness. Moreover, the effective family planning and re-productive health program can enhance women's human capital and productivity and the gains in productivity due to a program-induced decrease in fertility and slowing of population growth appear to have promoted development (Schults, 2009). However, this study obviously highlights the fact that there is association among poverty, economic growth, and employment and dependency ratio.

Table 4

Correlation Coefficient				
	GDP		Employment	Dependency Ratio
GDP	1.00		0.08	-0.49*

(Note:- *values are significant at 5% significance level)

There would generally be relationship among the economic growth, poverty, employment and high population or age dependency ratio. It is noted the fact that poverty and unemployment are very high whereas economic growth is very low and unstable in India. According to table 3, GDP and Dependency Ratio are also link to each other and find the correlation coefficient. It is -0.49. To interpret this value, a weak and negative linear relationship between them. What is the important fact is that in addition to economic growth and unemployment, dependency ratio due to high population of India highly affects the poverty

Conclusion The paper has scrutinized the relationship among employment and dependency ratio in India. Policy makers and competent authority should concentrate their attention on the population control and generating active population in a country. The providing better basic education, health and awareness are active remedies for this issues and thereby reducing population growth and dependency ratio. Further, as this growth is associated with more labour intensive technology, employment opportunities will definitely increase which lead to decrease in dependency ratio. Thus stable economic growth with increase in labour productivity and labour intensive technology is an active remedy for solving this problem. India which has more employment opportunities in industrial sector has had less dependency ratio in comparison with agricultural countries. Therefore, as indicated, India should give more priorities for the development of cottage,

micro, small and medium industrial development.

Reference

- Datt and Sundharam. Indian Economy, 64th. ed. New Delhi: GauravDutt and AshwaniMahajan S. Chand andCompany Ltd
- Hyung J. 2013. "An Analysis on Effect of Old Dependency Ratio on Domestic Saving Rate" Dept. of Economics, University of California, Berkeley
- Klasen, S., and T. Nestmann. 2006. "Population, Population Density and Technological Change."Journal of Population Economics19(3):611-626.
- Saxena, N.C. "Poverty Estimates for 1999-2000" Press Information Bureau, Govt. of India.Sundasam K. and Suresh D. Tendulkar, 2002. " The Working Poor In India: Employment- Poverty Linkages and Employment Policy Options"
- Sources: Economic survey in (2014-15), Ministry of statistics and Programme Implementation Govt. of India and Office of Register General of India, Ministry of Home affairs.

PERIODIC AND FIXED POINT THEOREMS IN d-COMPLETE TOPOLOGICAL SPACES

SAVITA SHARMA

Abstract

The present paper deals with extension and derived briefly theorem existence of periodic points and uniqueness of common fixed point on self maps of d-complete topological spaces which introduced by Hicks. The material of this paper is mainly derived from the paper of Harder and Saliga, which extended and improved the results due to Hicks and Hicks & Rhoades.

Keywords: Periodic and Fixed Point Theorem, d-Complete Topological Space

Introduction

This paper deals with existence of periodic points and uniqueness of common fixed point on self maps of d-complete topological spaces which introduced by Hicks [5], in 1992.

The material of this paper is mainly derived from the paper of Harder and Saliga [3] which extended and improved the results due to Hicks [5] and Hicks and Rhoades [4].

Paper Description

Notation (i) :w.l.s.c. denotes the weak lower semi-continuous.

(ii): The set $O(x, \infty) = \{x, Tx, T^2x, \dots\}$ denotes the orbit of x .

Theorem 1: Suppose $T : X \rightarrow X, n : X \rightarrow N$ and $\varphi : X \rightarrow [0, \infty)$, where $(X, \square \square)$ is a d-complete topological space. If, for some $x_0 \in X$, the sequence $S = \{x_n\}_{n=0}^\infty$ defined by $x_{n+1} = T^{n(x_n)}x_n$ satisfies

$d(y, T^{n(y)}y) \leq \varphi(y) - \varphi(T^{n(y)}y)$ for each $y \in S$, then we have

- (a) $\lim x_n = p$ exists, and
- (b) $T^{n(p)}p = p$ if and only if $G(x) = d(x, T^{n(x)}x)$ is T-orbitally w.l.s.c. relative to x_0 .

Proof : As $x_{n+1} = T^{n(x_n)}x_n$ for $n = 0, 1, \dots$, we obtain

$$d(x_n, x_{n+1}) = d(x_n, T^{n(x_n)}x_n) \leq \varphi(x_n) - \varphi(x_{n+1}).$$

For $m \geq 0$,

$$\begin{aligned} \sigma_m &= \sum_{n=0}^m d(x_n, x_{n+1}) \leq \sum_{n=0}^m [\varphi(x_n) - \varphi(x_{n+1})] \\ &= \{\varphi(x_0) - \varphi(x_1)\} + \{\varphi(x_1) - \varphi(x_2)\} + \dots + \{\varphi(x_m) - \varphi(x_{m+1})\} \\ &= \varphi(x_0) - \varphi(x_{m+1}) \leq \varphi(x_0). \end{aligned}$$

The sequence $\{\sigma_m\}_{m=0}^\infty$ of partial sums of the infinite series $\sum_{n=0}^\infty d(x_n, x_{n+1})$ is a non-decreasing

sequence bounded above by $\varphi(x_0)$ and thus converges. As X is d-complete, we obtain

$\lim x_n = p$ for some $p \in X$ and hence (a) is proved.

If $T^{n(p)}p = p$, then

$$\begin{aligned} G(p) &= d(p, T^{n(p)} p) = 0 \\ &\leq \limsup d(x_n, T^{n(x_n)} x_n) \\ &= \limsup G(x_n). \end{aligned}$$

Assume that $G(p) \leq \limsup G(x_n)$.

Now, $G(x_n) = d(x_n, x_{n+1}) \rightarrow 0$ as $n \rightarrow \infty$ as $\sum_{n=0}^{\infty} d(x_n, x_{n+1}) < \infty$.

Thus, $G(p) = d(p, T^{n(p)} p) = 0$.

Hence p is a periodic point of T and thus (b) holds.

Corollary 1: Let X be a d -complete topological space. Suppose $T: X \rightarrow X$ and $\varphi: X \rightarrow [0, \infty)$. Suppose there exists an x_0 such that

$$d(y, Ty) \leq \varphi(y) - \varphi(Ty) \text{ for all } y \in O(x_0, \infty).$$

Then we have:

(1) $\lim T^n x = p$ exists;

(2) $Tp = p$ if and only if $G(x) = d(x, Tx)$ is T -orbitally lower semi-continuous at x_0 .

Proof : Suppose $S = x_0, Tx_0, T^2 x_0, \dots$, and $n: X \rightarrow N$, defined by $n(x) = 1$ for every $x \in X$.

Then, by Theorem 1, the results hold.

Corollary 2: Suppose $T: X \rightarrow X$ and $n: X \rightarrow N$, where $(X, \square \square)$ is a d -complete topological space. If for some $x_0 \in X$, the sequence $S = \{x_n\}_{n=0}^{\infty}$ defined by $x_{n+1} = T^{n(x_n)} x_n$

satisfies $d(z, w) \leq kd(y, z)$ for each $y \in S$, where $k \in (0, 1)$, $z = T^{n(y)} y$ and $w = T^{n(z)} z$, then

(a) $\lim x_n = p$ exists, and

(b) $T^{n(p)} p = p$ if and only if $G(x) = d(x, T^{n(x)} x)$ is T -orbitally w.l.s.c. relative to x_0 .

Proof : Put $\varphi(y) = \frac{1}{1-k} d(y, T^{n(y)} y)$ for $y \in S$.

Now, $d(z, w) \leq kd(y, z)$

implies $d(y, z) - d(z, w) \geq (1-k)d(y, z)$,

or $\frac{1}{1-k} [d(y, z) - d(z, w)] \geq d(y, z)$.

Now again, $\frac{1}{1-k} d(y, z) = \frac{1}{1-k} d(y, T^{n(y)} y) = \varphi(y)$

and

$$\frac{1}{1-k} d(z, w) = \frac{1}{1-k} d(T^{n(y)} y, T^{n(T^{n(y)} y)} (T^{n(y)} y)) = \varphi(T^{n(y)} y).$$

Hence, $d(y, T^{n(y)} y) \leq \varphi(y) - \varphi(T^{n(y)} y)$ for each $y \in S$.

By Theorem 1, the results hold.

We note that corollary (1) is generalized of corollary (2) of Hicks [5]. Theorems 1 and 2 are extensions of the results due to Ciric [1] of fixed point theorems for quasi-metric spaces to d -complete topological spaces.

Theorem 2: Suppose $T: X \rightarrow X, n: X \rightarrow N$ and $\varphi: X \rightarrow [0, \infty)$, where $(X, \square \square)$ is a d -complete topological space. If for some $x_0 \in X$, the sequence $S = \{x_n\}_{n=0}^{\infty}$ defined by $x_{n+1} = T^{n(x_n)} x_n$ satisfies

- (i) $d(y, T^{n(y)}y) \leq \varphi(y) - \varphi(T^{n(y)}y)$ for each $y \in S$ and for all $y \in CI[0(x_0, \infty)]$;
- (ii) $y \neq Ty$ implies $\varphi(T^m y) < \varphi(y)$ for some positive integer $m = m(y)$, then T has a fixed point.

Theorem 3: Suppose $S, T: X \rightarrow X$ and $\varphi: X \rightarrow [0, \infty)$, where (X, \square, \square) is a d-complete topological space. If $x_0 \in X$ such that

$$d(y, Ty) + d(Ty, STy) \leq \varphi(y) - \varphi(STy) \text{ for all } y \in O_{ST}(x_0, \infty),$$

where $O_{ST}(x_0, \infty) = \{x_0, Tx_0, STx_0, T(ST)x_0, \dots, (ST)^n x_0, T(ST)^n x_0, \dots\}$.

Then we have

- (i) $\lim(ST)^n x_0 = \lim T(ST)^n x_0 = p$ exists, and
- (ii) $Tp = p = Sp$ if and only if $G_1(x) = d(x, Tx)$ and $G_2(x) = d(x, Sx)$ are (S, T) -orbitally w.l.s.c. relative to x_0 .

Proof : Let us consider the sequence $\{z_n\}_{n=0}^\infty$ by

$$z_{2k} = (ST)^k x_0 \text{ and } z_{2k+1} = T(ST)^k x_0 \text{ (k = 0, 1, 2, \dots)}.$$

For $m = 2k+1$

$$\begin{aligned} \sigma_m &= \sum_{n=0}^{2k+1} d(z_n, z_{n+1}) \\ &= [d(x_0, Tx_0) + d(Tx_0, STx_0)] + [d(STx_0, T(ST)x_0) + d(T(ST)x_0, (ST)^2 x_0)] \\ &+ \dots + [d((ST)^k x_0, T(ST)^k x_0) + d(T(ST)^k x_0, (ST)^{k+1} x_0)] \\ &\leq [\varphi(x_0) - \varphi(STx_0)] + [\varphi(STx_0) - \varphi((ST)^2 x_0)] + \dots + [\varphi((ST)^k x_0) - \varphi((ST)^{k+1} x_0)] \\ &= \varphi(x_0) - \varphi((ST)^{k+1} x_0) \leq \varphi(x_0). \end{aligned}$$

Again, for any $m = 2k$,

$$\begin{aligned} \sigma_m &= \sum_{n=0}^{2k} d(z_n, z_{n+1}) \\ &\leq \left(\sum_{n=0}^{2k} d(z_n, z_{n+1}) \right) + d(z_{2k+1}, z_{2k+2}) \\ &= \sigma_{2k+1} \leq \varphi(x_0). \end{aligned}$$

The sequence $\{\sigma_m\}_{m=0}^\infty$ of partial sums of the infinite series $\sum_{n=0}^\infty d(z_n, z_{n+1})$ is a non-decreasing sequence which is bounded above by $\varphi(x_0)$ and thus converges. As X is d-complete, there exists $p \in X$ such that $z_n \rightarrow p$ as $n \rightarrow \infty$.

Thus,

$$\lim (ST)^n x_0 = \lim T(ST)^n x_0 = p.$$

Assume that G_1 is (S, T) -orbitally w.l.s.c. relative to x_0 .

$$G_1(z_{2k}) = d(z_{2k}, Tz_{2k})$$

$$= d(z_{2k}, z_{2k+1}) \rightarrow 0 \text{ as } k \rightarrow \infty \text{ as } \sum_{n=0}^\infty d(z_n, z_{n+1}) < \infty.$$

Now, in $O_{ST} = (x_0, \infty)$, $\{z_{2k}\}_{k=0}^\infty$ is a sequence such that $z_{2k} \rightarrow p$ as $k \rightarrow \infty$.

Hence, $G_1(p) \leq \lim \sup G_1(z_{2k}) = 0$.

Therefore, $d(p, Tp) = G_1(p) = 0$ implies $p = Tp$.

Also, $d(p, Tp) = 0$ implies $G_1(x) = d(x, Tx) \geq 0 = G_1(p)$ for all $x \in X$.

Thus G_1 is w.l.s.c. relative to x_0 .

Similarly, $p = Sp$ implies G_2 is w.l.s.c. relative to x_0 .

Assume that G_2 is (S, T) -orbitally w.l.s.c relative to x_0 . Now, in $O_{ST}(x_0, \infty)$, $\{z_{2k+1}\}_{k=0}^\infty$ is a sequence such that $z_{2k+1} \rightarrow p$ as $k \rightarrow \infty$.

Therefore, $G_2(p) \leq \limsup G_2(z_{2k+1})$.

However,

$$\begin{aligned} G_2(z_{2k+1}) &= d(z_{2k+1}, Sz_{2k+1}) \\ &= d(T(ST)^k x_0, (ST)^{k+1} x_0) \\ &= d(z_{2k+1}, z_{2k+2}) \rightarrow 0 \text{ as } k \rightarrow \infty, \text{ as } \sum_{n=0}^\infty d(z_n, z_{n+1}) < \infty. \end{aligned}$$

Hence,

$$G_2(p) \leq 0 \text{ implies } d(p, Sp) = G_2(p) = 0$$

Thus, $p = Sp$. This completes the proof.

Theorem 4: Let $\{T_n\}_{n=1}^\infty$ be a sequence of self mappings of a d -complete topological space (X, \square, \square) satisfying $d(T_1x, T_1y) \leq \varphi(\max\{d(x, y), d(x, T_1x), d(y, T_1y), d(y, T_1x)\})$ for all $x, y \in X$, where d is continuous, $\varphi: [0, \infty) \rightarrow [0, \infty)$, $\varphi(0) = 0$, φ is non decreasing and upper semi-continuous and $\varphi(t) < t$ for all $t > 0$. Then the sequence $\{T_n\}_{n=1}^\infty$ has a unique common fixed point in X if and only if there exists $x_0 \in X$ such that

$$\sum_{n=0}^\infty \varphi^n(d(x_0, T_1x_0)) < \infty \text{ where } \varphi^2(t) = \varphi(\varphi(t)).$$

Proof : If there exists $p \in X$, such that $p = T_n p$ for $n = 1, 2, 3, \dots$, then,

$$\sum_{n=0}^\infty \varphi^n(d(p, T_1p)) = \sum_{n=0}^\infty \varphi^n(0) = 0.$$

Assume there exist $x_0 \in X$ such that

$$\sum_{n=0}^\infty \varphi^n(d(x_0, T_1x_0)) < \infty.$$

Consider the sequence $\{x_n\}_{n=1}^\infty$, defined by $x_n = T_n x_{n-1}$, $n = 1, 2, 3, 4, \dots$.

$$\begin{aligned} \text{Now, } d(x_1, x_2) &= d(T_1x_0, T_2x_1) \\ &\leq \varphi(\max\{d(x_0, x_1), d(x_0, T_1x_0), d(x_1, T_2x_1), d(x_1, T_1x_0)\}) \\ &= \varphi(\max\{d(x_0, x_1), d(x_0, x_1), d(x_1, x_2), d(x_1, x_1)\}) \\ &= \varphi(\max\{d(x_0, x_1), d(x_1, x_2)\}). \end{aligned}$$

If $d(x_1, x_2) = 0$, then

$$d(x_1, x_2) = 0 \leq \varphi(d(x_0, x_1)).$$

If $d(x_1, x_2) > 0$, then we also obtain

$$d(x_1, x_2) \leq \varphi(d(x_0, x_1)).$$

Assume that

$$\max\{d(x_0, x_1), d(x_1, x_2)\} = d(x_1, x_2).$$

Then, $d(x_1, x_2) \leq \varphi(d(x_1, x_2)) < d(x_1, x_2)$ which is a contradiction.

Hence, $\max\{d(x_0, x_1), d(x_1, x_2)\} = d(x_0, x_1)$

and

$$d(x_1, x_2) \leq \varphi(d(x_0, x_1)).$$

Also,

$$\begin{aligned} d(x_2, x_3) &= d(T_2x_1, T_3x_2) \\ &\leq \varphi(\max\{d(x_1, x_2), d(x_1, T_2x_1), d(x_2, T_3x_2), d(x_2, T_2x_1)\}) \\ &= \varphi(\max\{d(x_1, x_2), d(x_1, x_2), d(x_2, x_3), d(x_2, x_2)\}) \\ &= \varphi(\max\{d(x_1, x_2), d(x_2, x_3)\}) \\ &= \varphi(d(x_1, x_2)) \\ &\leq \varphi(\varphi(d(x_0, x_1))) = \varphi^2(d(x_0, x_1)) \end{aligned}$$

as φ is non decreasing.

Continuing in this way, we obtain

$$d(x_n, x_{n+1}) \leq \varphi^n d(x_0, x_1).$$

$$\text{As, } \sum_{n=0}^{\infty} \varphi^n (d(x_0, x_1)) = \sum_{n=0}^{\infty} \varphi^n (d(x_0, T_1x_0)) < \infty,$$

$$\text{then, } \sum_{n=0}^{\infty} d(x_n, x_{n+1}) < \infty.$$

Since X is d -complete, so $x_n \rightarrow x$ as $n \rightarrow \infty$ for any $x \in X$.

For any fixed $n \in \mathbb{N}$,

$$\begin{aligned} d(x_{m+1}, T_n x) &= d(T_{m+1}x_m, T_n x) \\ &\leq \varphi(\max\{d(x_m, x), d(x_m, T_{m+1}x_m), d(x, T_n x), d(x, T_{m+1}x_m)\}) \\ &= \varphi(\max\{d(x_m, x), d(x_m, x_{m+1}), d(x, T_n x), d(x, x_{m+1})\}). \end{aligned}$$

Since φ is upper semi continuous and d is continuous, letting $m \rightarrow \infty$ which gives

$$\begin{aligned} d(x, T_n x) &\leq \varphi(\max\{d(x, x), d(x, T_n x)\}) \\ &= \varphi(d(x, T_n x)). \end{aligned}$$

If $d(x, T_n x) > 0$, then $\varphi(d(x, T_n x)) < d(x, T_n x)$, which is a contradiction.

Hence, $x = T_n x$ for $n = 1, 2, 3, 4, \dots$

Uniqueness, for the uniqueness, let us suppose that x and y are two common fixed point of sequence $\{T_n\}_{n=1}^{\infty}$ with $x \neq y$.

Then, we obtain

$$\begin{aligned} d(x, y) &= d(T_n x, T_n y) \\ &\leq \varphi(\max\{d(x, y), d(x, T_n x), d(y, T_n y), d(y, T_n x)\}) \\ &= \varphi(\max\{d(x, y), 0, d(y, x)\}) \\ &= \varphi(d(x, y)). \end{aligned}$$

As $d(x, y) > 0$, this implies that $\varphi(d(x, y)) < d(x, y)$.

Similarly, $d(y, x) \leq \varphi(d(x, y))$.

$$\text{Hence, } d(x, y) \leq \varphi(d(y, x)) < d(y, x) \leq \varphi(d(x, y)) < d(x, y),$$

which is a contradiction.

Hence, our supposition is wrong.

Therefore, the common fixed point is unique.

Theorem 5: Let $\{T_n\}_{n=1}^\infty$ be a sequence of self mappings of a d-complete topological space (X, \square, \square) satisfying $d(T_i x, T_j y) \leq h \max\{d(x, y), d(x, T_i x), d(y, T_j y), d(y, T_i x)\}$ for all $x, y \in X$, where $0 \leq h < 1$ and d is continuous. Then the sequence $\{T_n\}_{n=1}^\infty$ has a unique common fixed point in X .

Proof : Suppose $\varphi(t) = ht$ for $t \geq 0$. Since $\varphi(0) = 0$, φ is continuous and non-decreasing.

As $0 \leq h < 1$, $\varphi(t) = ht < t$ for all $t > 0$.

Let $x_0 \in X$. Then

$$\sum_{n=1}^{\infty} \varphi^n(d(x_0, T_1 x_0)) = \sum_{n=1}^{\infty} h^n d(x_0, T_1 x_0) < \infty \text{ as } 0 \leq h < 1.$$

By Theorem 4, we have a unique common fixed point for $\{T_n\}_{n=1}^\infty$ and the sequence $\{x_n\}_{n=0}^\infty$ is defined by

$$x_n = T_n x_{n-1} \text{ for } n = 1, 2, 3, \dots,$$

converges to this fixed point.

Theorem 6: Let A, B, S and T be mapping from a d-complete topological space (X, \square, \square) into itself satisfying the following conditions :

- (a) $A(X) \subset T(X)$ and $B(X) \subset S(X)$,
- (b) $d(Ax, By) \leq \varphi(\max\{d(Ax, Sx), d(By, Ty), d(Sx, Ty)\})$ for all $x, y \in X$, where $\varphi: [0, \infty) \rightarrow [0, \infty)$, $\varphi(0) = 0$, φ is non decreasing, φ is upper semi-continuous and $\varphi(t) < t$ for $t > 0$,
- (c) One of A, B, S or T is w-continuous,
- (d) Pairs A, S and B, T are compatible on X ,
- (e) d is a continuous symmetric.

Then A, B, S and T have a unique common fixed point in X if and only if there exist $x_0,$

$x_1 \in X$ such that $Ax_0 = Tx_1$ and $\sum_{n=0}^{\infty} \varphi^n(d(Ax_0, Bx_1)) < \infty$.

Proof : If A, B, S and T have a common fixed point $q \in X$, then $Aq = Tq$

and $\sum_{n=0}^{\infty} \varphi^n(d(Aq, Bq)) = \sum_{n=0}^{\infty} \varphi^n(0) = 0$.

Assume there exist $x_0, x_1 \in X$ such that

$$Ax_0 = Tx_1 \text{ and } \sum_{n=0}^{\infty} \varphi^n(d(Ax_0, Bx_1)) < \infty.$$

Select $x_2 \in X$ such that $Sx_2 = Bx_1$ and $x_3 \in X$ such that $Tx_3 = Ax_2$.

Continuing in this way, we can obtain a sequence $\{y_n\}_{n=0}^\infty$ in X such that

$$y_{2n+1} = Tx_{2n+1} = Ax_{2n}$$

and $y_{2n} = Sx_{2n} = Bx_{2n-1}$ for $n = 1, 2, 3, \dots$.

Now,

$$\begin{aligned} d(y_{2n}, y_{2n+1}) &= d(y_{2n+1}, y_{2n}) \\ &= d(Ax_{2n}, Bx_{2n-1}) \\ &\leq \varphi(\max\{d(Ax_{2n}, Sx_{2n}), d(Bx_{2n-1}, Tx_{2n-1}), d(Sx_{2n}, Tx_{2n-1})\}) \end{aligned}$$

$$= \varphi(\max\{d(y_{2n+1}, y_{2n}), d(y_{2n}, y_{2n-1})\}) .$$

If $d(y_{2n}, y_{2n+1}) = 0$, then

$$\max\{d(y_{2n+1}, y_{2n}), d(y_{2n}, y_{2n-1})\} = d(y_{2n}, y_{2n-1}) ,$$

so that

$$\varphi(y_{2n}, y_{2n+1}) \leq \varphi(d(y_{2n}, y_{2n-1})) .$$

If $d(y_{2n}, y_{2n+1}) > 0$, then

$$\varphi(d(y_{2n}, y_{2n+1})) < d(y_{2n}, y_{2n-1}) .$$

Assume that

$$\max\{d(y_{2n+1}, y_{2n}), d(y_{2n}, y_{2n-1})\} = d(y_{2n+1}, y_{2n}) .$$

Then we obtain

$$d(y_{2n+1}, y_{2n}) \leq \varphi(d(y_{2n+1}, y_{2n})) < d(y_{2n+1}, y_{2n}),$$

which is a contradiction.

Hence, $\max\{d(y_{2n+1}, y_{2n}), d(y_{2n}, y_{2n-1})\} = d(y_{2n}, y_{2n-1})$

and $d(y_{2n}, y_{2n+1}) \leq \varphi(d(y_{2n}, y_{2n-1})) .$

Similarly,

$$\begin{aligned} d(y_{2n+1}, y_{2n+2}) &= d(Ax_{2n}, Bx_{2n+1}) \\ &\leq \varphi(\max\{d(Ax_{2n}, Sx_{2n}), d(Bx_{2n+1}, Tx_{2n+1}), d(Sx_{2n}, Tx_{2n+1})\}) \\ &= \varphi(d(y_{2n+1}, y_{2n})) . \end{aligned}$$

Then we have

$$d(y_n, y_{n+1}) \leq \varphi(d(y_n, y_{n-1})) \text{ for } n = 2, 3, 4, \dots .$$

It follows that

$$d(y_n, y_{n+1}) \leq \varphi^{n-1} d(y_2, y_1) \text{ for } n = 1, 2, 3, \dots , \text{ as } \varphi \text{ is non-decreasing.}$$

Hence,

$$\begin{aligned} \sum_{n=1}^{\infty} d(y_n, y_{n+1}) &\leq \sum_{n=1}^{\infty} \varphi^{n-1} (d(y_2, y_1)) . \\ &= \sum_{n=0}^{\infty} \varphi^n (d(Bx_1, Ax_0)) < \infty , \end{aligned}$$

implies that there exists $p \in X$ such that $y_n \rightarrow p$ for $n \rightarrow \infty$.

Since $\{Tx_{2n+1}\}_{n=1}^{\infty}, \{Ax_{2n}\}_{n=1}^{\infty}, \{Sx_{2n}\}_{n=1}^{\infty}$ and $\{Bx_{2n-1}\}_{n=1}^{\infty}$ are subsequences of $\{y_n\}_{n=1}^{\infty}$, they each converge to p .

Assume S is w -continuous, then

$$S^2x_{2n} \rightarrow Sp \text{ as } n \rightarrow \infty .$$

For $n \rightarrow \infty$, we obtain

$$ASx_{2n} \rightarrow Sp \text{ as } S \text{ and } A \text{ are compatible.}$$

Now,

$$d(ASx_{2n}, Bx_{2n-1}) \leq \varphi(\max\{d(ASx_{2n}, S^2x_{2n}), d(Bx_{2n-1}, Tx_{2n-1}), d(S^2x_{2n}, Tx_{2n-1})\}) .$$

Since d is continuous, S is w -continuous and ϕ is upper semi continuous, then for $n \rightarrow \infty$ gives

$$\begin{aligned} d(Sp, p) &\leq \varphi(\max\{d(Sp, Sp), d(p, p), d(Sp, p)\}) \\ &= \varphi(d(Sp, p)) . \end{aligned}$$

If $d(Sp, p) > 0$, then $\varphi(d(Sp, p)) < d(Sp, p)$,

which is a contradiction.

Hence, $Sp = p$ as $d(Sp, p) = 0$.

Also, $d(Ap, Bx_{2n-1}) \leq \varphi(\max\{d(Ap, Sp), d(Bx_{2n-1}, Tx_{2n-1}), d(Sp, Tx_{2n-1})\})$.

For $n \rightarrow \infty$, we obtain that

$$\begin{aligned} d(Ap, p) &\leq \varphi(\max\{d(Ap, p), d(p, p), d(Sp, p)\}) \\ &= \varphi(d(Ap, p)). \end{aligned}$$

If $d(Ap, p) > 0$, then $\varphi(d(Ap, p)) < d(Ap, p)$, which is a contradiction.

Hence, $Ap = p$.

As $A(X) \subset T(X)$, $p \in T(X)$ and there exists $u \in X$ such that $p = Ap = Tu$.

Now, $d(p, Bu) = d(Ap, Bu)$

$$\begin{aligned} &\leq \varphi(\max\{d(Ap, Sp), d(Bu, Tu), d(Sp, Tu)\}) \\ &= \varphi(d(Bu, p)), \end{aligned}$$

which implies that $Bu = p$.

As B and T are compatible on X and

$$Tu = Bu = p, d(TBu, BTu) = 0$$

and thus,

$$Tp = TBu = BTu = Bp.$$

Now, $d(p, Tp) = d(Ap, Bp)$

$$\begin{aligned} &\leq \varphi(\max\{d(Ap, Sp), d(Bp, Tp), d(Sp, Tp)\}) \\ &= \varphi(d(p, Tp)), \end{aligned}$$

or $Tp = p$.

The proof for T is w -continuous, is similar.

Next, assume that A is w -continuous.

As A and S are compatible on X , Sx_{2n} and A^2x_{2n} converge to Ap as $n \rightarrow \infty$.

Now,

$$d(A^2x_{2n}, Bx_{2n-1}) \leq \varphi(\max\{d(A^2x_{2n}, Sx_{2n}), d(Bx_{2n-1}, Tx_{2n-1}), d(Sx_{2n}, Tx_{2n-1})\})$$

For $n \rightarrow \infty$, we obtain

$$\begin{aligned} d(Ap, p) &\leq \varphi(\max\{d(Ap, Ap), d(p, p), d(Ap, p)\}) \\ &= \varphi(d(Ap, p)). \end{aligned}$$

Hence, $Ap = p$.

Thus, there exists $v \in X$ such that

$$p = Ap = Tv.$$

Now, $d(A^2x_{2n}, Bv) \leq \varphi(\max\{d(A^2x_{2n}, Sx_{2n}), d(Bv, Tv), d(Sx_{2n}, Tv)\})$.

For $n \rightarrow \infty$, we obtain

$$\begin{aligned} d(Ap, Bv) &\leq \varphi(\max\{d(Ap, Ap), d(Bv, p), d(Ap, p)\}) \\ &= \varphi(d(Bv, p)), \end{aligned}$$

implies that $Bv = p$.

As B and T are compatible on X and $Bv = Tv = p$, $d(TBv, BTv) = 0$

and $Tp = TBv = BTv = Bp$.

Now,

$$d(Ax_{2n}, Bp) \leq \varphi(\max\{d(Ax_{2n}, Sx_{2n}), d(Bp, Tp), d(Sx_{2n}, Tp)\}).$$

For $n \rightarrow \infty$, we obtain

$$\begin{aligned} d(p, Bp) &\leq \varphi(\max\{d(p, p), d(Bp, Tp), d(p, Tp)\}) \\ &= \varphi(d(p, Tp)) \\ &= \varphi(d(p, Bp)) \end{aligned}$$

and so $Bp = p$.

As $B(X) \subset S(X)$, so there exists $w \in X$ such that $p = Bp = Sw$.

$$\begin{aligned} \text{Now, } d(Aw, p) &= d(Aw, Bp) \\ &\leq \varphi(\max\{d(Aw, Sw), d(Bp, Tp), d(Sw, Tp)\}) \\ &= \varphi(d(Aw, p)), \end{aligned}$$

implies that $Aw = p$.

As A and S are compatible on X and $Aw = Sw = p$, $d(ASw, SAw) = 0$ and thus

$$Ap = ASw = SAw = Sp.$$

Hence, p is a common fixed point of A, B, S and T .

The proof for B w -continuous is similar.

Uniqueness, we prove the result by contradiction. To the contrary, let us suppose that p and z , $p \neq z$, are two common fixed points of A, B, S and T .

Then

$$\begin{aligned} d(p, z) &= d(Ap, Bz) \\ &\leq \varphi(\max\{d(Ap, Sp), d(Bz, Tz), d(Sp, Tz)\}) \\ &= \varphi(\max\{d(p, p), d(z, z), d(p, z)\}) \\ &= \varphi(d(p, z)), \end{aligned}$$

which is a contradiction, since $d(p, z) > 0$ if $p \neq z$.

Hence, our supposition is wrong.

Thus, the common fixed point of A, B, S and T is unique.

Corollary 3: Let A, B, S and T be mappings from a d -complete topological space (X, \square, \square) into itself satisfying the following conditions:

- (a) $A(X) \subset T(X)$ and $B(X) \subset S(X)$,
- (b) $d(Ax, By) \leq h \max\{d(Ax, Sx), d(By, Ty), d(Sx, Ty)\}$ for all $x, y \in X$ where $0 \leq h < 1$,
- (c) One of A, B, S , or T is w -continuous,
- (d) Pairs A, S and B, T are compatible on X ,
- (e) d is a continuous symmetric.

Then A, B, S and T have a unique common fixed point in X .

References:

1. Ciric, Lj. B.: A certain class of maps and fixed point theorems, Publ. L'Inst. Math. (Beograd), 20(1976), 73-77.
2. Ciric, Lj. B.: A generalized contraction and fixed point theorems, Publ. Inst. Math. (Beograd), 12(1971), 19-26.
3. Harder, A.M. and Saliga, L.M.: Periodic and fixed point theorems in d -complete topological spaces, Indian J. Pure Appl. Math., 26(8) (1995), 787-796.
4. Hicks, T.L. and Rhoades, B.E.: Fixed point theorems for d -complete topological spaces II, Math, Japanica, 37(1992), 847-853.
5. Hicks, T.L.: Fixed points theorems for d -complete topological spaces I, Internat. J. Math. Math. Sci., 15(1995), 435-440.

EMERGING TRENDS IN INDIAN BANKING INDUSTRY

Sakshi

M.Phil Scholar

Kurukshetra University, Kurukshetra

ABSTRACT: The banking industry plays a crucial job for the improvement of any country's economy. The development of banking industry depends upon the facilities granted by them to the clients in different perspectives. The developing drift of banking industry is found noteworthy after the financial and economical betterment in India. Nowadays, India contains a reasonably well created banking framework with diverse classes of banks –public segment banks, private segment banks, foreign banks, – both the traditional and modern era, co-operative banks and regional rural banks with the Reserve Bank of India as the wellspring starting of the framework. These days banking segment acts as a spine of Indian economy which revolved as a supporter amid the period of boom and recession. From 1991 different patterns and advancements in banking segment are credited. It moreover showed the different changes were caused to move forward their facilities to convince the clients.

KEY WORDS: Current trends, financial segment, developments, security, banking industry etc.

INTRODUCTION:

The banking framework in India is altogether distinctive from other Asian countries since of the country's interesting social, geographic, financial and economical characteristics. India includes a huge population, a different culture, huge area and extraordinary inequality in wage, which are stamped among its areas. There are giant levels of lack of education among a huge rate of its people but simultaneously, the nation encompasses a huge supply of administrative and mechanically progressed endowments. Between around 35 and 40 percent of the population of India dwells in metro and urban cities and the rest is spread in a few semi-urban and rustic areas.

The country's financial and economical arrangement system combines communist and capitalistic highlights with an overwhelming predisposition towards public segment venture. India has taken after the way of growth driven exports instead of the export driven growth of other Asian economies, with accentuation on self-reliance through import substitution. These characteristics are showed within the system, area, structure and differing qualities of the country's banking and financial division. The banking framework had to serve the objectives of financial and economical arrangements articulated in progressive five year advancement schemes, especially focusing on the evenhanded wage dissemination, adjusted territorial financial and economical development and the decrease and disposal of private division monopolies business models in exchange and industry.

In arrange for the banking industry to act as a tool of state arrangement, it was exposed to different nationalization plans completely different stages (1955, 1969, and 1980). As an outcome, banking prevailed globally confined and simultaneously few Indian banks had opened their branches in overseas in worldwide monetary areas, since of distractions with household needs, particularly gigantic department extension and pulling in more individuals to the structure. Additionally, the segment had doled out the part of giving

assistance to other financial and economical divisions such as small-scale businesses, trades and agribusiness and banking exercises within the developed commercial areas like urban and a constrained number of semi-urban areas.

The banking structure's universal segregation was too because of severe department authorizing controls on foreign banks previously working within the nation as well as section confinements confronting modern foreign banks. A measure of correspondence was needed for any Indian bank to open a branch of their bank in foreign countries. These highlights had cleared out the confusion of Indian banking division's shortcomings and qualities. An enormous challenge confronting Indian banks was how beneath the current proprietorship system, to achieve operational proficiency appropriate for contemporary financial intermediation. On the other side, it had generally simple for the public segment banks to recapitalize, provided the increments in nonperforming resources because their Government overwhelmed proprietorship system had diminished the clashes of intrigued that private banks would confront.

OBJECTIVES:

- ✓ To study about the rising trends in banking sector.
- ✓ To explore the current patterns and improvements in banking segment.
- ✓ To show the innovative and technological improvements in Indian banking segment.

RESEARCH METHODOLOGY:

The nature of study is conceptual. Data was collected from secondary sources like reports of RBI, journal, magazines and online websites.

RECENT TRENDS IN INDIAN BANKING SEGMENT:

Nowadays, we are having a reasonably well created banking framework with diverse classes of banks – private segment banks, public segment banks, regional rural banks, foreign banks and co-operative banks. The Reserve Bank of India is the predominant of all the banks. The RBI's (Reserve Bank of India) most vital objective is to preserve money related steadiness in India and for this purpose the RBI utilizes monetary policy to preserve cost steadiness and a satisfactory flow of credit. The rates utilized by RBI to realize the repo rate, bank rate, cash reserve ratio and reverse repo rate. Decreasing inflation has become one of the foremost critical objectives of RBI at a few point of time.

Development and enhancement in banking segment had risen above limits all over the globe. In 1991, the Government unlocked the entryways for the foreign banks to begin their activities in India and impart their wide extent of prerequisites, subsequently giving a solid competition to the household banks, and making a difference for the clients in providing the leading facilities of the banks. The Reserve Bank offered to move towards the leading universal banking facilities will advance hone the prudential standards and fortify its administrator component.

There had been impressive advancement and expansion within the trade of prime commercial banks. A few of them have locked in within the ranges of leasing, credit cards, customer credit, internet and phone banking, merchant banking, mutual funds etc. A number of banks had already established their branches for leasing, merchant banking and mutual funds and numerous more are within the preparation of doing so. A few banks had started factoring trade. So, following are the current trends which we can see in the functioning of each and every bank in India.

- **BANK NET:**

Bank net could be to begin with national level framework in India, which was contracted in February 1991. It is communication framework built up by Reserve Bank of India on the premise of proposal of the committee scheduled by it beneath the chairmanship of the official chief T.N.A. Lyre. Bank net had two stages: Bank net-I and Bank net- II.

- **INTERNET:**

Web may be a mesh of computers. In this promoting technique, any message and any information can be exchanged and accepted around the globe. In no time, internet can do numerous works for us, like the net can work as electronic mailing framework. It had eruption of remote database, which may be a daily newspaper, magazines of another nation. Clients can transmit their thoughts through Web and can make link with anybody who could be connected with internet.

On web, one can transmit any kind of data like numerals, letters, diagrams, picture, video and any kind of audio like music recording. Internet could be a quick creating net and is of most extreme imperative for public division undertaking, Research Institutions, financial Institutions and educational organization etc.

- **TELE-BANKING:**

Tele banking is a major development in banking sector, which given the service of 24 hour banking to the client. Tele banking depends on the voice handling service accessible on bank computers. The caller more often than not a client calls the bank anytime and can ask about the balance in his account or other exchange details happened previously. In this framework, the computers at bank are associated to a phone interface with the assistance of a modem. Voice processing service given within the software. This computer program recognizes the voice of caller and gives him appropriate reply. Some banks utilize telephonic replying machine but usually constrained to a few brief capacities. This can be as it were phone replying framework and presently known as Tele-banking. Tele banking is getting to be well known since inquiries at Automated Teller Machines are presently getting to be as well long.

- **AUTOMATED TELLER MACHINE:**

Automated Teller Machine (ATM) is an electronic machine, which accessed by the client himself to operate the functions of withdrawals, deposits and other financial exchanges. ATM could be a step of advancement in providing facilities to clients. ATM service is accessible to the clients 24 hours a day. The banks provided an ATM card to clients. It is usually a plastic card, coded magnetically which can be easily recognized by the ATM and it had the client's name.

Each cardholder is given with a confidential personal identification number (PIN). When the client needs to utilize the card, he needs to embed his plastic card within the opening of the machine. After the card may be acknowledged by the ATM, the client enters his PIN. After setting up the verification of the clients, the ATM takes after the client to enter the sum to be pulled back by him. After preparing that exchange and finding adequate equalizations in his account, the yield space of ATM grant the specified cash to client. When the exchange is completed, the ATM expels the customer's card.

- **PHONE BANKING:**

Clients can presently dial up the bank's outlined phone number and he by dialing his ID number will be accomplished to induce network to bank's designated computer. The computer program given within the machine associated with the computer inquiring him to dial the code number of facility needed by him and appropriately answers him. By utilizing Automatic voice recorder (AVR) for straightforward inquiries and exchanges and staff

phone terminals for complicated questions and exchanges, the client can really do whole non-cash relating banking on phone: Anytime, Anyplace.

- **MOBILE BANKING:**

Mobile banking service is an expansion of web banking. The bank is in affiliation with the cellular facility suppliers provide this service. For this facility, mobile phone ought to either be SMS or WAP empowered. These services are accessible indeed to those clients who had credit card accounts with the bank.

- **INTERNET BANKING:**

Web Banking empowers a client to do banking exchanges functions through the bank's website with the help of internet. It could be a framework of retrieving accounts and common data on bank services, products and different facilities by a computer or mobile phone while the client sits in his home or office.

Moreover, it is typically called virtual banking. It is just like escorting the bank in to your home whether by computer or by mobile phone. In conventional banking one should approach the department in individual, to deposit money, to deposit a cheque, to withdraw cash or ask an articulation of accounts etc. but now internet banking had modified the way of banking.

Presently everybody can easily work out all these sort of exchanges through website of bank on his mobile phone or computer with the help of internet. All these sort of exchanges are encoded utilizing advanced multi-layered security design, consisting firewalls and filters. The client can be rest guaranteed that his exchanges are assured and secret.

- **CASH DISPENSERS:**

Taking out your deposited money is the fundamental facility provided by the branches of banks. The money given to client by cashier or teller of money dispensers is an interchange to save the time. The functions performed by this machine are so economical as compared to manual functions and this machine is inexpensive and quick as compared to Automated Teller Machine. A plastic card issued to client, which had coated magnetically. After fulfilling the conventions, software permits the machine to perform the exchanges functions for needed sum.

- **CHIP CARD:**

The client of the bank is given an uncommon sort of credit card which had a special code and client's name etc. The credit sum of the client account is recorded on the card with magnetic strategies. The software in the bank's machines or bank's computer can easily recognize these magnetic spots. At the time, when client utilizes this credit card, the credit sum recorded on the card begins diminishing. After utilize of number of times, at one organize, the total amount gets to be nil on the card. At that point of time, the card lost its utility. The client should deposit money in his bank account for availing the service of again utilizing the card. Once more the credit sum is recorded on the card with the help of magnetic strategies.

- **ELECTRONIC CLEARING SERVICE:**

In 1994, RBI scheduled a committee to investigate the computerization within the banks additionally to evaluate the electronic clearing Service. The committee prescribed in its final report that electronic clearing service or credit clearing service ought to be mould accessible to all Government organizations or corporate institutions for doing monotonous little worth remittance like discount, compensation, interest, monthly installments, salary, pension, commission and dividend.

it was too prescribed by the committee that one more function of electronic clearing service which is debit clearing may be launched for pre-authorized charges for remittance of insurance premium, segments of leasing, utility bills, and financing institutions. RBI had taken vital movements to launch these plans, at first in Chennai, Mumbai, Calcutta and New Delhi.

- **SOCIETY FOR WORLDWIDE INTER-BANK FINANCIAL TELECOMMUNICATIONS :**

SWIFT is an acronym of society for worldwide inter-bank financial telecommunications. It is a co-operative society was established in May 1973 with 239 engaging banks from 15 nations with its central command offices at Brussels. It had begun working in May 1977. Reserve Bank of India and 27 other public segment banks along with 8 foreign banks in India had gotten the association of the SWIFT. SWIFT gives fast, reliable, dependable and fetched compelling mode of communicating the financial information around the globe. Nowadays, more than 3000 banks are the participants of this system. To serve to the improvement in information, SWIFT was overhaul within the 80s and this form is pronounced as SWIFT-II.

Indian banks are snared to SWIFT-II framework. SWIFT can be a strategy of the advanced information communication of universal notoriety. This technique is super economical, dependable and secure method of money exchange. It encourages the communication of information regarding the interest installment, fixed deposit, debit-credit articulations, foreign trade etc. This facility is accessible all through the year, 24 hours a day. It guarantee against any misfortune of disfigurement regarding exchange. It is evident from the above stated advantages of SWIFT that it is exceptionally advantageous in viable client facility. SWIFT had expanded its scope to clients like dealers, institutions and other organizations.

- **REAL TIME GROSS SETTLEMENT :**

Real time gross settlement system acts as a money exchange framework. Settlement in real time implies the exchanges occurred nearly promptly and gross settlement implies exchange is cleared one to one premise not at all like national electronic fund transfer (NEFT), where the exchange occurred in large size at a given point of time amid the whole day. It is typically primarily utilized for exchange which is huge in value and ought to be cleared promptly. In this procedure the bank that gets cash must credit the sum within the account within 30 min after accepting it. Facilities of RTG's window for exchange are accessible to banks from 9.00 am to 4.30 pm in a week and 9.00 am to 4.00 pm in Saturday's for clearance at from RBI's segment.

CONCLUSION:

Within the days to come, banks are supposed to romp a really valuable part within the financial and economical improvement and the rising market will produce the trading openings to saddle. As banking in India will gotten to be increasingly information backed, capital will appear as the finest resources of the banking segment. Eventually banking is individuals and not fair numerals. Conclusively, the banking segment in India is advancing with the expanded development in client base, because of the recently enhanced and inventive services provided by banks.

The financial and economical development of the nation is a pointer for the development of the banking segment. The Indian economy is anticipated to develop at a rate of 7-8 % and the nation's banking system is anticipated to contemplate this development. The responsibility of it resides within the potential of the Reserve Bank of India as a central administrative specialist, whose approaches had protected Indian banks from intemperate

clouting and creating major risk capitations. By the government assistance and a cautious re-examination of subsisting trade techniques can made the platform for Indian banks to gotten to be greater and more powerful, subsequently making the platform for developments into a worldwide client foundation.

REFERENCES:

- Reddy, Y.V. (2010). Banking Sector Reforms in India: An Overview. Reserve Bank of India Bulletin, June.
- Jayaratne, J. & Strahan, P.E. (2010). The finance-growth nexus: evidence from bank branch deregulation. Quarterly Journal of Economics, 111, 639-670.
- Mittal, A. & Gupta, S. (2013) Emerging role of information technology in banking sector's development of India. Acme International Journal of Multidisciplinary, 1(4).
- Walter, Ingo & Gray, H.P. (1983). Protectionism and international banking, sectoral efficiency, competitive structure and national policy. Journal of Banking and Finance, 7, 597-607.
- The Government of India (2008) Report of the Committee on Banking Sector Reforms (Chairman: M Narasimham).
- Reddy, Y.V. (2010): Credit Policy, Systems and Culture. Reserve Bank of India Bulletin, March.
- <http://www.hsbc.comhk/personal/way-to-bank/e-cheque.html>
- <http://info.shine.com/industry/banking-financial-services/8.html>
- <http://searchwindowserver.techtarget.com/definition/electronic-funds-transfer-EFT>
- http://www.time4education.com/career_in_banking.asp
- <http://www.yourarticlelibrary.com/essay/role-of-banks-in-the-development-of-indianeconomy/42577/>
- <http://www.axisbank.com/bank-smart/internet-banking/transfer-funds/rtgs>

EMPLOYEE: A VALUABLE RESOURCE (CONCEPTUAL STUDY)

Deepak Kakkar, Assistant Professor
Department of Commerce
Mukand Lal National College, Radaur

Employees give an identity to the organization and make it distinct from others. In the organization, engagement of employees in the workplace resulting in the right conditions to give of their best at every moment, committed to their organisation's objectives and vision, motivated to contribute to organisational success, with a best sense of their own well-being. It is a measurable degree of an employee's emotional attachment to their job work, and organization that profoundly influences their willingness to learn and perform at work. Thus engagement is distinctively different from employee satisfaction, motivation and organisational culture. The employees are the real assets of an organization. They are the ones who contribute effectively towards the successful functioning of any organization. Role of employees was described in the academic literature by

Schmidt et al's A modernized version of job satisfaction, His definition of engagement was "an employee's involvement with, commitment to, and satisfaction with work. Employee engagement is a part of employee retention."

Smith et al's This integrates the classic constructs of job satisfaction. and organizational commitment.

Harter and Schmidt's most recent meta-analysis can be useful for understanding the impact of employee's engagement in the organization. Employee engagement is the level of commitment, involvement, satisfaction & enthusiasm, an employee has towards their work, organization and its values. An engaged employee is aware of business context, and works with colleagues to improve performance within the job for the benefit of the organization by utilizing their natural talents.

According to a study conducted by **Hewitt Associates** in 2009, the software giant HCL Technologies was ranked as the best Indian employer in that year. The reasons being, creation of a positive work culture and its long term approach in the midst of challenging conditions. The other companies who made to the list of top employers were Hindustan Zinc, Taj Hotels, Resorts and Palaces, Cisco Systems, ITC Welcome Group, Eureka Forbes, LG Electronics India, Domino's Pizza India and Marriott Hotels India.

Infosys in year 2011 plans to have its own radio in establishing a healthy and quick interaction and communication amongst employees. The company also plans to host talk shows where top management would interact with the employees. Besides this, the company also has a social networking portal like Facebook. Named as Bubble, it helps employees connect to their colleagues, seniors, subordinates and top management. Infosys had also created Infosys Television.

The Concept of the role of Employee as a valuable factor for the development of any organisation is rapidly gaining popularity, use and importance in the workplace. Research and consultancy firms, led by the high-profile Gallup organization, are focusing their efforts increasingly on surveys of employee engagement that aim to improve levels of engagement. This is because corporate results have reportedly demonstrated a strong link

between some conceptualizations of engagement, worker performance and business outcomes while there is much interest in engagement, there is also much confusion. There is no consistency in definition, and engagement has been operationalised and measured in many diverse ways. Engagement may be a global construct as it appears to be a combination of job satisfaction, organizational commitment and intention to stay. Indeed, some argue that engagement is a multidimensional construct, in that employees could be emotionally, cognitively or physically engaged. However, despite this confusion in the literature, many companies and research firms see engagement as a powerful source of competitive advantage. Corporate results have demonstrated a strong link between some conceptualizations of engagement, worker performance and business outcomes. This is because corporate results have reportedly demonstrated a strong link between some conceptualizations of engagement, worker performance, job satisfaction, employee turnover and business outcomes. Great organizations win business by engaging the complex emotions of employees and customers. It is the psychology of how each employee connects with customers and with the organization, it is an instant, and constant, competitive edge. Gallup defines it as a significant predictor of desirable organizational outcomes such as customer satisfaction, retention, and profitability some of the management literature defines it as 'a positive, two-way relationship between employee and their organization' where both parties are aware of their own and the other's needs, and support each other to fulfill these needs. Engaged employees and organizations go the extra mile, and both reap mutual benefits.

Role of Employee

Role of employee is a concept that has begun to grab the attention of the corporate world for past few years. When put simply higher levels of employee engagement in organisation mean higher profitability of the organisation. Employee engagement is critical. Highly productive organizations have understood this fact a long ago where mediocre and low performing organizations have just started taking it seriously. It makes sense to engage employees in organization operation and make them find a meaning in what they do. Those employees who do not understand what they contribute towards the success of their organisation will not stick to it for long. They would rather consider leaving in a few months or years as and when they are offered a high-paying job. It is a long term process and goes through various phases describing the level of the engagement of employee, involvement, attachment and belongingness between employee and employer. The way of role of employee make a continuous cycle that each organisation aiming to achieve increased profitability must undertake. The organization must work to develop and nurture engagement, which requires a two-way relationship between employer and employee. Thus measurement of employee engagement is a barometer that determines the association of a person with the organization. Thus it is largely the organization's responsibility to create an environment and culture conducive to this partnership, and a win-win equation. The opposite of employee engagement is a zombie employee. A zombie employee is a disengaged employee that will stumble around the office, lower morale and cost the company money. More recently employee engagement has become an area of focus within organizations for the purpose of retention as a means of avoiding expensive employee replacement costs resulting from staff who voluntarily quit their jobs.

Andrew J. Wefald, in his study "An Examination of Job Engagement, Transformational Leadership, and Related Psychological Constructs", he sought to critically examine the concept of engagement as well as provide empirical evidence regarding its place in the homological network of job attitudes. Both theoretically and empirically, engagement has been linked to personality and leadership variables; however, no research to date has attempted to examine all three concepts together. This research additionally sought to link engagement, personality, and leadership in a theoretically based model. Participants at mid-sized financial institution completed a survey comprised of demographic items, attitude measures, a leadership measure, and a personality measure. Results indicated that the Schaufeli and Britt measures of engagement substantially overlap with job satisfaction and affective commitment; however, the Shirom measure (called vigor) is not redundant with job satisfaction or affective commitment. Hypothetical models of engagement, personality, and leadership were not good fits with the data; however, two modified models (one with Schaufeli's engagement and one with Shirom's vigor) had marginally acceptable fits. Further, hierarchical regressions indicated a strong connection between engagement and leadership and between engagement and personality. He investigated the factor structure of W. B. Schaufeli et al.'s measure of engagement and academic engagement's relation to academic satisfaction and found the Employee Engagement and Job Satisfaction to be highly related constructs. The Previous researchers found a 3-factor structure of engagement that comprises vigor, dedication, and absorption. The authors administered to a sample of university students a questionnaire on their level of engagement in academic work and various other measures. The results did not confirm the 3-factor structure. He investigated the factor structure of W. B. Schaufeli et al.'s measure of engagement and academic engagement's relation to academic satisfaction and found the Employee Engagement and Job Satisfaction to be highly related constructs. The Previous researchers found a 3-factor structure of engagement that comprises vigor, dedication, and absorption. The authors administered to a sample of university students a questionnaire on their level of engagement in academic work and various other measures. The results did not confirm the 3-factor structure, which three dimensions of workplace spirituality (transcendence, community, and spiritual values) relate to employee engagement through four psychological conditions (meaningfulness in work, meaningfulness at work, safety, and availability). **Categories of role of employee** There are three different type of people in organization based on their level of commitment, involvement & satisfaction. **Engaged Employee** --"engaged" employees are builders. They want to know the desired expectations for their role so they can meet and exceed them. They're naturally curious about their company and their place in it. They work with passion and they drive innovation and move their organization forward by performing at high levels. **Not Engaged Employee**--"not-engaged" employees tend to concentrate on tasks rather than the goals and outcomes they are expected to accomplish. They want to be told what to do just so they can do it and say they have finished. They focus on accomplishing tasks versus achieving an outcome. **Actively disengaged Employee**--the "actively disengaged" employees are the "cave dwellers." They are "consistently against virtually everything." they're not just unhappy at work; they are busy acting out their unhappiness. They sow seeds of negativity at every Opportunity.

Main Factor Influence the Role of Employee in the Organization

➤ **Attract**

The first phase of the employee engagement cycle is attracting the best talent from the

industry. This phase involves creating a positive impression about the work culture and employee career as a potential employer. It is all about carefully creating an authentic, genuine and crafted image as an employer. This is although an indirect yet the first impression that attracts a big pool of candidates to apply for the job vacancies in an organisation. The first phase is the most important phase of the employee engagement cycle. Another aspect spreading the reputation of an organisation is its employees. They are not only the employees but also are regarded as internal customers. Their job and career satisfaction speaks about their workplace. Therefore, they should not be taken for granted. Besides attracting the talent from the outside, it is important to keep the existing employees attracted towards the organisation.

➤ **Acquire**

The acquire image involves more than one thing. It includes (1) the way the potential candidates are interacted while advertising a position; (2) keeping the promises that were made while hiring them and (3) providing the new joiners a right kind of work culture. When an organisation advertises a position, interested candidates apply. The way their applications are created, the reaction of the organisation and the manner in which they are approached speak a lot about the image and work culture of an organisation. Hiring the best talent not only serves the purpose. During their honeymoon or initial period with the organisation, the company must try to keep all the promises that were made during the selection process. Besides this, they should feel happy and satisfied when their expectations are tested against the reality. Providing the right kind of culture also plays an important role in keeping them engaged. The whole idea is to prepare them to perform their best by giving them challenging tasks right from the beginning. It's like developing a habit or culture right from the time they decide to work with the organisation.

➤ **Advance**

Continuous moving the talent is the last but an unending phase. It not only involves promoting the employees to a higher designation along with salary increments but also growing them in other tangible and intangible ways. Job rotation can help them grow in experience, responsibility and belongingness but only when it is done right. Advancing the employees in every aspect, be it monetary or non-monetary, is the key to retain people and develop their overall personality.

Importance of Employees

A highly engaged employee will consistently deliver beyond expectations in the workplace. Engaged employees will stay with the company, be an advocate of the company and its products and services, and contribute to bottom line business success. They will normally perform better and are more motivated. There is a significant link between employee engagement and profitability. They form an emotional connection with the company. This impacts their attitude towards the company's clients, and thereby improves customer satisfaction and service levels it builds passion, commitment and alignment with the organization's strategies and goals, increases employees' trust in the organization creates a sense of loyalty in a competitive environment. A high-energy working environment, boosts business growth makes the employees effective brand ambassadors for the company. Highly engaged employee will consistently deliver beyond expectations. Thus employee engagement is critical to any organization that seeks to retain valued employees. The **Watson Wyatt** consulting companies has been proved that there is an intrinsic link between employee engagement, customer loyalty, and profitability. As organizations

globalize and become more dependent on technology in a virtual working environment, there is a greater need to connect and engage with employees to provide them with an organizational 'identity.' These are all good things that prove that engaging and involving employees make good business sense and building shareholder value. In contrast organizations with least engaged employees are much more likely to have high employee turnover, low customer loyalty, less productivity and earnings. Negative workplace relationships may be a big part of why so many employees are not engaged with their jobs. Employee engagement also affects the mindset of people. Engaged employees believe that they can make a difference in the organizations they work for. Confidence in the knowledge, skills, and abilities that people possess – in both themselves and others – is a powerful predictor of behavior and subsequent performance. Thus, consider some of the results of the Towers Perrin survey cited earlier:

Drivers of Role of the Employee

While it is possible to measure engagement itself through employee surveys, this does not assist in identifying areas for improvement within organizations. There are a range of factors, known as drivers that are thought to increase overall engagement. By managing the drivers, an organization can effectively manage engagement levels of its employees. Drivers such as communication, performance clarity and feedback, organizational culture, rewards and recognition, relationships with managers and peers, career development opportunities and knowledge of the organization's goals and vision are some of the factors that facilitate employee engagement. Role of Employee has transcended from being the latest business buzzword to being recognized by organizations as a tool that positively influences business performance. This linkage between organization performance and employee engagement was researched by ISR in 2006 by means of world-wide survey. The **ISR(International Survey Research)** study reveals that companies with high engagement scores saw an increase of more than 25% in EPS (Earnings per Share), while companies with low engagement scores saw a decrease of 11% in EPS. The results confirm the belief of many that engagement positively influences business performance. Hence, it is vital for companies to understand what "causes" employee engagement if they want to influence the "effect" i.e. employee engagement. By understanding these drivers and leveraging them, organizations can try and manage engagement levels of their employees. So what drives employee engagement? Several theories have been propounded that focus on the rational and emotional aspects of engagement. Some even focus on the tangible and intangible aspects of engagement. **Mercer's** 'What's Working' studies reveal that engagement drivers differ by geography, by industry and even by time.

While there is no one panacea for leveraging employee engagement, there are some broad drivers which are presented below:

- **Employee perceptions of job importance** - An employee's attitude toward the job's importance and the company had the greatest impact on loyalty and customer service than all other employee factors combined.
- **Employee clarity of job expectations** - If expectations are not clear and basic materials and equipment are not provided, negative emotions such as boredom or resentment may result, and the employee may then become focused on surviving more than thinking about how he can help the organization succeed.
- **Career advancement/improvement opportunities** - Plant supervisors and managers indicated that many plant improvements were being made outside the suggestion system,

where employees initiated changes in order to reap the bonuses generated by the subsequent cost savings.

- **Regular feedback and dialogue with superiors** - Feedback is the key to giving employees a sense of where they're going, but many organizations are remarkably bad at giving it." What I really wanted to hear was 'Thanks. You did a good job.' But all my boss did was hand me a check.
- **Quality of working relationships with peers, superiors, and subordinates** - if employees' relationship with their managers is fractured, then no amount of perks will persuade the employees to perform at top levels. Employee engagement is a direct reflection of how employees feel about their relationship with the boss.
- **Perceptions of the ethos & values of the organization** - Inspiration and value is the most important of the six drivers in our engaged Performance model. Inspirational leadership is the ultimate perk. In its absence, [it] is unlikely to engage employees.
- **Work/Job Role** - Employees must see a link between their role and the larger organization goal. Understanding this linkage provides an intrinsic motivation and increased engagement. Most employees will come to work on time without possessing a sense of belonging and will try and complete assigned tasks even without possessing that sense achievement on completion of task. However, an employee that sees a clear linkage on how his/her role contributes to the organization will go the extra mile and help create organization wealth.
- **Work Environment/Organization Culture** - The bond between an employee and the organization is cemented when the employee identifies with the culture of the organization. An employee is engaged and motivated to stretch beyond the call of duty if he/she finds the work environment enabling and supportive.
- **Rewards and Recognition** - The bottom line is that people work to earn which helps fulfill ambitions. Equitable pay coupled with rewards and recognition programs enhances motivation and leads to commitment and engagement.
- **Learning and Training Opportunities** - As Lawyer put it - "People Enjoy Learning." This is especially true in the case of today's millennial workforce that constantly looks at enhancing knowledge and skill. Skill and Knowledge enhancement is not just important for the employees but providing a learning culture is essential for organizations to remain relevant in the constantly changing business landscape.
- **Performance Management** - An effective performance management system contributes positively to employee engagement. Goal setting lies at the root of any performance management system. Clearly articulated goals, a fair and just means to judge performance and timely, rational feedback are critical elements in creating a bond between the employee and his/her organization.
- **Leadership** - It is a well recorded fact that most resignations happen because the employee is not satisfied with his/her 'boss.' An organization that spends time and effort in grooming leaders who are aligned to its goals, culture and people invests well. New age industries have a young and dynamic workforce that looks for autonomy in decision making, increased responsibility and accountabilities.

Other Factors - Clear and open communication, quality of interaction with peers, collaboration, organization policy, organization performance are all contributing factors to

employee engagement. The highly productive and the most reputed companies across the world have understood the fact that it was employee engagement that made them stand apart from all other companies.

Different companies had taken different initiatives to enhance the level of engagement among employees towards their jobs and the organisation. Some offer custom-made incentives while some stick to provide extra facilities like crèche for kids, schools for children of employees, pick and drop, provision of food, movie tickets and many other things. Each company has its own reasons to establish a specific type of reward-motivation programme depending upon their financial status, region in which they are operating and level which they function at and the backgrounds of the employees. In the year 2015, an annual study conducted by the research arm of **Kenexa**, a leading global HR solution provider, revealed that Indian giants rank highest as compared to their peers in other countries when it comes to employee engagement and effective leadership. When compared on the national level, India with 71% employee engagement ratio secured the topmost rank while Japan was at the lowest position with 38% ratio. This was a surprising fact as it is believed that Indian companies have miles to cover in order to achieve what global companies have done already. Factors that made India stand apart from rest of the countries were employee recognition, emphasis of improvement of quality, show of genuine responsibility of organisation towards employees and opportunities to grow. The research conducted by Kenexa included India, US, UK, Brazil, Australia, Canada, Denmark, China, France, Finland, Germany, Japan, Spain, Russia, Sweden, The Netherlands, Switzerland, Italy, Mexico and Gulf countries. The most surprising fact is that the Indian companies took creative and unique initiatives to enhance the level of engagement and involvement of their employees. Indian giants like Mahindra & Mahindra, Mercer, KPMG and Wipro offer democracy to choose their wages and perks depending upon their lifestyles. It is done to decrease as well as prevent dissatisfaction amongst employees. It has worked out very well and companies are successful in drawing and retaining the best talent. The trend began in these IT giants can now be seen in FMCG, banking and other industries.

BIBLIOGRAPHY

Aurya Prakash Pati & Pankaj Kumar (July 2010) "The Indian Journal of Industrial Relations" Employee Engagement: Role of Self-efficacy, Organizational Support & Supervisor Support,

TARA SHANKAR & JYOTSNA BHATNAGAR (JULY 2010) "The Indian Journal of Industrial Relations" Work Life Balance, Employee Engagement, Emotional Consonance/Dissonance & Turnover Intention, VOL. 46, NO. 1, PP NO.74-87

Jyotsna Bhatnagar & Soumendu Biswas (October 2010) The Indian Journal of Industrial Relations, Predictors & Outcomes of Employee Engagement Implications for the Resource-based View Perspective Vol. 46, No. 2, pp no.273-288

Dr. Shulgana Sarkar (May 2011) Global Management Review, A STUDY ON EMPLOYEE ENGAGEMENT AT MANUFACTURING INDUSTRIES Volume 5 Issue 3, pp no.62-72

J. Josli & J.S. Sodhi (July 2011) Indian Journal of Industrial Relations, Drivers of Employee Engagement in Indian Organizations, Vol.-47. No. 1, pp no. 162-182

RabiyaSange& R.K. Srivasatava (January, 2012), Synergy Vol. X No. I, pp. no.37-50

Kumar Alok& D. Israel(January 2012)Indian Journal of Industrial Relations, Authentic Leadership & Work Engagement,Vol. 47, No. 3, pp. no. 498-510

Surya Prakash Pati (July 2012)The Indian Journal of Industrial Relations, Development of a Measure of Employee Engagement .Vol. 48, No. 1, pp. no. 94-104

Solomon Markos (December 2010) International Journal of Business and Management, Employee Engagement: The Key to Improving Performance, Vol. 5, No. 12;, pp. no.89-96

Dr. Padmakumar Ram & Dr. Gantasala V. Prabhakar(March 2011) Interdisciplinary Journal of Research in Business, The role of employee engagement in work-related outcomes, Vol. 1, Issue. 3, (pp.47-61)

An International Double-Blind, Peer Reviewed, Refereed Open Access Journal - Included in the International Indexing Directories Page 67 .

Websites:-

www.tatadocomo.com/ediscclaimer

This website give information regarding the company

en.wikipedia.org/wiki/Employee_engagement

This website give information regarding employee engagement

http://en.wikipedia.org/wiki/Perceived_organizational_support

This website give information regarding organizational support

<http://www.scontrino-powell.com/2011/supervisor-support-a-key-ingredient-in-effective-leadership/>

This website give information regarding supervisor support.

<http://en.wikipedia.org/wiki/Self-efficacy>

This website give information regarding self-efficacy

<http://sustainabilityadvantage.com/2010/10/12/csr-efforts-correlate-with-employee-engagement/>

RELATIONSHIP BETWEEN EMPLOYMENT AND DEPENDENCY RATIO IN INDIA

Preeti

Ph.D Scholar, Department of Economics,
Kurukshetra University, Kurukshetra

Abstract employment is the major issues of any economy in the world. Today, dependency ratio also plays a very important role in Indian economy. the youth and old dependency ratio is increase in India. According to 2011 census, the dependency ratio is 65.7 percent. The study is use secondary data through the NSSO, CENSUS etc. The purpose of the study is find the relationship between employment and dependency ratio in India, to find out the various troubles faced by the increase of dependency ratio in India.

Key words Employment, Dependency Ratio, GDP

Introduction In research point of view, without visionary and well-policy structured government, countries never make significant contribution on the whole economy in general, virtually India is characterized the high population and dependency ratio which is one of the main causes for poverty and employment. Therefore, many economists and socialists put forwarded their emphasis on the control of population growth and thereby decreasing the dependency ratio. Indeed, age dependency ratio affects economic growth, poverty and employment in India. According to 2011 census, the dependency ratio is 65.7 percent and it is lowest ratio in all the plans. Now, these days, India has 2nd largest country in the world. Working population is huge number of people in these days in India. This paper has tried to find out the relationship between employment and dependency ratio in India.

- **Employment** Employment has featured as an important item in the development agenda in India. There is a continuing debate in India among economists and policy makers on the best measures of labour forces participation and utilization. Problem of employment and unemployment is a very grave and complex problem in India. Rapid growth of population is main reason of unemployment. Employment is the state of engagement of a person in a production work. It may be either self-employment or wage employment. Macro employment scenario in India from 1983 to 2009-10 as revealed the employment is growing constantly and unemployment together with its rate is coming down but the growth of employment is not in pace with population and labour force growth in India. The employment has growth at 0.05% during 2004-05 to 2009-1

Table 1

Five Year Plan	GDP Growth Rate (in per cent)	Employment growth (in per cent)
1 st Plan (1951-56)	3.6	0.39
2 nd Plan (1956-61)	4.3	0.87
3 rd Plan (1961-66)	2.8	2.03
4 th Plan (1969-74)	3.3	1.99
5 th Plan (1974-78)	4.8	1.84
6 th Plan (1980-85)	5.7	1.89
7 th Plan (1985-90)	6.0	1.26
8 th Plan (1992-97)	6.8	1.86
9 th Plan (1997-02)	5.4	1.14
10 th Plan (2002-07)	7.6	1.23
11 th Plan (2007-12)	8.0	1.82

Sources: Economic Survey of India.

Dependency ratio The number of non-working age persons in a community dependent on working age persons can be expressed as a ‘dependency ratio’ – the number of person aged less than 15 years and 60 and over divided by the number of persons aged 15 to 59. In India, dependency ratio was 652 persons per 1000 persons in 2011. It gives the proportions of persons whom the person is economically active age group need to support. It gives some working age person in order to provide for non-working age persons. The ratio can be further separated into two components, namely the young dependency ratio (person aged 60 and over divided by persons aged 15-59). In India, young dependency ratio and old dependency ratio were 510 and 142 persons per 1000 persons respectively 2011. Reduced in dependency ratio indicates a phase of population transition where a higher percentage of persons in the working age group may translate into higher per capital income for the economy.

Table 3

Census	Age Group of population (in per cent)			Dependency Ratio (in per cent)	GDP (at factor cost in current price) in crore
	0-14	15-59	60- 60 above		
1951	37.4	56.9	5.7	75.74	9547
1961	41.0	53.3	5.7	87.61	16220
1971	42.0	52.0	6.0	92.3	42222
1981	39.7	54.1	6.2	84.84	130176
1991	37.3	55.5	7.2	80.18	510954
2001	35.3	56.9	7.72	75.65	1925017
2011	30.7	60.3	8.94	65.7	7248859

Sources: Census of India.

According to table 3, dependency ratio is decreasing in India. These days, working population (15-59) is high and young and old age group is low. We can say that dependency ratio is decreasing in India. According to 1971 census, dependency ratio is 92.3 per cent. First of all, it is increase and after that it is decrease in India.

Relationship between employment and dependency ratio General theory tells us that lower the labor productivity lower the economic growth and higher the unemployment and poverty. On the contrary, high dependency ratio in India leads to lower productivity of such labor force As higher rate of economic growth pay the way the sustained and stable increase in productive capacity, employment opportunities with rising productivity are generated. GDP and employment correlation coefficient (r) is 0.08 and to interpret its value, there is weak positive relationship between them in India. In fact, this enables country to absorb more employees in the production and allied activities and thereby decreasing under and unemployment. In this process poor could definitely be able to achieve higher productivity and increase their income in their existing occupations or to obtain new jobs with better remuneration than before. As a matter of fact, employees getting better remuneration than before would make possible to spent more income on nutritional food, education and health care of their children which will enhance the productivity of workforce and also decrease the dependency ratio via education and awareness. Moreover, the effective family planning and re-productive health program can enhance women's human capital and productivity and the gains in productivity due to a program-induced decrease in fertility and slowing of population growth appear to have promoted development (Schults, 2009). However, this study obviously highlights the fact that there is association among poverty, economic growth, and employment and dependency ratio.

Table 4

Correlation Coefficient				
	GDP		Employment	Dependency Ratio
GDP	1.00		0.08	-0.49*

(Note:- *values are significant at 5% significance level)

There would generally be relationship among the economic growth, poverty, employment and high population or age dependency ratio. It is noted the fact that poverty and unemployment are very high whereas economic growth is very low and unstable in India. According to table 3, GDP and Dependency Ratio are also link to each other and find the correlation coefficient. It is -0.49. To interpret this value, a weak and negative linear relationship between them. What is the important fact is that in addition to economic growth and unemployment, dependency ratio due to high population of India highly affects the poverty

Conclusion The paper has scrutinized the relationship among employment and dependency ratio in India. Policy makers and competent authority should concentrate their attention on the population control and generating active population in a country. The providing better basic education, health and awareness are active remedies for this issues and thereby reducing population growth and dependency ratio. Further, as this growth is associated with more labour intensive technology, employment opportunities will definitely increase which lead to decrease in dependency ratio. Thus stable economic growth with increase in labour productivity and labour intensive technology is an active remedy for solving this problem. India which has more employment opportunities in industrial sector has had less dependency ratio in comparison with agricultural countries. Therefore, as indicated, India should give more priorities for the development of cottage,

micro, small and medium industrial development.

Reference

- Datt and Sundharam. Indian Economy, 64th. ed. New Delhi: GauravDutt and AshwaniMahajan S. Chand andCompany Ltd
- Hyung J. 2013. "An Analysis on Effect of Old Dependency Ratio on Domestic Saving Rate" Dept. of Economics, University of California, Berkeley
- Klasen, S., and T. Nestmann. 2006. "Population, Population Density and Technological Change."Journal of Population Economics19(3):611-626.
- Saxena, N.C. "Poverty Estimates for 1999-2000" Press Information Bureau, Govt. of India.Sundasam K. and Suresh D. Tendulkar, 2002. " The Working Poor In India: Employment- Poverty Linkages and Employment Policy Options"
- Sources: Economic survey in (2014-15), Ministry of statistics and Programme Implementation Govt. of India and Office of Register General of India, Ministry of Home affairs.

PERIODIC AND FIXED POINT THEOREMS IN d-COMPLETE TOPOLOGICAL SPACES

SAVITA SHARMA

Abstract

The present paper deals with extension and derived briefly theorem existence of periodic points and uniqueness of common fixed point on self maps of d-complete topological spaces which introduced by Hicks. The material of this paper is mainly derived from the paper of Harder and Saliga, which extended and improved the results due to Hicks and Hicks & Rhoades.

Keywords: Periodic and Fixed Point Theorem, d-Complete Topological Space

Introduction

This paper deals with existence of periodic points and uniqueness of common fixed point on self maps of d-complete topological spaces which introduced by Hicks [5], in 1992.

The material of this paper is mainly derived from the paper of Harder and Saliga [3] which extended and improved the results due to Hicks [5] and Hicks and Rhoades [4].

Paper Description

Notation (i) :w.l.s.c. denotes the weak lower semi-continuous.

(ii): The set $O(x, \infty) = \{x, Tx, T^2x, \dots\}$ denotes the orbit of x .

Theorem 1: Suppose $T : X \rightarrow X, n : X \rightarrow N$ and $\varphi : X \rightarrow [0, \infty)$, where $(X, \square \square)$ is a d-complete topological space. If, for some $x_0 \in X$, the sequence $S = \{x_n\}_{n=0}^\infty$ defined by $x_{n+1} = T^{n(x_n)}x_n$ satisfies

$d(y, T^{n(y)}y) \leq \varphi(y) - \varphi(T^{n(y)}y)$ for each $y \in S$, then we have

(c) $\lim x_n = p$ exists, and

(d) $T^{n(p)}p = p$ if and only if $G(x) = d(x, T^{n(x)}x)$ is T-orbitally w.l.s.c. relative to x_0 .

Proof : As $x_{n+1} = T^{n(x_n)}x_n$ for $n = 0, 1, \dots$, we obtain

$$d(x_n, x_{n+1}) = d(x_n, T^{n(x_n)}x_n) \leq \varphi(x_n) - \varphi(x_{n+1}).$$

For $m \geq 0$,

$$\begin{aligned} \sigma_m &= \sum_{n=0}^m d(x_n, x_{n+1}) \leq \sum_{n=0}^m [\varphi(x_n) - \varphi(x_{n+1})] \\ &= \{\varphi(x_0) - \varphi(x_1)\} + \{\varphi(x_1) - \varphi(x_2)\} + \dots + \{\varphi(x_m) - \varphi(x_{m+1})\} \\ &= \varphi(x_0) - \varphi(x_{m+1}) \leq \varphi(x_0). \end{aligned}$$

The sequence $\{\sigma_m\}_{m=0}^\infty$ of partial sums of the infinite series $\sum_{n=0}^\infty d(x_n, x_{n+1})$ is a non-decreasing

sequence bounded above by $\varphi(x_0)$ and thus converges. As X is d-complete, we obtain

$\lim x_n = p$ for some $p \in X$ and hence (a) is proved.

If $T^{n(p)}p = p$, then

$$\begin{aligned} G(p) &= d(p, T^{n(p)} p) = 0 \\ &\leq \limsup d(x_n, T^{n(x_n)} x_n) \\ &= \limsup G(x_n). \end{aligned}$$

Assume that $G(p) \leq \limsup G(x_n)$.

Now, $G(x_n) = d(x_n, x_{n+1}) \rightarrow 0$ as $n \rightarrow \infty$ as $\sum_{n=0}^{\infty} d(x_n, x_{n+1}) < \infty$.

Thus, $G(p) = d(p, T^{n(p)} p) = 0$.

Hence p is a periodic point of T and thus (b) holds.

Corollary 1: Let X be a d -complete topological space. Suppose $T: X \rightarrow X$ and $\varphi: X \rightarrow [0, \infty)$. Suppose there exists an x_0 such that

$$d(y, Ty) \leq \varphi(y) - \varphi(Ty) \text{ for all } y \in O(x_0, \infty).$$

Then we have:

(1) $\lim T^n x = p$ exists;

(2) $Tp = p$ if and only if $G(x) = d(x, Tx)$ is T -orbitally lower semi-continuous at x_0 .

Proof : Suppose $S = x_0, Tx_0, T^2 x_0, \dots$, and $n: X \rightarrow N$, defined by $n(x) = 1$ for every $x \in X$.

Then, by Theorem 1, the results hold.

Corollary 2: Suppose $T: X \rightarrow X$ and $n: X \rightarrow N$, where $(X, \square \square)$ is a d -complete topological space. If for some $x_0 \in X$, the sequence $S = \{x_n\}_{n=0}^{\infty}$ defined by $x_{n+1} = T^{n(x_n)} x_n$

satisfies $d(z, w) \leq kd(y, z)$ for each $y \in S$, where $k \in (0, 1)$, $z = T^{n(y)} y$ and $w = T^{n(z)} z$, then

(a) $\lim x_n = p$ exists, and

(b) $T^{n(p)} p = p$ if and only if $G(x) = d(x, T^{n(x)} x)$ is T -orbitally w.l.s.c. relative to x_0 .

Proof : Put $\varphi(y) = \frac{1}{1-k} d(y, T^{n(y)} y)$ for $y \in S$.

Now, $d(z, w) \leq kd(y, z)$

implies $d(y, z) - d(z, w) \geq (1-k)d(y, z)$,

or $\frac{1}{1-k} [d(y, z) - d(z, w)] \geq d(y, z)$.

Now again, $\frac{1}{1-k} d(y, z) = \frac{1}{1-k} d(y, T^{n(y)} y) = \varphi(y)$

and

$$\frac{1}{1-k} d(z, w) = \frac{1}{1-k} d(T^{n(y)} y, T^{n(T^{n(y)} y)} (T^{n(y)} y)) = \varphi(T^{n(y)} y).$$

Hence, $d(y, T^{n(y)} y) \leq \varphi(y) - \varphi(T^{n(y)} y)$ for each $y \in S$.

By Theorem 1, the results hold.

We note that corollary (1) is generalized of corollary (2) of Hicks [5]. Theorems 1 and 2 are extensions of the results due to Ciric [1] of fixed point theorems for quasi-metric spaces to d -complete topological spaces.

Theorem 2: Suppose $T: X \rightarrow X, n: X \rightarrow N$ and $\varphi: X \rightarrow [0, \infty)$, where $(X, \square \square)$ is a d -complete topological space. If for some $x_0 \in X$, the sequence $S = \{x_n\}_{n=0}^{\infty}$ defined by $x_{n+1} = T^{n(x_n)} x_n$ satisfies

- (i) $d(y, T^{n(y)}y) \leq \varphi(y) - \varphi(T^{n(y)}y)$ for each $y \in S$ and for all $y \in CI[0(x_0, \infty)]$;
 (ii) $y \neq Ty$ implies $\varphi(T^m y) < \varphi(y)$ for some positive integer $m = m(y)$, then T has a fixed point.

Theorem 3: Suppose $S, T: X \rightarrow X$ and $\varphi: X \rightarrow [0, \infty)$, where (X, \square, \square) is a d-complete topological space. If $x_0 \in X$ such that

$$d(y, Ty) + d(Ty, STy) \leq \varphi(y) - \varphi(STy) \text{ for all } y \in O_{ST}(x_0, \infty),$$

where $O_{ST}(x_0, \infty) = \{x_0, Tx_0, STx_0, T(ST)x_0, \dots, (ST)^n x_0, T(ST)^n x_0, \dots\}$.

Then we have

- (i) $\lim(ST)^n x_0 = \lim T(ST)^n x_0 = p$ exists, and
 (ii) $Tp = p = Sp$ if and only if $G_1(x) = d(x, Tx)$ and $G_2(x) = d(x, Sx)$ are (S, T) -orbitally w.l.s.c. relative to x_0 .

Proof : Let us consider the sequence $\{z_n\}_{n=0}^\infty$ by

$$z_{2k} = (ST)^k x_0 \text{ and } z_{2k+1} = T(ST)^k x_0 \text{ (k = 0, 1, 2, \dots)}.$$

For $m = 2k+1$

$$\begin{aligned} \sigma_m &= \sum_{n=0}^{2k+1} d(z_n, z_{n+1}) \\ &= [d(x_0, Tx_0) + d(Tx_0, STx_0)] + [d(STx_0, T(ST)x_0) + d(T(ST)x_0, (ST)^2 x_0)] \\ &+ \dots + [d((ST)^k x_0, T(ST)^k x_0) + d(T(ST)^k x_0, (ST)^{k+1} x_0)] \\ &\leq [\varphi(x_0) - \varphi(STx_0)] + [\varphi(STx_0) - \varphi((ST)^2 x_0)] + \dots + [\varphi((ST)^k x_0) - \varphi((ST)^{k+1} x_0)] \\ &= \varphi(x_0) - \varphi((ST)^{k+1} x_0) \leq \varphi(x_0). \end{aligned}$$

Again, for any $m = 2k$,

$$\begin{aligned} \sigma_m &= \sum_{n=0}^{2k} d(z_n, z_{n+1}) \\ &\leq \left(\sum_{n=0}^{2k} d(z_n, z_{n+1}) \right) + d(z_{2k+1}, z_{2k+2}) \\ &= \sigma_{2k+1} \leq \varphi(x_0). \end{aligned}$$

The sequence $\{\sigma_m\}_{m=0}^\infty$ of partial sums of the infinite series $\sum_{n=0}^\infty d(z_n, z_{n+1})$ is a non-decreasing sequence which is bounded above by $\varphi(x_0)$ and thus converges. As X is d-complete, there exists $p \in X$ such that $z_n \rightarrow p$ as $n \rightarrow \infty$.

Thus,

$$\lim (ST)^n x_0 = \lim T(ST)^n x_0 = p.$$

Assume that G_1 is (S, T) -orbitally w.l.s.c. relative to x_0 .

$$G_1(z_{2k}) = d(z_{2k}, Tz_{2k})$$

$$= d(z_{2k}, z_{2k+1}) \rightarrow 0 \text{ as } k \rightarrow \infty \text{ as } \sum_{n=0}^\infty d(z_n, z_{n+1}) < \infty.$$

Now, in $O_{ST}(x_0, \infty)$, $\{z_{2k}\}_{k=0}^\infty$ is a sequence such that $z_{2k} \rightarrow p$ as $k \rightarrow \infty$.

Hence, $G_1(p) \leq \lim \sup G_1(z_{2k}) = 0$.

Therefore, $d(p, Tp) = G_1(p) = 0$ implies $p = Tp$.

Also, $d(p, Tp) = 0$ implies $G_1(x) = d(x, Tx) \geq 0 = G_1(p)$ for all $x \in X$.

Thus G_1 is w.l.s.c. relative to x_0 .

Similarly, $p = Sp$ implies G_2 is w.l.s.c. relative to x_0 .

Assume that G_2 is (S, T) -orbitally w.l.s.c relative to x_0 . Now, in $O_{ST}(x_0, \infty)$, $\{z_{2k+1}\}_{k=0}^\infty$ is a sequence such that $z_{2k+1} \rightarrow p$ as $k \rightarrow \infty$.

Therefore, $G_2(p) \leq \limsup G_2(z_{2k+1})$.

However,

$$\begin{aligned} G_2(z_{2k+1}) &= d(z_{2k+1}, Sz_{2k+1}) \\ &= d(T(ST)^k x_0, (ST)^{k+1} x_0) \\ &= d(z_{2k+1}, z_{2k+2}) \rightarrow 0 \text{ as } k \rightarrow \infty, \text{ as } \sum_{n=0}^\infty d(z_n, z_{n+1}) < \infty. \end{aligned}$$

Hence,

$$G_2(p) \leq 0 \text{ implies } d(p, Sp) = G_2(p) = 0$$

Thus, $p = Sp$. This completes the proof.

Theorem 4: Let $\{T_n\}_{n=1}^\infty$ be a sequence of self mappings of a d -complete topological space (X, \square, \square) satisfying $d(T_1x, T_1y) \leq \varphi(\max\{d(x, y), d(x, T_1x), d(y, T_1y), d(y, T_1x)\})$ for all $x, y \in X$, where d is continuous, $\varphi: [0, \infty) \rightarrow [0, \infty)$, $\varphi(0) = 0$, φ is non decreasing and upper semi-continuous and $\varphi(t) < t$ for all $t > 0$. Then the sequence $\{T_n\}_{n=1}^\infty$ has a unique common fixed point in X if and only if there exists $x_0 \in X$ such that

$$\sum_{n=0}^\infty \varphi^n(d(x_0, T_1x_0)) < \infty \text{ where } \varphi^2(t) = \varphi(\varphi(t)).$$

Proof : If there exists $p \in X$, such that $p = T_n p$ for $n = 1, 2, 3, \dots$, then,

$$\sum_{n=0}^\infty \varphi^n(d(p, T_1p)) = \sum_{n=0}^\infty \varphi^n(0) = 0.$$

Assume there exist $x_0 \in X$ such that

$$\sum_{n=0}^\infty \varphi^n(d(x_0, T_1x_0)) < \infty.$$

Consider the sequence $\{x_n\}_{n=1}^\infty$, defined by $x_n = T_n x_{n-1}$, $n = 1, 2, 3, 4, \dots$.

$$\begin{aligned} \text{Now, } d(x_1, x_2) &= d(T_1x_0, T_2x_1) \\ &\leq \varphi(\max\{d(x_0, x_1), d(x_0, T_1x_0), d(x_1, T_2x_1), d(x_1, T_1x_0)\}) \\ &= \varphi(\max\{d(x_0, x_1), d(x_0, x_1), d(x_1, x_2), d(x_1, x_1)\}) \\ &= \varphi(\max\{d(x_0, x_1), d(x_1, x_2)\}). \end{aligned}$$

If $d(x_1, x_2) = 0$, then

$$d(x_1, x_2) = 0 \leq \varphi(d(x_0, x_1)).$$

If $d(x_1, x_2) > 0$, then we also obtain

$$d(x_1, x_2) \leq \varphi(d(x_0, x_1)).$$

Assume that

$$\max\{d(x_0, x_1), d(x_1, x_2)\} = d(x_1, x_2).$$

Then, $d(x_1, x_2) \leq \varphi(d(x_1, x_2)) < d(x_1, x_2)$ which is a contradiction.

Hence, $\max\{d(x_0, x_1), d(x_1, x_2)\} = d(x_0, x_1)$

and

$$d(x_1, x_2) \leq \varphi(d(x_0, x_1)).$$

Also,

$$\begin{aligned} d(x_2, x_3) &= d(T_2x_1, T_3x_2) \\ &\leq \varphi(\max\{d(x_1, x_2), d(x_1, T_2x_1), d(x_2, T_3x_2), d(x_2, T_2x_1)\}) \\ &= \varphi(\max\{d(x_1, x_2), d(x_1, x_2), d(x_2, x_3), d(x_2, x_2)\}) \\ &= \varphi(\max\{d(x_1, x_2), d(x_2, x_3)\}) \\ &= \varphi(d(x_1, x_2)) \\ &\leq \varphi(\varphi(d(x_0, x_1))) = \varphi^2(d(x_0, x_1)) \end{aligned}$$

as φ is non decreasing.

Continuing in this way, we obtain

$$d(x_n, x_{n+1}) \leq \varphi^n d(x_0, x_1).$$

$$\text{As, } \sum_{n=0}^{\infty} \varphi^n (d(x_0, x_1)) = \sum_{n=0}^{\infty} \varphi^n (d(x_0, T_1x_0)) < \infty,$$

$$\text{then, } \sum_{n=0}^{\infty} d(x_n, x_{n+1}) < \infty.$$

Since X is d -complete, so $x_n \rightarrow x$ as $n \rightarrow \infty$ for any $x \in X$.

For any fixed $n \in \mathbb{N}$,

$$\begin{aligned} d(x_{m+1}, T_n x) &= d(T_{m+1}x_m, T_n x) \\ &\leq \varphi(\max\{d(x_m, x), d(x_m, T_{m+1}x_m), d(x, T_n x), d(x, T_{m+1}x_m)\}) \\ &= \varphi(\max\{d(x_m, x), d(x_m, x_{m+1}), d(x, T_n x), d(x, x_{m+1})\}). \end{aligned}$$

Since φ is upper semi continuous and d is continuous, letting $m \rightarrow \infty$ which gives

$$\begin{aligned} d(x, T_n x) &\leq \varphi(\max\{d(x, x), d(x, T_n x)\}) \\ &= \varphi(d(x, T_n x)). \end{aligned}$$

If $d(x, T_n x) > 0$, then $\varphi(d(x, T_n x)) < d(x, T_n x)$, which is a contradiction.

Hence, $x = T_n x$ for $n = 1, 2, 3, 4, \dots$

Uniqueness, for the uniqueness, let us suppose that x and y are two common fixed point of sequence $\{T_n\}_{n=1}^{\infty}$ with $x \neq y$.

Then, we obtain

$$\begin{aligned} d(x, y) &= d(T_n x, T_n y) \\ &\leq \varphi(\max\{d(x, y), d(x, T_n x), d(y, T_n y), d(y, T_n x)\}) \\ &= \varphi(\max\{d(x, y), 0, d(y, x)\}) \\ &= \varphi(d(x, y)). \end{aligned}$$

As $d(x, y) > 0$, this implies that $\varphi(d(x, y)) < d(x, y)$.

Similarly, $d(y, x) \leq \varphi(d(x, y))$.

$$\text{Hence, } d(x, y) \leq \varphi(d(y, x)) < d(y, x) \leq \varphi(d(x, y)) < d(x, y),$$

which is a contradiction.

Hence, our supposition is wrong.

Therefore, the common fixed point is unique.

Theorem 5: Let $\{T_n\}_{n=1}^\infty$ be a sequence of self mappings of a d-complete topological space (X, \square, \square) satisfying $d(T_i x, T_j y) \leq h \max\{d(x, y), d(x, T_i x), d(y, T_j y), d(y, T_i x)\}$ for all $x, y \in X$, where $0 \leq h < 1$ and d is continuous. Then the sequence $\{T_n\}_{n=1}^\infty$ has a unique common fixed point in X .

Proof: Suppose $\varphi(t) = ht$ for $t \geq 0$. Since $\varphi(0) = 0$, φ is continuous and non-decreasing. As $0 \leq h < 1$, $\varphi(t) = ht < t$ for all $t > 0$.

Let $x_0 \in X$. Then

$$\sum_{n=1}^{\infty} \varphi^n(d(x_0, T_1 x_0)) = \sum_{n=1}^{\infty} h^n d(x_0, T_1 x_0) < \infty \text{ as } 0 \leq h < 1.$$

By Theorem 4, we have a unique common fixed point for $\{T_n\}_{n=1}^\infty$ and the sequence $\{x_n\}_{n=0}^\infty$ is defined by

$$x_n = T_n x_{n-1} \text{ for } n = 1, 2, 3, \dots,$$

converges to this fixed point.

Theorem 6: Let A, B, S and T be mapping from a d-complete topological space (X, \square, \square) into itself satisfying the following conditions :

- (a) $A(X) \subset T(X)$ and $B(X) \subset S(X)$,
- (b) $d(Ax, By) \leq \varphi(\max\{d(Ax, Sx), d(By, Ty), d(Sx, Ty)\})$ for all $x, y \in X$, where $\varphi: [0, \infty) \rightarrow [0, \infty)$, $\varphi(0) = 0$, φ is non decreasing, φ is upper semi-continuous and $\varphi(t) < t$ for $t > 0$,
- (c) One of A, B, S or T is w-continuous,
- (d) Pairs A, S and B, T are compatible on X ,
- (e) d is a continuous symmetric.

Then A, B, S and T have a unique common fixed point in X if and only if there exist $x_0,$

$$x_1 \in X \text{ such that } Ax_0 = Tx_1 \text{ and } \sum_{n=0}^{\infty} \varphi^n(d(Ax_0, Bx_1)) < \infty.$$

Proof: If A, B, S and T have a common fixed point $q \in X$, then $Aq = Tq$

$$\text{and } \sum_{n=0}^{\infty} \varphi^n(d(Aq, Bq)) = \sum_{n=0}^{\infty} \varphi^n(0) = 0.$$

Assume there exist $x_0, x_1 \in X$ such that

$$Ax_0 = Tx_1 \text{ and } \sum_{n=0}^{\infty} \varphi^n(d(Ax_0, Bx_1)) < \infty.$$

Select $x_2 \in X$ such that $Sx_2 = Bx_1$ and $x_3 \in X$ such that $Tx_3 = Ax_2$.

Continuing in this way, we can obtain a sequence $\{y_n\}_{n=0}^\infty$ in X such that

$$y_{2n+1} = Tx_{2n+1} = Ax_{2n}$$

and $y_{2n} = Sx_{2n} = Bx_{2n-1}$ for $n = 1, 2, 3, \dots$.

Now,

$$\begin{aligned} d(y_{2n}, y_{2n+1}) &= d(y_{2n+1}, y_{2n}) \\ &= d(Ax_{2n}, Bx_{2n-1}) \\ &\leq \varphi(\max\{d(Ax_{2n}, Sx_{2n}), d(Bx_{2n-1}, Tx_{2n-1}), d(Sx_{2n}, Tx_{2n-1})\}) \end{aligned}$$

$$= \varphi(\max\{d(y_{2n+1}, y_{2n}), d(y_{2n}, y_{2n-1})\}) \cdot$$

If $d(y_{2n}, y_{2n+1}) = 0$, then

$$\max\{d(y_{2n+1}, y_{2n}), d(y_{2n}, y_{2n-1})\} = d(y_{2n}, y_{2n-1}),$$

so that

$$\varphi(y_{2n}, y_{2n+1}) \leq \varphi(d(y_{2n}, y_{2n-1})).$$

If $d(y_{2n}, y_{2n+1}) > 0$, then

$$\varphi(d(y_{2n}, y_{2n+1})) < d(y_{2n}, y_{2n-1}).$$

Assume that

$$\max\{d(y_{2n+1}, y_{2n}), d(y_{2n}, y_{2n-1})\} = d(y_{2n+1}, y_{2n}).$$

Then we obtain

$$d(y_{2n+1}, y_{2n}) \leq \varphi(d(y_{2n+1}, y_{2n})) < d(y_{2n+1}, y_{2n}),$$

which is a contradiction.

Hence, $\max\{d(y_{2n+1}, y_{2n}), d(y_{2n}, y_{2n-1})\} = d(y_{2n}, y_{2n-1})$

and $d(y_{2n}, y_{2n+1}) \leq \varphi(d(y_{2n}, y_{2n-1}))$.

Similarly,

$$\begin{aligned} d(y_{2n+1}, y_{2n+2}) &= d(Ax_{2n}, Bx_{2n+1}) \\ &\leq \varphi(\max\{d(Ax_{2n}, Sx_{2n}), d(Bx_{2n+1}, Tx_{2n+1}), d(Sx_{2n}, Tx_{2n+1})\}) \\ &= \varphi(d(y_{2n+1}, y_{2n})). \end{aligned}$$

Then we have

$$d(y_n, y_{n+1}) \leq \varphi(d(y_n, y_{n-1})) \text{ for } n = 2, 3, 4, \dots$$

It follows that

$$d(y_n, y_{n+1}) \leq \varphi^{n-1} d(y_2, y_1) \text{ for } n = 1, 2, 3, \dots, \text{ as } \varphi \text{ is non-decreasing.}$$

Hence,

$$\begin{aligned} \sum_{n=1}^{\infty} d(y_n, y_{n+1}) &\leq \sum_{n=1}^{\infty} \varphi^{n-1} (d(y_2, y_1)). \\ &= \sum_{n=0}^{\infty} \varphi^n (d(Bx_1, Ax_0)) < \infty, \end{aligned}$$

implies that there exists $p \in X$ such that $y_n \rightarrow p$ for $n \rightarrow \infty$.

Since $\{Tx_{2n+1}\}_{n=1}^{\infty}, \{Ax_{2n}\}_{n=1}^{\infty}, \{Sx_{2n}\}_{n=1}^{\infty}$ and $\{Bx_{2n-1}\}_{n=1}^{\infty}$ are subsequences of $\{y_n\}_{n=1}^{\infty}$, they each converge to p .

Assume S is w -continuous, then

$$S^2x_{2n} \rightarrow Sp \text{ as } n \rightarrow \infty.$$

For $n \rightarrow \infty$, we obtain

$$ASx_{2n} \rightarrow Sp \text{ as } S \text{ and } A \text{ are compatible.}$$

Now,

$$d(ASx_{2n}, Bx_{2n-1}) \leq \varphi(\max\{d(ASx_{2n}, S^2x_{2n}), d(Bx_{2n-1}, Tx_{2n-1}), d(S^2x_{2n}, Tx_{2n-1})\}).$$

Since d is continuous, S is w -continuous and ϕ is upper semi continuous, then for $n \rightarrow \infty$ gives

$$\begin{aligned} d(Sp, p) &\leq \varphi(\max\{d(Sp, Sp), d(p, p), d(Sp, p)\}) \\ &= \varphi(d(Sp, p)). \end{aligned}$$

If $d(Sp, p) > 0$, then $\varphi(d(Sp, p)) < d(Sp, p)$,

which is a contradiction.

Hence, $Sp = p$ as $d(Sp, p) = 0$.

Also, $d(Ap, Bx_{2n-1}) \leq \varphi(\max\{d(Ap, Sp), d(Bx_{2n-1}, Tx_{2n-1}), d(Sp, Tx_{2n-1})\})$.

For $n \rightarrow \infty$, we obtain that

$$\begin{aligned} d(Ap, p) &\leq \varphi(\max\{d(Ap, p), d(p, p), d(Sp, p)\}) \\ &= \varphi(d(Ap, p)). \end{aligned}$$

If $d(Ap, p) > 0$, then $\varphi(d(Ap, p)) < d(Ap, p)$, which is a contradiction.

Hence, $Ap = p$.

As $A(X) \subset T(X)$, $p \in T(X)$ and there exists $u \in X$ such that $p = Ap = Tu$.

Now, $d(p, Bu) = d(Ap, Bu)$

$$\begin{aligned} &\leq \varphi(\max\{d(Ap, Sp), d(Bu, Tu), d(Sp, Tu)\}) \\ &= \varphi(d(Bu, p)), \end{aligned}$$

which implies that $Bu = p$.

As B and T are compatible on X and

$$Tu = Bu = p, d(TBu, BTu) = 0$$

and thus,

$$Tp = TBu = BTu = Bp.$$

Now, $d(p, Tp) = d(Ap, Bp)$

$$\begin{aligned} &\leq \varphi(\max\{d(Ap, Sp), d(Bp, Tp), d(Sp, Tp)\}) \\ &= \varphi(d(p, Tp)), \end{aligned}$$

or $Tp = p$.

The proof for T is w -continuous, is similar.

Next, assume that A is w -continuous.

As A and S are compatible on X , Sx_{2n} and A^2x_{2n} converge to Ap as $n \rightarrow \infty$.

Now,

$$d(A^2x_{2n}, Bx_{2n-1}) \leq \varphi(\max\{d(A^2x_{2n}, Sx_{2n}), d(Bx_{2n-1}, Tx_{2n-1}), d(Sx_{2n}, Tx_{2n-1})\})$$

For $n \rightarrow \infty$, we obtain

$$\begin{aligned} d(Ap, p) &\leq \varphi(\max\{d(Ap, Ap), d(p, p), d(Ap, p)\}) \\ &= \varphi(d(Ap, p)). \end{aligned}$$

Hence, $Ap = p$.

Thus, there exists $v \in X$ such that

$$p = Ap = Tv.$$

Now, $d(A^2x_{2n}, Bv) \leq \varphi(\max\{d(A^2x_{2n}, Sx_{2n}), d(Bv, Tv), d(Sx_{2n}, Tv)\})$.

For $n \rightarrow \infty$, we obtain

$$\begin{aligned} d(Ap, Bv) &\leq \varphi(\max\{d(Ap, Ap), d(Bv, p), d(Ap, p)\}) \\ &= \varphi(d(Bv, p)), \end{aligned}$$

implies that $Bv = p$.

As B and T are compatible on X and $Bv = Tv = p$, $d(TBv, BTv) = 0$

and $Tp = TBv = BTv = Bp$.

Now,

$$d(Ax_{2n}, Bp) \leq \varphi(\max\{d(Ax_{2n}, Sx_{2n}), d(Bp, Tp), d(Sx_{2n}, Tp)\}).$$

For $n \rightarrow \infty$, we obtain

$$\begin{aligned} d(p, Bp) &\leq \varphi(\max\{d(p, p), d(Bp, Tp), d(p, Tp)\}) \\ &= \varphi(d(p, Tp)) \\ &= \varphi(d(p, Bp)) \end{aligned}$$

and so $Bp = p$.

As $B(X) \subset S(X)$, so there exists $w \in X$ such that $p = Bp = Sw$.

$$\begin{aligned} \text{Now, } d(Aw, p) &= d(Aw, Bp) \\ &\leq \varphi(\max\{d(Aw, Sw), d(Bp, Tp), d(Sw, Tp)\}) \\ &= \varphi(d(Aw, p)), \end{aligned}$$

implies that $Aw = p$.

As A and S are compatible on X and $Aw = Sw = p$, $d(ASw, SAw) = 0$ and thus

$$Ap = ASw = SAw = Sp.$$

Hence, p is a common fixed point of A, B, S and T .

The proof for B w -continuous is similar.

Uniqueness, we prove the result by contradiction. To the contrary, let us suppose that p and z , $p \neq z$, are two common fixed points of A, B, S and T .

Then

$$\begin{aligned} d(p, z) &= d(Ap, Bz) \\ &\leq \varphi(\max\{d(Ap, Sp), d(Bz, Tz), d(Sp, Tz)\}) \\ &= \varphi(\max\{d(p, p), d(z, z), d(p, z)\}) \\ &= \varphi(d(p, z)), \end{aligned}$$

which is a contradiction, since $d(p, z) > 0$ if $p \neq z$.

Hence, our supposition is wrong.

Thus, the common fixed point of A, B, S and T is unique.

Corollary 3: Let A, B, S and T be mappings from a d -complete topological space (X, \square, \square) into itself satisfying the following conditions:

- (a) $A(X) \subset T(X)$ and $B(X) \subset S(X)$,
- (b) $d(Ax, By) \leq h \max\{d(Ax, Sx), d(By, Ty), d(Sx, Ty)\}$ for all $x, y \in X$ where $0 \leq h < 1$,
- (c) One of A, B, S , or T is w -continuous,
- (d) Pairs A, S and B, T are compatible on X ,
- (e) d is a continuous symmetric.

Then A, B, S and T have a unique common fixed point in X .

References:

- 6. Ciric, Lj. B.: A certain class of maps and fixed point theorems, Publ. L'Inst. Math. (Beograd), 20(1976), 73-77.
- 7. Ciric, Lj. B.: A generalized contraction and fixed point theorems, Publ. Inst. Math. (Beograd), 12(1971), 19-26.
- 8. Harder, A.M. and Saliga, L.M.: Periodic and fixed point theorems in d -complete topological spaces, Indian J. Pure Appl. Math., 26(8) (1995), 787-796.
- 9. Hicks, T.L. and Rhoades, B.E.: Fixed point theorems for d -complete topological spaces II, Math. Japonica, 37(1992), 847-853.
- 10. Hicks, T.L.: Fixed points theorems for d -complete topological spaces I, Internat. J. Math. Math. Sci., 15(1995), 435-440.

SPECTRAL AND X-RAY CRYSTALLOGRAPHIC CHARACTERIZATION OF MONONUCLEAR MIXED-LIGAND COMPLEXES WITH 4-PHENYL-5-PYRIDIN-4-YL-2,4-DIHYDRO-1,2,4-TRIAZOLE-3-THIONE AND ETHYLENEDIAMINE

SATPAL SINGH

PGT CHEMISTRY

GSSS RAMSARA , FATEHABAD HARYANA - 125053

ABSTRACT

1,2,4-Triazoles and their derivatives represent an interesting class of heterocyclic compounds possessing a wide spectrum of biological activities. A large number of 1,2,4-triazoles are known to exhibit bactericidal, fungicidal, antitubercular, analgesic, anti-inflammatory, antitumor, anticonvulsant, antiviral, insecticidal, antidepressant and central nervous system (CNS) activities.

A series of alkyl/aryl-2,4-dihydro-5-(2-furyl)-3H-1,2,4-triazole-3-thione have been reported and the thione form was proposed as the most stable form in solid state. Because of the presence of electronegative elements viz. N and S in 4-phenyl-5-pyridin-4-yl-2,4-dihydro-1,2,4-triazole-3-thione and amine and methylene hydrogens in ethylenediamine, the mixed ligand complexes of this system are expected to form extensive intermolecular and intramolecular hydrogen bonding leading to supramolecular architecture.

KEYWORDS:

Intramolecular, Ethylenediamine, Ligand

INTRODUCTION

Due to the presence of aromatic pyridine ring in the present ligand may lead to the π - π stacking and may contribute to self assembly. In continuation of our studies on metal complexes of substituted 1,3,4-oxadiazole-2-thione with ethylenediamine, this chapter reports first time metal complexes based on 4-phenyl-5-pyridin-4-yl-2,4-dihydro-1,2,4-triazole-3-thione with ethylenediamine and their crystallographic structures.

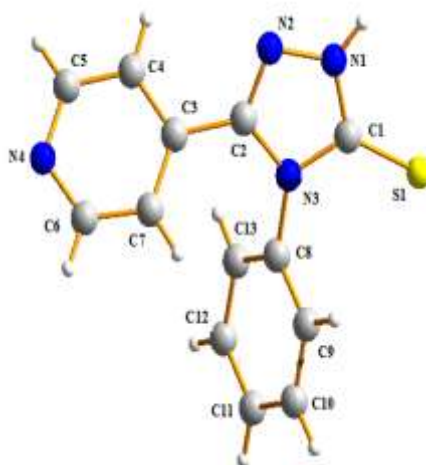


Fig. 1-Phenyl-5-pyridin-4-yl-2,4-dihydro-1,2,4-triazole-3-thione (Hppdtt)

Synthesis of $[Ni(en)_2(ppdt)_2] \cdot 2H_2O$ (1)

A methanol solution (20 mL) of $Ni(OAc)_2 \cdot 4H_2O$ (0.248 g, 1 mmol) was stirred with an aqueous methanol solution (20 mL, 50:50, v/v) of Hppdtt (0.5 g, 2 mmol). The resulting green precipitate was filtered off, washed with mixture of methanol-water (50:50, v/v) and then suspended in methanol to which an excess (0.30 mL, 5 mmol) of ethylenediamine was added and the mixture was stirred until total dissolution of the precipitate was observed. The resulting brown solution was filtered off. Brown crystals of **1** suitable for X-ray analysis were obtained by slow evaporation of the solution over a period of 10 days. Yield: 52%, M.p. 260°C

Synthesis of $[Cu(en)_2(ppdt)_2] \cdot 2H_2O$ (2)

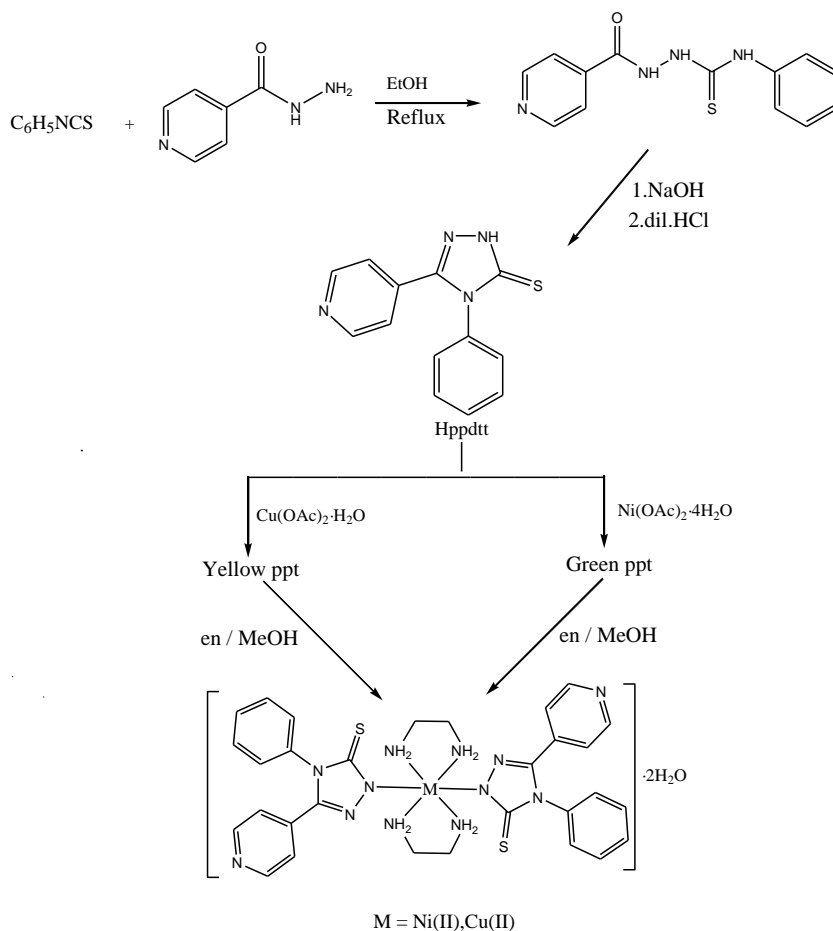
$Cu(OAc)_2 \cdot H_2O$ (0.200 g, 1 mmol) and Hppdtt (0.5 g, 2 mmol) were dissolved separately in 20 mL methanol, mixed together and stirred for 1h. The yellow precipitate was filtered off, washed successively with methanol-water mixture (50:50, v/v) and finally with methanol. A methanolic solution of (10 mL) of ethylenediamine (0.30 mL, 5 mmol) was added to the suspension of the above compound and stirred for 1h. A clear dark blue solution was obtained which was filtered and kept for crystallization. Dark blue crystals of **2** suitable for X-ray analysis were obtained by slow evaporation of the solution over a period of 5 days. Yield: 62%, M.p.180°C.

Crystal structure determination and structure refinement

Preliminary examination and intensity data for the structures **1** and **2** were obtained at 293(2) K on Oxford diffraction Xcaliber Eros diffractometer equipped with a CrysAlis Pro., using graphite mono-chromated Mo $K\alpha$ ($\lambda=0.71073 \text{ \AA}$) radiation. The structures of compounds **1** and **2** were solved by direct methods (SHELXL-2008) and refined against all data by full matrix least-squares on F^2 using anisotropic displacement parameters for all non-hydrogen atoms. All the hydrogen atoms were included in the refinement at geometrically ideal positions and refined with a riding model. The MERCURY package, DIAMOND program and ORTEP-3 for windows program were used for generating molecular structure.

Results and discussion

In continuation of our studies on metal complexes of substituted 1,3,4-oxadiazole-2-thione with ethylenediamine, this chapter reports herein synthesis, spectroscopic and X-ray studies of two new Ni(II) and Cu(II) complexes based on a new heterocyclic ligand 4-phenyl-5-pyridin-4-yl-2,4-dihydro-1,2,4-triazole-3-thione. Analytical data and physical properties of Hppdtt and complexes are given in Table 1.



Scheme 1 Preparation of Hppdt and complexes 1 and 2

Table 1 Analytical data and physical properties of the Hppdt and complexes

Compound	F.W	Color/Yield (%)	.p. (°C)	Found (Calcd) %		
				C	H	N
Hppdt	254.31	Green/65	5	61.43 (61.40)	4.01 (3.96)	21.98 (22.03)
[Ni(en) ₂ (ppdt) ₂].2H ₂ O	721.55	Brown/52	60	49.98 (49.93)	5.29 (5.30)	23.37 (23.29)
[Cu(en) ₂ (ppdt) ₂].2H ₂ O	726.41	Blue/62	80	49.50 (49.60)	5.30 (5.27)	23.15 (23.13)

¹H and ¹³C NMR spectra

The ¹H NMR spectrum of Hppdt in DMSO-d₆ shows a signal at 7.28 ppm for one NH proton. The phenyl ring protons are observed at 7.26, 7.15 and 7.13 ppm while the pyridine rings protons at 8.46 and 7.46 ppm. The occurrence of ¹³C NMR signals at 147.92 C(5,6); 120.71 C(4,7); 135.93 C(3) for pyridine ring; 134.54 C(8); 128.49 C(9);

128.99 C(10,12); 128.26 C(11) ppm for phenyl ring and 148.24 C(1); 169.91 C(2) ppm for triazole carbon suggest the presence of a 1,2,4-triazole moiety in Hppdtt.

Table 2¹H NMR spectral data (δ, ppm) of Hppdtt

Compound	NH	Pyridine ring	Phenyl ring
Hppdtt	7.28 (1H)	8.46 (2H), 7.46 (2H)	7.26 (2H), 7.15 (1H), 7.13 (2H)

Table 3¹³C NMR spectral data (δ, ppm) of Hppdtt

Compound	Pyridine ring	Phenyl ring	Triazole ring
Hppdtt	147.92 C(5,6), 120.71 C(4,7), 135.93 C(3)	134.54 C(8), 128.49 C(9), 128.99 C(10,12), 128.26 C(11)	148.24 C(1), 169.91 C(2)

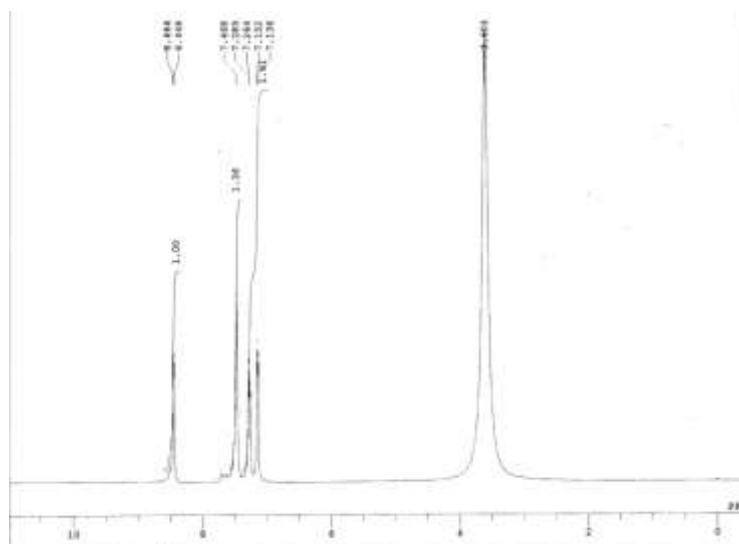


Fig. 2¹H NMR spectrum of Hppdtt

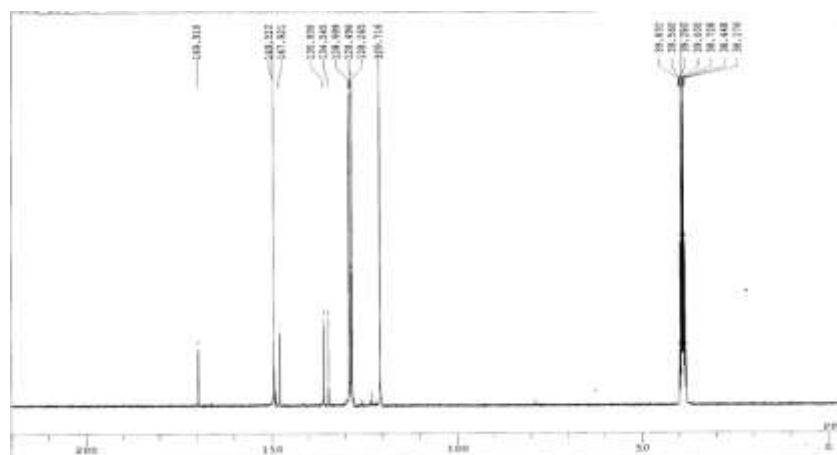


Fig. 3¹³C NMR spectrum of Hppdtt

IR spectra:

The absorptions in the region of 3300-3200 cm^{-1} are due to the NH stretching vibrations of en. This band occurs at a lower frequency than that reported for other en complexes and indicates the involvement of NH_2 hydrogen in hydrogen bonding. The spectrum of free Hppdt in thione form is expected to give rise to characteristic bands due to $\nu(\text{NH})$, $\nu(\text{C}=\text{N})$ and $\nu(\text{C}=\text{S})$ which occur at 3122, 1606 and 1003 cm^{-1} , respectively. The bands at 771 and 692 cm^{-1} are due to the pyridine and phenyl rings, respectively. The absence of $\nu(\text{NH})$ and presence of $\nu(\text{C}=\text{S})$ at almost the same position suggests bonding of triazole nitrogen and the uncoordinated nature of triazole sulfur in complexes **1** and **2**.

Table 3 IR spectral bands (nm) and their assignments for Hppdt and complexes **1** and **2**.

Compound	$\nu(\text{N-H})$	$\nu(\text{C}=\text{S})$	$\nu(\text{C}=\text{N})$	Pyridine ring	Phenyl ring
Hppdt	3032	-	1606	771	692
$[\text{Ni}(\text{en})_2(\text{ppdt})_2] \cdot 2\text{H}_2\text{O}$	-	1003	1600	772	698
$[\text{Cu}(\text{en})_2(\text{ppdt})_2] \cdot 2\text{H}_2\text{O}$	-	1003	1600	772	696

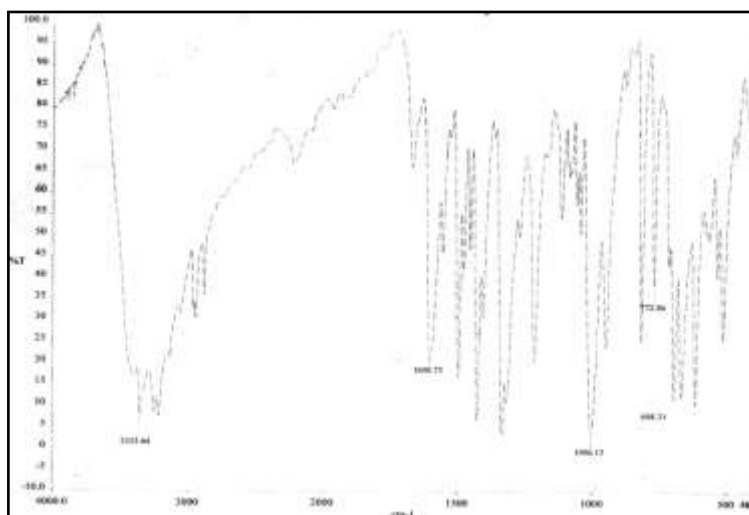


Fig.4 IR spectrum of $[\text{Ni}(\text{en})_2(\text{ppdt})_2] \cdot 2\text{H}_2\text{O}$

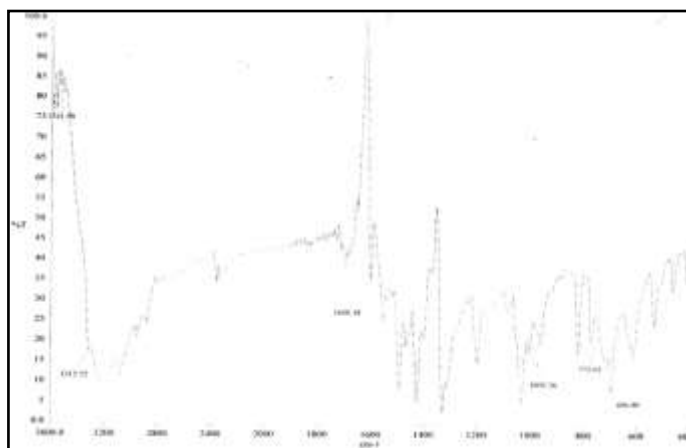


Fig.5 IR spectrum of $[\text{Cu}(\text{en})_2(\text{ppdt})_2] \cdot 2\text{H}_2\text{O}$

Electronic spectra and magnetic moments

The magnetic moment of 2.86 BM for complex **1** suggests two unpaired electrons and the presence of two low intensity d-d bands at 847 and 510 nm assigned to the ${}^3A_{2g}(F) \rightarrow {}^3T_{2g}(F)$ and ${}^3T_{1g}(F)$ transitions, respectively, suggest an octahedral geometry around Ni(II). Other high intensity bands (more than 10 times intense) at 307, 295 and 276 nm may be due to charge transfer/intraligand transitions. Complex **2** shows a magnetic moment of 1.89 BM., indicating the presence of one unpaired electron. The presence of a low intensity broad band around 591 nm assigned to the ${}^2T_{2g} \rightarrow {}^2E_g$ transition suggests an octahedral geometry for the complex. Other high intensity bands observed at 368, 342 and 296 nm may be due to charge transfer/intraligand transitions.

Table 4 Magnetic moment, electronic spectral bands and their assignments for complexes 1 and 2

Compound	μ_{eff} (BM)	Band maxima (nm)	Assignment	Geometry
$[\text{Ni}(\text{en})_2(\text{ppdt})_2] \cdot 2\text{H}_2\text{O}$	2.86	684, 504, 307, 295, 276	${}^3A_{2g}(F) \rightarrow {}^3T_{1g}(F)$, ${}^3T_{1g}(P)$	Oh
$[\text{Cu}(\text{en})_2(\text{ppdt})_2] \cdot 2\text{H}_2\text{O}$	1.89	795, 591, 368, 342, 296	${}^2T_{2g} \rightarrow {}^2E_g$	Oh

ESR Spectra:

The ESR spectrum of the copper complex provides information regarding the metal ion environment. The ESR spectrum of the crystalline monomeric complex $[\text{Cu}(\text{en})_2(\text{ppdt})_2] \cdot 2\text{H}_2\text{O}$ (Fig.5.4) at LNT shows a signal at 2950 G in the parallel region and another signal at 3130 G in the perpendicular region which are typical of Cu(II) complexes with axial symmetry. The analysis of the spectrum yields $g_{\parallel} = 2.273$, $g_{\perp} = 2.058$ and $g_{\text{av}} = 2.130$ and the trend $g_{\parallel} > g_{\perp} > g_e(2.0023)$ indicates that the unpaired electron is present in the $d_{x^2-y^2}$ orbital of Cu(II).

In octahedral field of Ni(II), g and A (hyperfine splitting) values are close to isotropic. As the field becomes distorted, the zero fields splitting become larger and ESR signals are difficult to observe. Therefore ESR spectrum of the complex **1** was silent.

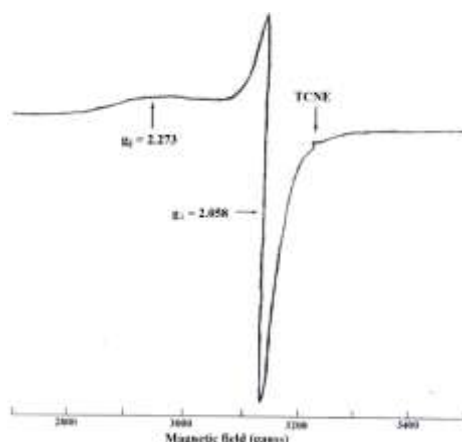


Fig.6 ESR spectrum of $[\text{Cu}(\text{en})_2(\text{ppdt})_2] \cdot 2\text{H}_2\text{O}$ at LNT.

CONCLUSION

The cyclic voltammogram obtained at a platinum electrode in the potential range of + 1.5 V to -1.5 V with a scan rate of 100 mVs^{-1} , characterizing the redox behaviour of metal complex **1**. The complex **1** exhibits a quasi-reversible ill-defined oxidation wave at 0.990V and a well define reduction wave at -0.843 V. The cathodic and anodic peaks observed at 0.359 and 0.609 V, respectively indicates the presence of a reversible redox process and can possibly be assigned to the nickel(II)/ nickel(III) couple with the formal redox potential $E = (E_{pa} + E_{pc})/2 = 0.534\text{V}$. However, it is to be noted that the peak separation ($\Delta E_p = E_{pa} - E_{pc}$) is quite large as compared to that expected for one electron process and hence it can be concluded that this quasi-reversible redox process is coupled with some chemical reaction.

REFERENCES

- [1] Turan-Zitouni, G., Kaplancikli, Z.A., Yildiz, M.T., Chevallet, P. and Kaya, D., Synthesis and antimicrobial activity of 4-phenyl/cyclohexyl-5-(1-phenoxyethyl)-3-[N-(2-thiazolyl)acetamido]thio-4H-1,2,4-triazole derivatives, *Eur.J. Med.Chem.*, 40, 607-613, 2015.
- [2] Jalilian, A.R., Sattari, S., Bineshmarvasti, M., Shafiee, A. and M. Daneshtalab, Synthesis and in vitro antifungal and cytotoxicity evaluation of thiazolo-4H-1,2,4-triazoles and 1,2,3-thiadiazolo-4H-1,2,4-triazoles, *Arch.Pharm.*, 333, 347-354, 2010.
- [3] Kucukguzel, I., Kucukguzel, S.G., Rollas, S. and Kiraz, M., Some 3-thioxo/alkylthio-1,2,4-triazoles with a substituted thiourea moiety as possible antimycobacterials, *Bioorg. Med. Chem. Lett.*, 11, 1703-1704, 2011.
- [4] Tozkoparan, B., Kupeli, E., Yesilada, E. and Ertan, M., Preparation of 5-aryl-3-alkylthio-1,2,4-triazoles and corresponding sulfones with antiinflammatory-analgesic activity, *Bioorg.Med.Chem.*, 15, 1808-1814, 2014.
- [5] Rabea, S.M., El-Koussi, N.A., Hassan, H.Y. and Aboul-Fadl, T., Synthesis of 5-phenyl-1-(3-pyridyl)-1H-1,2,4-triazole-3-carboxylic acid derivatives of potential anti-inflammatory activity, *Arch. Pharm. Chem. Life Sci.*, 339, 32-40, 2014.
- [6] Holla, B.S., Veerendra, B., Shivananda, M.K. and Poojary, B., Synthesis of some new 2,4-disubstituted thiazoles as possible antibacterial and anti-inflammatory agents, *Eur. J. Med. Chem.*, 38, 759-767, 2013.

Structure of India's Foreign Trade: Composition and Direction

ROBIN, Research Scholar

Department of Commerce

MDU, Rohtak

ABSTRACT

Generally no country is self-sufficient. It has to depend upon other countries for importing the goods which are either non-available with it or are available in insufficient quantities. Similarly, it can export goods, which are in excess quantity with it and are in high demand outside. Foreign trade also known as International trade which means trade between the two or more countries. India is a developing country and Indian economy is one of the world's largest economies. After independence in 1947 India held traditional values such as self reliance and socialistic policies of economic development, which resulted in the segregation, inefficiency of the economy with a host of other problems. Then economic liberalization was initiated (also called economic reforms) by Indian government in 1991. In this study, we will study the Structure of India's foreign trade including its composition and direction. To examine the changes in the structure of India's foreign trade from the year 2008 to 2018 two financial years i.e. 2007-08 and 2017-18 will be taken as reference year in our study and foreign trade data for these reference years will be analyzed comparatively.

Keywords: Structure, Foreign Trade, Composition, Direction.

INTRODUCTION

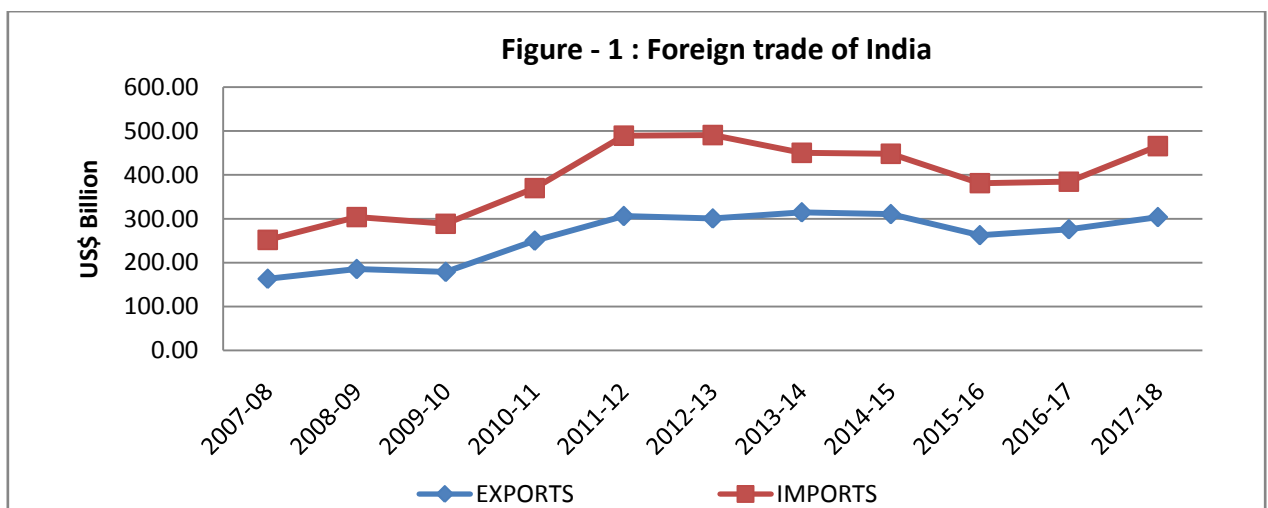
All countries need goods and services to satisfy wants of their people. Production of goods and services requires resources. Every country has only limited resources. No country can produce all the goods and services that it requires. It has to buy from other countries what it cannot produce or can produce less than its requirements. Similarly, it sells to other countries the goods which it has in surplus quantities. Foreign trade is nothing but trade between the different countries of the world. It is also called as International trade, External trade or Inter-Regional trade. International trade is in principle not different from domestic trade as the motivation and the behavior of parties involved in a trade do not change fundamentally regardless of whether trade is across a border or not. The main difference is that international trade is typically more costly than domestic trade. The reason is that a border typically imposes additional costs such as tariffs, time costs due to border delays and costs associated with country differences such as language, the legal system or culture. International trade involves different currencies of different countries and is regulated by laws, rules and regulations of the concerned countries. Thus, International trade is more complex. Foreign Trade can be divided into following three groups- (i) Import Trade: Import trade refers to purchase of goods by one country from another country or inflow of goods and services from foreign country to home country. (ii) Export Trade: Export trade refers to the sale of goods by one country to another country or outflow of goods from home country to foreign country. (iii) Entrepot Trade: Entrepot

trade is also known as Re-export. It refers to purchase of goods from one country and then selling them to another country after some processing operations. But in our study foreign trade is divided in two parts- (i) imports and (ii) exports (includes re-exports). Major reasons or motives for the foreign trade are as follows:

1. Maximum Use of Natural Resources
2. Availability of Goods and services with varieties
3. Specialization in production
4. Economics of Large Scale
5. Stability in Prices
6. Ability to Face Natural Calamities
7. Availability of Advance Equipments and technology
8. Discouragement to Monopolies
9. International Co-operation

❖ FOREIGN TRADE OF INDIA

Like all other countries India too, buy from and sell to other countries various types of goods and services. Foreign trade of India is continuously growing year by year. But foreign trade of India has negative balance i.e. its imports are greater than its export. This difference between imports and exports also called Current account deficit and this current account deficit has become an indispensable feature of India's foreign trades. In the year 2017-18 exports and imports has grown by 10.03% and 21.13% respectively from the previous year i.e. year 2016-17. During the decade under study (from the year 2007-08 to 2017-18) year on year average growth rate for exports and imports was 7.36% and 7.48% respectively.



(Source: Export Import data bank, Department of Commerce, India)

Figure 1 explains the pattern of India's foreign trade. Exports of India are increasing year by year but with the increase in the exports, imports are also increasing. In the figure, trend line of imports is above the trend line of exports for each year of our study. This indicates that since 2007-08 India's imports are more than its exports and it had current account deficit in every year.

Year	Exports (In US\$ Billion)	Imports (In US\$ Billion)	Exports (In Rs. Lakh Crore)	Imports (In Rs. Lakh Crore)
2007-08	163.13	251.65	6.56	10.12
2017-18	303.53	465.58	19.57	30.01
Growth	86.06%	85.01%	198.31%	196.45%

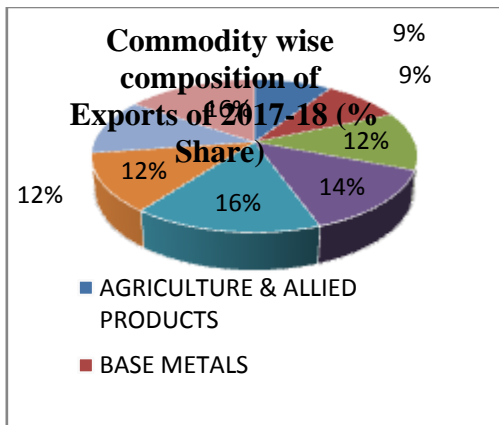
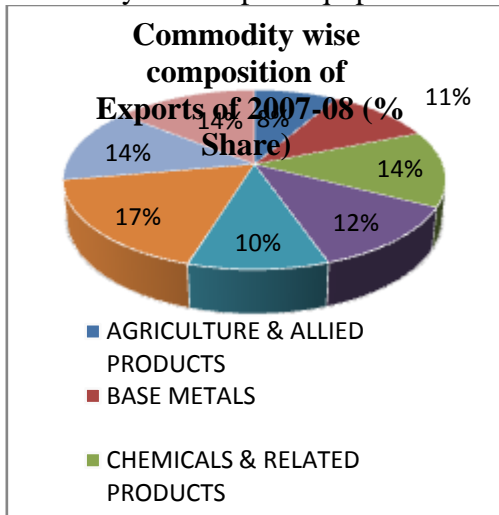
(Source: Export Import data bank, Department of Commerce, India)

While comparing India's exports-imports of the year 2007-08 with the exports-imports of the year 2017-18, it is found that exports and imports of India has been increased by 86.06% and 85.01% respectively. But this growth is only when exports-imports are valued in US\$. When exports-imports are valued in Rs. then these growth rates increased to 198.31% and 196.45% respectively. Reason behind this difference is the changes in the exchange rate during that period.

❖ **COMPOSITION OF FOREIGN TRADE OF INDIA**

Composition of Exports

Exports of India mainly comprises of petroleum products, chemical & related products, textile & allied products, gems & jewellery (including gold and silver), base metals, machinery & transport equipments and agriculture & allied products.

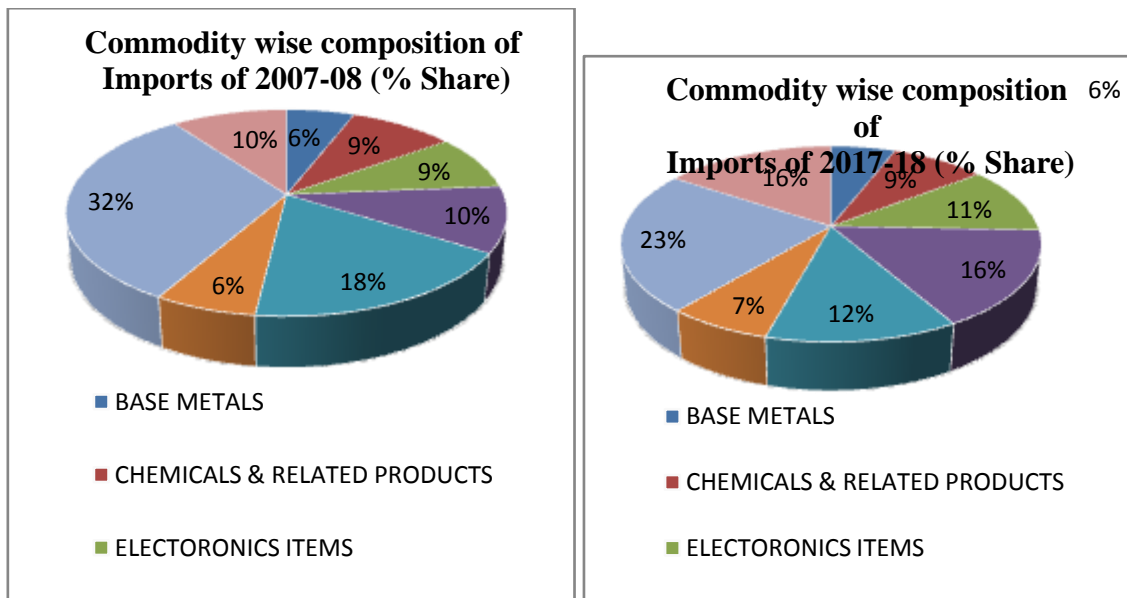


(Source: [DGCI&S, Kolkata](http://www.dgci&s.com) and Export Import data bank, Department of Commerce, India)

The above stated commodities accounts for more than 80% of India's exports. In 2007-08, the share of petroleum products was highest (about 17.40% in total exports) followed by chemical & related products and textile and allied products with 13.72% and 13.58% share respectively. But in the year 2017-18, machinery & transport equipment products took top position with 15.85% share in total exports followed by gems and jewellery with 13.69% share and chemical & related products with 12.37% share in total exports. Share of agriculture & allied products is lowest in both the years among the stated commodities i.e. 8.29% in 2007-08 and 9.15% in 2017-18. During the decade ranging from the year 2007-08 to 2017-18 major changes were seen in the share of machinery and transport equipments and petroleum products. In this period share of machinery and transport equipments has increased by 5.73% while the share of petroleum products has decreased by 5.07% in total exports. Percentage share of petroleum products was highest in India's total exports in the year 2007-08 but in 2017-18 its share is lowest among the stated commodities of India's exports. Although the exports of Textiles & allied products, chemical & related products and base metals are growing but these commodities recorded decline in % share in total exports in the 2017-18 in comparison to the year 2007-08.

Composition of Imports

Imports of India mainly comprises of petroleum crude & products, machinery & transport equipments, gems & jewellery, chemical & related products, electronics items, ores & minerals and base metals, which constitute about 84% of India's imports.



(Source: [DGCI&S, Kolkata](#) and Export Import data bank, Department of Commerce, India)

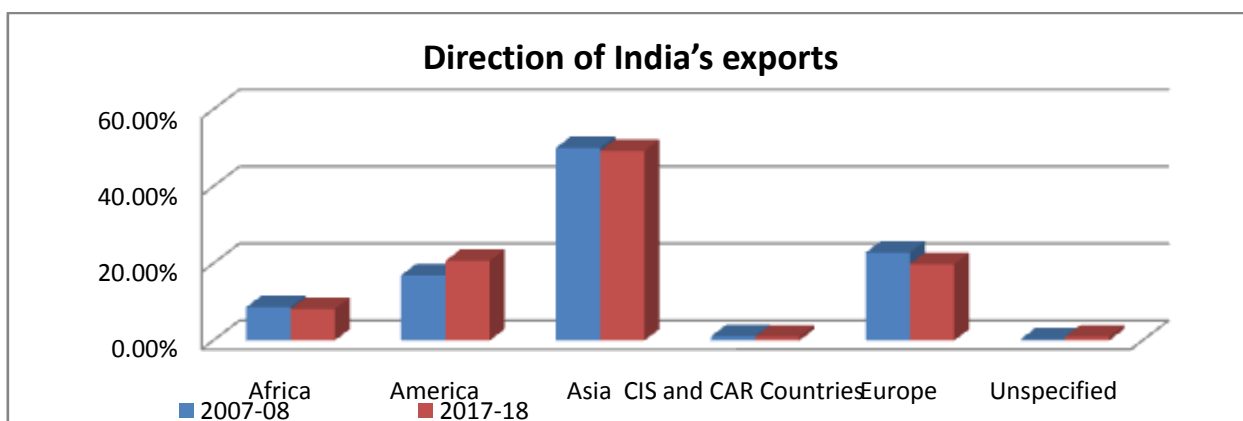
In 2007-08 the share of petroleum crude & products was highest (about 31.69% in total imports) followed by machinery & transport equipment and gems & jewellery with 17.97% and 10.28% share respectively. Likewise, in the year 2017-18 share of petroleum crude & products is highest but this time its share is 23.34% in total imports followed by gems and jewellery with 16.04% share and machinery & transport equipment with 12.53% share in total imports. Share of ores & minerals and base metals is lowest in both the years among the stated commodities. Share of ores & minerals and base metals was 6.39% and 5.91% respectively in 2007-08, and 6.82% and 5.89% respectively in 2017-18. During the

period under study, despite of the fact that petroleum crude and products hold highest share in total imports but it's share in total imports has decreased by 8.31%. It does not mean that import of petroleum crude & products in India has been reduced as compared to the year 2007-08. But it is because of increase in the imports of other commodities. Share of machinery and transport equipments also decreased by 5.44% during this period. While, the share of gems & jewellery, other commodities and electronic items has increased by 5.76%, 5.62% and 2.44% respectively during this decade.

❖ **DIRECTION OF INDIA'S FOREIGN TRADE**

Direction of India's exports

Asia has been the largest export partner of India. India exports nearly half of its exports to Asia itself. For the year 2007-08, total exports from India to Asia were 81.69 US\$ billion which was about 50.07% of India's total exports of 2007-08. In the year 2017-18 also India exported goods and services of 149.63 US\$ billion to Asia constituting 49.30% of total exports of India for that year. Second largest export partner of India is America followed by Europe. Exports to America and Europe for the year 2017-18 was 62.78 US\$ billion and 60.31 US\$ billion respectively that were about 20.68% and 19.87% respectively of total exports of India. In term of percentage share in overall exports, share of only America and unspecified region showed an increase by 3.72% and 0.61% respectively in 2017-18 as compared to 2007-08. While percentage share of Europe decreased by 2.99%.



(Source: Export Import data bank, Department of Commerce, India)

Major destination countries of India's export for the two reference years are as follows:

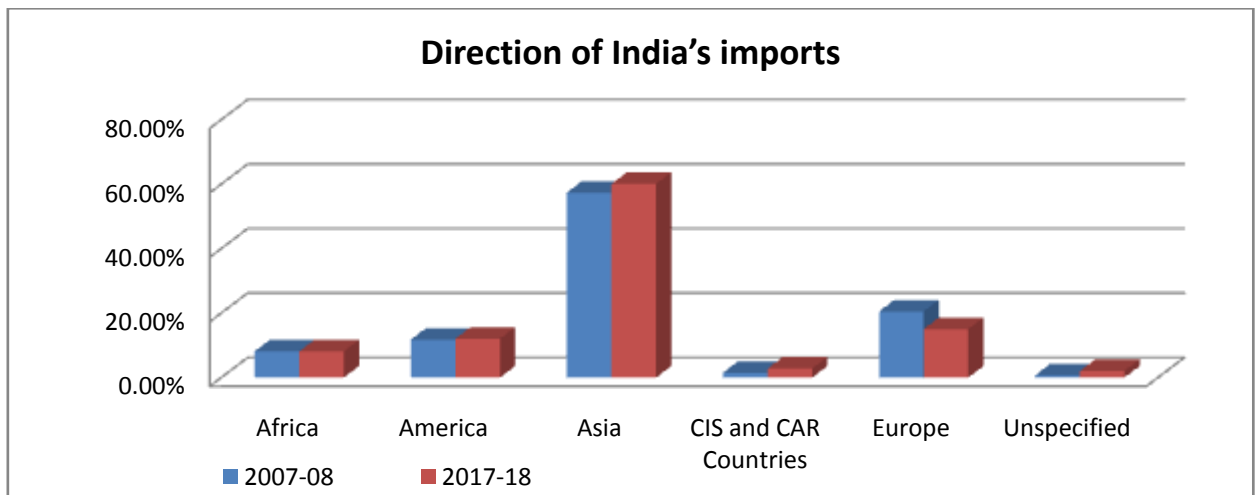
Exports of India to top export partner countries (Amounts in US\$ Billion)						
Rank	Country	2017-2018	%Share	Country	2007-2008	%Share
1	U S A	47.88	15.77	U S A	20.73	12.71
2	U ARAB EMTS	28.15	9.27	U ARAB EMTS	15.64	9.59
3	HONG KONG	14.69	4.84	CHINA P RP	10.87	6.66
4	CHINA P RP	13.33	4.39	SINGAPORE	7.38	4.52
5	SINGAPORE	10.20	3.36	U K	6.71	4.11
6	U K	9.69	3.19	HONG KONG	6.31	3.87
	Others	179.58	59.17	Others	95.49	58.54
	India's Total Export	303.53	100.00	India's Total Export	163.13	100.00

(Source: Export Import data bank, Department of Commerce, India)

Above table depict that only top six export partner countries of India imports from India more than 40% of India's total exports. Although all the top six export partner countries of the year 2007-08 remained top six export partners in the year 2017-18 also, but among these only USA and Hong Kong have shown an increase in their respective percentage share of India's total exports. USA is the top buyer/purchaser of India's goods and services. In the year 2017-18 total exports from India have increased by 86% from the total exports from India in 2007-08. But for the same periods exports to USA has increased by more than 130% and its percentage share in India's total exports has increased by 3.06%. From the year 2007-08 to 2017-18 China has shown lowest growth rate i.e. 22.65% among top six export partner countries and lost its 2.27% percentage share in India's total exports. During the decade of 2007-08 to 2017-18 there was no major change in the position of top six export partner countries of India. The only change is made by the Hong Kong which jumped over three ranks and reached at third position in 2017-18 from the sixth position in 2007-08.

Direction of India's imports

A major part of India's imports are sourced from Asia. India imports more than 60% of its total imports only from Asia. This is because of imports of petroleum crude & products at large scale. For the year 2007-08 total imports from Asia was 144.41 US\$ billion which was about 57.38% of India's total imports of 2007-08. In the year 2017-18 also India imported goods and services of 279.67 US\$ billion from Asia constituting 60.07% of total imports of India for that year. Second largest import partner of India is Europe followed by America. Imports from Europe and America for the year 2017-18 was 69.90 US\$ billion and 55.99 US\$ billion respectively that were about 15.01% and 12.03% respectively of total imports of India. Percentage share of Europe in overall imports of India saw a major decline by 5.48% in 2017-18 as compared to 2007-08.



(Source: Export Import data bank, Department of Commerce, India)

Major source countries of India's import for the two reference years are as follows:

Imports of India from top Import partner countries (Amounts in US\$ Billion)						
Rank	Country	2017-2018	%Share	Country	2007-2008	%Share
1	CHINA P RP	76.38	16.41	CHINA P RP	27.15	10.79
2	U S A	26.61	5.72	U S A	21.07	8.37
3	SAUDI ARAB	22.07	4.74	SAUDI ARAB	19.47	7.74
4	U ARAB EMTS	21.74	4.67	U ARAB EMTS	13.48	5.36
5	SWITZERLAND	18.92	4.06	IRAN	10.94	4.35
6	IRAQ	17.62	3.78	GERMANY	9.88	3.93
	Others	282.24	60.62	Others	149.66	59.47
	India's Total Import	465.58	100.00	India's Total Import	251.65	100.00

(Source: Export Import data bank, Department of Commerce, India)

India's imports from top six import partner countries only constitute more than 40% of its total imports. It is interesting that the top four import partner countries of the year 2007-08 hold same positions in the year 2017-18 also, but except China all the three partners have shown decline in their respective percentage share of India's total imports. Percentage share of China in India's total imports has increased by 5.62% in 2017-18 as compared to 2007-08. China is the biggest source of India's imports. In the year 2017-18 total imports of India has been increased by 85% from the total imports in 2007-08. But for the same periods imports from China has been increased by more than 181% and its percentage share in India's total imports has been increased by 5.62%. From the year 2007-08 to 2017-18 Saudi Arab has shown lowest growth rate i.e. 13.35% among top six import partner countries and lost its 3.0% percentage share in India's total imports.

During the decade of 2007-08 to 2017-18, Iraq has shown a major change in its position by reaching at sixth position in 2017-18 from the twelfth position in 2007-08. In that period Switzerland has also reached at fifth position from the seventh position in 2007-08.

CONCLUSION

On the basis of above study, we can say that current account deficit is a substantial part of India's foreign trade. Although exports of India are growing year by year but this growth is also accompanied by imports with higher rate of growth. This causes the increased current account deficit of India. Share of petroleum crude & products in imports is still largest but its percentage share in total imports has decreased by more than 8% during the period from 2007-08 to 2017-18. On other side percentage share of gems & jewellery in total imports increased by more than 5% during the same period. In India's exports also, percentage share of petroleum products decreased by more than 5% in 2017-18 as compared to 2007-08. While, the percentage share of machinery & transports equipments has decreased by 5.4% in total imports and increased by 5.7% in total exports of India. Asia is the largest trade partner of India. America and unspecified region has recorded major increase in their respective share in India's foreign on other side Europe has lost a major part of its percentage share in India's foreign trade. USA, China and Arab countries are the top trade partners of India. During the decade under study, percentage share of USA in India's exports and of China in India's imports has substantially increased. Hong Kong has also

made good growth and reached at third position in 2017-18 from the sixth position in 2007-08 in the list of top export partners of India.

REFERENCES

- Akrani, G. (2011, February 03). What is Foreign Trade ? Types and Importance of Foreign Trade [Web log post]. Retrieved from <https://kalyan-city.blogspot.com/2011/03/what-is-foreign-trade-types-and.html>
- CARE. (2013). *India's Foreign Trade: A Study on Direction & Composition of Trade* (pp. 1-11, Rep.). Retrieved from <http://www.careratings.com/upload/NewsFiles/Studies/India's%20foreign%20Trade%20-%20Composition%20%20Direction.pdf>
- Chand, S. The Meaning and Definition of Foreign Trade or International Trade – Explained! [Web log post]. Retrieved from <http://www.yourarticlelibrary.com/foreign-trade/the-meaning-and-definition-of-foreign-trade-or-international-trade-explained/5972>
- India, Ministry of Commerce & Industry, Department of Commerce. *Export Import Data Bank*. Retrieved from <https://commerce-app.gov.in/eidb/default.asp>
- India, Ministry of Commerce & Industry, Directorate General of Foreign Trade. *Principal commodity level data*. Retrieved from <http://121.241.212.143/http://121.241.212.143/principalcommditysearch.html>
- India, Ministry of Commerce & Industry, Directorate General of Foreign Trade. *Annual Report 2008-09*. Retrieved from <https://dgft.gov.in/document/annual-report-0809>
- India, Ministry of Commerce & Industry, Department of Commerce. *Annual Report 2017-18*. Retrieved from https://commerce.gov.in/writereaddata/uploadedfile/MOC_636626711232248483_Annual%20Report%20%202017-18%20English.pdf
- <https://www.wikipedia.org/>

ECONOMIC ANALYSIS OF NUTRITIONAL AND HEALTH STATUS OF SCHEDULED TRIBE WOMEN IN UDAIPUR DISTRICT, RAJASTHAN

YOGITA SHARMA*

*Ph.D Research Scholar, Department of Commerce and Management, Bhagwant University, Ajmer Rajasthan

ABSTRACT

The purpose of this paper is to study the nutritional and health status of Scheduled tribe women in Udaipur District, Rajasthan. The sample of the study consists of 300 respondents, which were selected by Multistage Random Sampling Method. The major objectives of the study are:- 1. To study the nutritional status scheduled tribe women in the study area. 2. To identify the factors affecting the nutritional and health status of the Scheduled tribe women in the study area. The nutritional and health status of the Scheduled tribe women was mostly influenced by socio-economic and cultural factors like low education, low income status, low living standard, unsafe water facility etc. It was found that Scheduled tribe women show deficiency in consumption of food items. It was also found that dalit reproductive women suffered more due to PEM (Protein-Energy Malnutrition) in the study area. It was found that the rate of food consumption was quite low among the respondents in the study area. It was also observed that the Scheduled tribe women generally do not pay much attention to their nutritional and health problems especially during pregnancy and lactation where food and nutrient requirements are more. The nutritional and health problems Scheduled tribe women need special attention because the Scheduled tribe women have distinctive health problems. In this regard, the researcher attempted to analyze the nutritional and health status of the Scheduled tribe women from the Udaipur district of Rajasthan.

Keywords: Nutritional Status, Body Mass Index, Health Status, Health Seeking Behavior, Health Care Facilities.

Introduction

Nutrition is one of the components of health status. Good health is a prerequisite to human productivity and the development process. It is essential to economic and technological development. Social scientists incorporated nutrition and health as its important component disturbances in health and nutrition regardless of etiology, invariably affect the health of mothers and child growth. The social environment influences a woman's lifestyle and her diet, which in many cases is inadequate. With increasing socio-economic complexity, the issue of malnutrition is becoming responsive to multifaceted factors. These factors operate at two levels: micro and macro. At the macro level, the availability of enough food and knowledge of a balanced diet are assumed to be important determinants of nutritional balance. Propensity of the place of residence and region for production and exchange of food are critical determinants at the macro-level. However, both in the context of excess and scarcity of food, women are more vulnerable to nutritional deficiency than men. Economists and sociologists have drawn attention to the crucial role of food security in protecting the vulnerability of poor households. Evidences suggest that efforts to improve the health and nutritional status of women could be critical to the goal of poverty reduction. The weight of poverty falls more heavily on women. Among the poor, women headed households, especially are at a greater economic

disadvantage than male or joint headed households because of the lower earnings of women and the dual nature of their work burden, which imposes severe time constraints, restricting their access to social and health services.

Undernutrition and poor health from preventable causes disproportionately affect the well-being of millions of people in the developing world. Factors at the individual, household and community levels or a combination of these factors may contribute to poor nutrition and health status. In particular, malnutrition among women is likely to have a major impact on their own health as well as their children's health. More than 3.5 million women and children under age five in developing countries die each year due to the underlying cause of undernutrition (Robert et al., 2008). A heavy workload for women may lead to a poorer diet not only for their children and member of families but for women themselves. Heavy workload may be a constraint to higher productivity in food chain, constraints to adequate child care and nutrition and health risk to women themselves and a constraint for fulfilling their other basic needs. Excessive workload on the other hand brings about poor nutrition stains of women in relation to low birth weight: small for date or pre-term babies. This suffered growth retardation before birth and are said to be malnourished. When the women heavily engaged in farming did not look the morning meal might go for her days and almost never see their children: at time they left early in the morning and return after sunset. It is reasonable to assume that this work pattern will not only affect child nutrition, but also have detrimental effect on women's own health (Caldwell, 1982).

Women are generally vulnerable to undernutrition especially during pregnancy and lactation where food and nutrient requirements are more during that period. The demographic consequences of the lower status in women formed expression in various forms such as female infanticide, higher death of women compared to men, lower literacy rate in female, lower sex ratio, lower level of employment of women in the non agricultural sector as compared to men etc (Tara 1989).

The nutritional status of women is important both for the quality of their own lives and the survival and healthy development of their children. Better nutrition means stronger immune system, fewer incidences of illness and better health. However, recent evidence from developed countries indicate that malnourished women with a body Mass Index (BMI) below 18.5 show a progressive increase in mortality rates as well as an increased risk of illness. In India, increased prenatal and neonatal mortality, a higher risk of low birth weight babies, stillbirths and miscarriage are some of the consequences of malnutrition among women (Mallikharjuna and Balakrishna 2010).

REVIEW OF LITERATURE

Bandana Sachdev (2012) revealed that the tribal people do not prefer to visit hospitals frequently. It further confirms that they did not prefer to visit hospitals even for delivering their child inspite of having aware about the incentives are given for delivery of the child in the government hospitals. They still depend on Dias more as compared to professional doctors. Elderly ladies of the community help in conducting the delivery. The naval cord is cut by the mother herself with the help of a Bamboo strip, knife and stone. They prefer to cut the naval cord with a bamboo strip because it is safer from infections. The main hindrance in the poor health status of nomad tribal is the nomad tribal environment and non acceptance of community towards professional doctors and their association with strong social networks identified as key determinants for perception in all communities.

However, the inaccessibility and unaffordability to health care and reluctance to seek help for health issues remain a significant problem in nomad tribal areas. In considering priorities for health, greater endeavour resources are required to increase their awareness and change attitudes towards acceptance of nowadays health care services

Basu (1990) has clarified that the maternal and child health care is an important aspect of health seeking behaviour, which is largely neglected among the tribals. The planners have to take into consideration the lifestyle, beliefs, culture milieu, social organization and the channels of communication of the tribal people before introducing developmental activities. The MCH services are almost non-existent and the childhood mortality is comparatively high. Comprehensive area specific health related studies are limited; most of the available studies are isolated, fragmentary and did not cover the various dimensions of health affecting the status of tribal women. Early marriage, successive pregnancies accompanied with low calorie of food intake and inaccessibility and under utilization of medical facilities lead to high maternal morbidity and mortality rate. Maternal depletion is thus the result of early mating, continuous cycles of pregnancy and lactation. The inadequate diet and uninterrupted overwork lead to cumulative disorders such as anaemia, general malnutrition, premature ageing and early death.

Chakma (2009) conducted a study on Nutritional Status of Baiga – A Primitive Tribe of Madhya Pradesh. The extent of malnutrition for preschool children was assessed by SD classification and the nutritional status of adults was assessed by BMI classification. About 61 per cent of the pre-school children were under weight (<Median -2SD) out of them 24.3 percent children were severely under weight. Stunting and wasting were seen in 44.3 percent and 37 percent children respectively. Prevalence of chronic energy deficiency (BMI<18.5) was about 76 percent of the adult population. Consumption of cereals was higher than recommended level (460gm) while the consumption of another foodstuff was lower than the RDA. The intake of all nutrients except calcium was significantly lower than recommended level. The present study revealed that malnutrition is widely prevalent among tribe which is mainly due to inadequate dietary intake.

Chandraker et al., (2009) conducted a cross-sectional study to understand “Reproductive and Child Health among the Dhur Gond Tribal Community of Mahasamund District, Chhattisgarh, India”. They revealed that high percentage of mothers had not taken antenatal check-ups (51.72 percent), tetanus injection (41.38 percent) and iron and folic acid tablets (56.32 percent) during pregnancies. 94.83 percent deliveries performed at home and 57.47 percent births were done mainly by untrained dais (traditional birth attendants). Infant and child mortality rates were 5.92 and 4.28 per 100 live births respectively. 47.12 percent of mothers were undernourished (BMI <18.5 kg/m²) and all the children were suffered from malnutrition.

Rajaratnam. J. et al., (1996) conducted a cross sectional study on the existing morbidity pattern and health care utilization in the K.V. Kuppam Block, North Arcot Ambedkar District, Tamil Nadu. They found that the prevalence of infective and parasitic diseases was found to be 21.9 percent with an average of 3 episodes. Services rendered by private practitioners (registered, non-registered and indigenous) were utilized by 59 percent of the households and 79 percent of the households had used allopathic treatment at some time. The average per capita per annum health expenditure was Rs 89.9 (Rs 449 per household). This increased significantly with increase in the household size (p <0.001) and per capita income (p <0.01). The health seeking behaviour of the population can be changed if efficient services were rendered through government primary health centres and sub

centres. This would allow the existing voluntary agency to withdraw without much change in the per capita health expenditure.

Usha Shri Garikipati et al., (2003) pointed out that there is a huge burden of neo-natal ill health in tribal areas. High prevalence of home deliveries and inaccessibility of neo-natal care in tribal areas indicate a need to develop and promote home based neo-natal care practices. The ASHA/TBA are the anchor workers at the village level. By improving the skills of these health workers at the community level, a lot of improvement can be achieved in reducing IMR and NMR. There should be separate programmes for a plan of implementing programmes for tribal and non-tribal areas. The review of maternal and child health (MCH) services should not be based on over all condition of the district, but should be specific to the regions.

OBJECTIVES

1. To study the nutritional status of scheduled tribe women in the study area.
2. To identify the factors affecting the nutritional and health status of the scheduled tribe women in the study area.

METHODOLOGY

The researcher has selected the Udaipur district from the 34 districts of the Rajasthan. This district has relatively large number of scheduled tribe population. The total number of Scheduled tribe households of the given area as per census 2011 was 15,25,289. The sampling of the study is said to be *Multi- Stage Random sampling method*. District Udaipur has 11 blocks namely Malvi, Gogunda, Kotra, Jhadol, Bargaon, Girwa, Bhindar, Lasadiya, Salumbar, Sarada and Kherwara. Out of these 11 blocks, Malvi and Bhindar blocks were selected on the basis of high concentration of scheduled tribe population. The third stage of sampling involves the selection of six villages from two selected blocks. The fourth stage of sampling involves the selection of respondents from the six selected villages. The sample of 50 respondents was selected from each village and thus a total sample of 300 respondents has been selected from the Udaipur district for the present study.

ANALYSIS AND DISCUSSIONS

Mean height, weight and BMI of the respondents in the study area

Height and weight measurement of scheduled tribe women were taken and BMI was calculated to assess their nutritional profile. The mean values of height, weight and BMI of the scheduled tribe women are presented in the table-1.

Table-1

Mean Height, Weight and Body Mass Index of the Respondents

Age Group (in years)	Scheduled Tribe Women			Total
	Height	Weight	BMI	
18-27	5.57	56.51	19.47	62
28-37	5.51	59.49	20.96	106
38-47	5.55	62.72	22.38	86
Above-47	5.53	64.73	22.69	46
Total	5.54	60.69	21.37	300

Source: Computed from primary data

Table-1 shows the mean height, weight and Body Mass Index of the scheduled tribe women. The mean height of 5.54 inches was recorded for scheduled tribe women and the maximum height 5.57 inches was at the age of 18-27 years, after which there seems to be a

decline, The mean weight of the scheduled tribe women was 60.69 Kg .It was also observed that among scheduled tribe women, weight was directly proportional to age The mean BMI was found to be 21.37 for the scheduled tribe women. It was also observed that among scheduled tribe women. The mean BMI was high 21.82 at the age above-47 years

Categorization of selected adults based on BMI

BMI has been shown to be a good indicator of nutritional status. Based on BMI, the respondents were classified into four categories viz Undernourished (BMI<18.4), Normal (BMI=18.5-22.9), Overweight (BMI=23-24.9) and Obese (BMI >25) (ICMR 2010). BMI is a key index for relating weight to height. BMI is a person's weight in kilograms (kg) divided by his or her height in meters squared. The BMI limit for Indians prescribed by ICMR is as given in table-2.

Equation for Predicting

$$BMI = \text{Weight in Kg} \div (\text{Height in meter})^2$$

Table-2
The BMI Limit for Indians (ICMR 2010)

BMI rank	Status
<18.4	Undernourished
18.5 to 22.9	Normal
23 to 24.9	Overweight
>25	Obese

Source: www.healthizen.com

Table-3
Age-Wise Distribution of Body Mass Index of the Respondents

Age Group (in Years)	Body Mass Index				Total
	Undernourished (<18.4)	Normal (18.5-22.9)	Overweight (23-24.9)	Obese (>25)	
18-27	23 (37.1)	29 (46.8)	7 (11.3)	3 (4.8)	62 (100)
28-37	35 (33)	53 (50)	11 (10.4)	7 (6.6)	106 (100)
38-47	23 (26.7)	46 (53.5)	11 (12.8)	6 (7)	86 (100)
Above-47	10 (21.7)	29 (63.1)	4 (8.7)	3 (6.5)	46 (100)
Total	91 (30.3)	156 (52)	33 (11)	20 (6.7)	300 (100)

Source: Computed from primary data

Note: Figures in parentheses denote percentages to the row total

Table-3 shows the age wise distribution of the Body Mass Index of the respondents. In case of undernourished category, the highest 37.1 percent of respondents were under the 18-27 years age group and lowest 21.7 percent of respondents were above-47 years age group. In case of normal category, the highest 63.1 percent of respondents were above-47 years age group and lowest 46.8 percent of respondents were under the 18-27 years age group. In case of overweight category, the highest 12.8 percent of respondents were under the 38-47 years age group and lowest 8.7 percent of respondents above-47 years age group. In case of obese category, the highest 7 percent of respondents were under 38-47 years age group and lowest 4.8 percent of respondents were under the 18-27 years age group.

Table-4
Type of Family-Wise Distribution of Body Mass Index of the Respondents

Type of Family	Body Mass Index				Total
	Undernourished (<18.4)	Normal (18.5-22.9)	Overweight (23-24.9)	Obese (>25)	
Joint Family	37 (38.9)	44 (46.3)	9 (9.5)	5 (5.3)	95 (100)
Nuclear Family	54 (26.4)	112 (54.6)	24 (11.7)	15 (7.3)	205 (100)
Total	91 (30.3)	156 (52)	33 (11)	20 (6.7)	300 (100)

Source: Computed from primary data

Note: Figures in parentheses denote percentages to the row total

Table-4 shows the type of family wise distribution of the Body Mass Index of the respondents. In case of undernourished category, the highest 38.9 percent of respondents were under the joint family type and lowest 26.4 percent of respondents were under the nuclear family type. In case of normal category, the highest 54.6 percent of respondents were under the nuclear family type and lowest 46.3 percent of respondents were under the joint family type. In case of overweight, the highest percentage of 11.7 respondents was under the nuclear family type and lowest 9.5 percent of respondents were under the Joint family type. In case of overweight category, the highest 7.3 percent of respondents were under the nuclear family type and lowest 5.3 percent of respondents were under the joint family type. In case of obese category, the highest 3.4 percent of respondents were under the nuclear family type and lowest 2.1 percent of respondents were under the joint family type.

Table-5
Education-Wise Distribution of BMI of the Respondents

Educational level	Body Mass Index				Total
	Undernourished (<18.4)	Normal (18.5-22.9)	Overweight (23-24.9)	Obese (>25)	
Illiterate	57 (35.6)	73 (45.6)	16 (10)	14 (8.8)	160 (100)
Primary	23 (29.1)	40 (50.6)	12 (15.2)	4 (5.1)	79 (100)
Secondary	9 (24)	23 (62)	3 (8)	2 (5)	37 (100)
Higher Secondary	2 (13.4)	12 (80)	1 (6.6)	-	15 (100)
Graduation & above	-	8 (88.9)	1 (11.1)	-	9 (100)
Total	91 (30.3)	156 (52)	33 (11)	20 (6.7)	300 (100)

Source: Computed from primary data

Note: Figures in parentheses denote percentages to the row total

Table-5 shows the occupation wise distribution of the Body Mass Index of the respondents. In case of undernourished category, the highest 35.6 percent of respondents were under the illiterates and lowest 13.4 percent of respondents were under the higher secondary level. In case of normal category, the highest 80 percent of respondents were under the graduation & above level and lowest 45.6 percent of respondents were under the illiterates. In case of overweight category, the highest 15.2 percent of respondents were under the primary level and lowest 6.6 percent of respondents were under the higher

secondary level. In case of obese category, the highest 8.8 percent of respondents were under the illiterates and lowest 5 percent of respondents were under the secondary level

Table-6
Income-Wise Distribution of the Body Mass Index of the Respondents

Income level (in Rs.)	Body Mass Index				Total
	Undernourished (<18.4)	Normal (18.5-22.9)	Overweight (23-24.9)	Obese (>25)	
Below- 25000	40 (34.9)	57 (50.9)	10 (8.8)	5 (4.4)	112 (100)
25001-50000	30 (34.9)	45 (52.3)	7 (8.1)	4 (2.7)	86 (100)
50001-75000	14 (21.9)	36 (56.2)	9 (14.6)	5 (7.8)	64 (100)
Above -75000	7 (18.4)	18 (47.4)	7 (18.4)	6 (15.8)	38 (100)
Total	91 (30.3)	156 (52)	33 (11)	20 (6.7)	300 (100)

Source: Computed from primary data

Note: Figures in parentheses denote percentages to the row total

Table-7 shows the income wise distribution of the Body Mass Index of the respondents. In case of undernourished category, the highest 34.9 percent of respondents were under Below-Rs. 25000 income category and lowest 18.4 percent of respondents were under the Above- Rs. 75000 income category. In case of normal category, the highest 56.2 percent of respondents were under Rs. 50001-75000 income category and lowest 47.4 percent of respondents were under the above- Rs. 75000 income category. In case of overweight category, the highest 18.4 percent of respondents were above-Rs. 75000 income category and lowest 8.1 percent of respondents were under the Rs. 25001-50000 income category. In case of obese category, the highest 15.8 percent of respondents were above Rs. 75000 income category and lowest 4.4 percent of respondents were under the below-Rs. 25000 income category.

Table-7
Per Day Calorie and Protein Content of Food Consumed by the scheduled tribe women

Cereals	5732.01	191.05	67374	245.8	144	4.8	Protein	11.88
Pulses	364.42	15.57	663	22.1	35.1	1.17		
Vegetables	641.17	21.42	742.2	24.74	15.9	0.53		
Fish and Flesh	390.2	13.01	780.9	26.03	66	2.2		
Snacks	906	30.2	3027.6	100.92	84	2.8	Calorie	434.67
Milk Products	539.2	17.96	254.1	8.47	8.7	0.29		
Fruits	45.73	2.55	94.5	3.15	0.9	0.03		
Chutneys	62.79	2.07	103.8	3.46	1.8	0.06		
Total	8681.52	293.83	73040.1	434.67	356.4	11.88		

Source: Computed from primary data

Table-7 shows per day calorie and protein content of food consumed by the scheduled tribe women. The total consumption of the cereals consumed per day by the scheduled tribe reproductive women was 191.05 gm and per day per women's calorie content of cereals was 245.8 gm and per day per women's protein content of cereals were 4.8 Kg/Cal. The total consumption of the pulses consumed per day by the scheduled tribe

women was 15.57 gm and per day per women's calorie content of pulses was 22.1 gms and per day per women's protein content of pulses was 1.17 Kg/Cal. The total consumption of the vegetables consumed per day by the scheduled tribe women was 21.42 gm and per day per women's calorie content of vegetables was 24.74 gm and per day per women's protein content of vegetables were 0.53 Kg/Cal. The total consumption of the fish and flesh consumed per day by the Dalit women agricultural labour was 13.01 gm and per day per women's calorie content of fish & flesh was 26.03 gm and per day per women's protein content of fish & flesh were 2.8 Kg/Cal. The total consumption of the snacks consumed per day by the scheduled tribe women was 30.2 gm and per day per women's calorie content of snacks was 100.92 gm and per day per women's protein content of snacks were 2.8 Kg/Cal. The total consumption of the milk & milk products consumed per day by the reproductive scheduled tribe women was 17.96 gm and per day per women's calorie content of milk & milk products was 8.47 gm and per day per women's protein content of milk & milk products were 0.29 Kg/Cal. The total consumption of the Fruits products consumed per day by the scheduled tribe women reproductive women was 2.55 gm and per day per women's calorie content of fruits was 3.15 gm and per day per women's protein content of fruits were 0.03 Kg/Cal. The total consumption of the Chutneys products consumed per day by the scheduled tribe women reproductive women was 2.07 gm and per day per women's calorie content of fruits was 3.46 gm and per day per women's protein content of fruits were 0.06 Kg/Cal.

Table-8
Per Day Average Intake of Food by Scheduled Tribe Women

Items	ICMR (norms)	Food Intake of reproductive women	Deficit	Food intake of pregnant women	Deficit	Food intake of lactating women	Deficit
Cereals	440	340	100	347	93	370	70
Pulses	45	14	31	15	30	12	33
Vegetables	100	20	80	25	75	26	74
Fish and Flesh	30	10	20	11	19	11	19
Snacks	50	20	30	20	30	20	30
Milk Products	30	18	12	20	10	20	10
Fruits	30	20	10	14	16	13	17
Chutneys	30	2	28	1	29	2	28

Source: Computed from primary data

Table-8 shows per day average food intake of the scheduled tribe women in the study area. According to ICMR prescribed level of food items of cereals, pulses, vegetables, fish and flesh, snacks, milk products, fruits and chutneys were 440, 45, 100, 30, 50, 30, 30 and 30 grams respectively. In case of scheduled tribe women, the deficit of food intake was 100, 31, 80, 20, 30, 12, 10 and 28 grams respectively. In case of scheduled tribe women, the deficit of food intake was 93, 30, 75, 19, 30, 10, 16, and 29 grams respectively. In case of scheduled tribe women, the deficit of food intake was 70, 33, 74, 19, 30, 10, 17 and 28 respectively. Table-8 reveals that the average food intake of scheduled tribe women was unsecured in food.

Table-9
Educational Wise Family Planning Methods Adopted by the Respondents

Educational levels	Family Planning Methods				Total
	No Planning	Oral	LUV	Sterilization	
Illiterate	74 (46.2)	43 (26.9)	31 (19.4)	12 (7.5)	160 (100)
Primary	27 (34.2)	24 (30.4)	20 (25.3)	8 (10.1)	79 (100)
Secondary	9 (24.3)	12 (32.5)	10 (27)	6 (16.2)	37 (100)
Higher Secondary	3 (20)	4 (26.7)	5 (33.3)	3 (20)	15 (100)
Graduation & above	1 (11.1)	3 (33.3)	3 (33.3)	2 (22.3)	9 (100)
Total	114 (38)	86 (28.7)	69 (23)	31 (10.3)	300 (100)

Source: Computed from primary data

Note: Figures in parentheses denote percentages to the row total

Table-9 shows the education wise family planning methods adopted by the respondents. In case of No Planning category, the highest 46.2 percent of respondents were under illiterates and lowest 11.1 percent of respondents were under the graduation & above level. In case of Oral family planning method, the highest 32.5 percent of respondents were under primary level and lowest 26.7 percent of respondents were under the graduation & above level. In case of LUV family planning method, the tribals shows the highest 33.3 percent of respondents were under higher secondary level and lowest 19.4 percent of respondents were under the illiterates. In case of Sterilization family planning method, the highest 22.3 percent of respondents were under the graduation & above level and lowest 7.5 percent of respondents were under the illiterates.

Table-10
Income levels and Place of Deliveries of the Respondents

Income level (in Rs.)	Place of Delivery			Total
	Home	PHC & GH	Private Hospital	
Below- 25000	22 (19.7)	78 (69.4)	12 (10.7)	112 (100)
25001-50000	15 (17.4)	58 (67.5)	13 (15.1)	86 (100)
50001-75000	8 (12.5)	43 (67.2)	13 (20.3)	64 (100)
Above -75000	4 (10.5)	23 (60.5)	11 (29)	38 (100)
Total	49 (16.3)	202 (67.3)	49 (16.4)	300 (100)

Source: Computed from primary data

Note: Figures in parentheses denote percentages to the row total

Table-10 shows the income wise place of the delivery of the respondents. In case of home deliveries, the tribals shows the highest 19.7 percent of respondents under below-Rs 25000 income level and lowest 10.5 percent of respondents under the above Rs. 75000 income level. In case of PHC & GH deliveries, the tribals shows the highest 69.4 percent of respondents were below-Rs. 25000 income level and lowest 60.5 percent of respondents were the below-Rs. 25000 income level. In case of private hospital deliveries, the tribals shows the highest 29 percent of respondents under above Rs. 75000 income level and lowest 10.7 percent of respondents under the below-Rs. 25000 income level.

Table-11

Awareness of Family Planning Programmes and Time Interval between Deliveries

Time Interval between deliveries	Awareness of Family Planning Programmes			Total
	No	Average	High	
Low	38 (55.9)	17 (25)	13 (19.1)	68 (100)
Medium	65 (43.1)	50 (33.1)	36 (23.8)	151 (100)
High	17 (21)	36 (44.4)	28 (34.6)	81 (100)
Total	120 (40)	103 (34.3)	77 (25.7)	300 (100)

Source: Computed from primary data

Note: Figures in parentheses denote percentages to the row total

Table-11 shows the awareness of family planning programmes and the time interval between deliveries of the respondents. In case of No awareness of family planning programmes category the tribals shows the highest 55.9 percent of respondents under low interval between deliveries and lowest 21 percent of respondents under the high interval between deliveries. In case of average awareness of family planning programmes the tribals shows the highest 44.4 percent of respondents under high interval between deliveries and lowest 25 percent of respondents under the low interval between deliveries. In case of high awareness of family planning programmes the tribals shows the highest 34.6 percent of respondents under high interval between deliveries and lowest 19.1 percent of respondents under the low interval between deliveries.

FINDINGS

1. It was found that the mean height was 5.54 inches, mean weight was 60.69 Kg and mean BMI was 21.37
2. It was found that the BMI was higher 22.69 in above-47 year age group and lower 19.47 in 18-27 years age group, weight was higher 64.73 Kg in above-47 years age group and lower 56.51 Kg in 18-27 years age group and height was higher 5.57 in 18-27 years age group and lowest 5.53 in above 47 years age group.
3. It was found that the majority of the respondents 35.6 percent were undernourished belongs to illiterates while as the majority of the respondents 15.2 percent were overweight belongs to primary level.
4. It was found that the majority of the respondents 37.1 percent were undernourished belongs to 18-27 years age group while as the majority of the respondents 12.8 percent belongs to the above-47 years age group.
5. It was found that the majority of the respondents 34.9 percent were undernourished belongs to below-25000 income group while as the majority of the respondents 18.4 percent were overweight belongs to the above-75000 income group.
6. It was found that dalit reproductive women show deficiency in consumption of cereals, pulses, green leafy vegetables, fish and flesh, milk and milk products, fruits, snacks and chutney while compared with ICMR Recommended level. This shows the nutritional insecurity of scheduled tribe women. It was also found that scheduled tribe women suffered more due to PEM (Protein-Energy Malnutrition) in the study area. It was found that the rate of food consumption was quite low among the respondents in the study area.
7. It was also found that 16.3 percent of the scheduled tribe women deliveries take place at home and 67.3 percent of the respondent's deliveries take place in Govt. Hospitals.

8. It was also found that in case of no planning majority of the respondents 46.2 percent of the respondents have no awareness about family planning methods belongs to illiterates and 12 percent of respondents were using the sterilization method for family planning belongs to illiterates.
9. It was also found that low income capacity to make use of available health care facilities and services among the scheduled tribe women and they have low user fee paying capacity for health care services. In general, illiterate and primary level educated scheduled tribe women have low health consequent upon lack of awareness about health care practices. Usually they belong to the poor households, so, they are not able to take required nutritional and health care practices.

SUGGESTIONS

1. There is a vital need for mass education program free of cost in scheduled tribe women communities in order to raise their social and economic status. Furthermore, due importance to female education has to be accorded to increase the scheduled tribe women literacy rate and educational attainment at par with their male counterparts and scheduled tribes as a whole to minimize the scheduled tribes and the other community disparities in the levels of education.
2. Given the large prevalence of under nutrition among the scheduled tribe women as indicated by the primary survey, there is a need for mass information, education and communication in the scheduled tribe women in order to increase their awareness about intake of proper nutrient rich food during the pregnancy and child bearing.
3. We also argue for the improvement of affordable, accessible and quality health care services in the scheduled tribe women with proper follow-up in order to raise the general nutritional and health status of the scheduled tribe women.
4. The government can strengthen the household capacity to access food through public food distribution, food price stabilization and food for work programmes.
5. Finally, the Government of India should repeatedly take steps to strengthen preventive health care services in addition to the provision of easy treatment for delivery and emergency services. The nutritional status of the dalit women was quite low. Hence there is a need to increase nutritional status of the scheduled tribe women with the support of IRDP.

REFERENCES

- Basu, S. 1990. "Anthropological Approach to Tribal Health." In *Tribal Demography and Development in North-East India*, eds. Ashish Bose et al., Delhi: Hindustan Publishing Corporation.
- Chakma, T. et al., 2009. "Nutritional Status of Baiga—A Primitive Tribe of Madhya Pradesh." *Anthropologist*, 11(1): 39-43.
- Chandraker, Richa et al. 2009. "Reproductive and Child Health among the Dhur Gond Tribal Community of Mahasamund District, Chhattisgarh, India." *Stud Tribes Tribals*, 7(2): 97-103.
- Mallikharjuna and Balakrishna. 2010. "Diet and Nutritional Status of Women in India." *Journal of Human Ecology*, 29(3): 165-70.
- Rajaratnam, J. et al., 1996. "Morbidity Pattern, Health-Care Utilization and Per Capita Health Expenditure in a Rural-Population of Tamil Nadu." *National Medical Journal of India*, 9(6): 259-62.

Robert et al., 2008. "Maternal and Child Under Nutrition: Global and Regional Exposures and Health Consequences" retrieved from [http:// www.thelancet.com](http://www.thelancet.com).

Sachdev, Bandana. 2012. "Perspectives on Health, Health Needs and Health Care Services among Select Nomad Tribal Populations of Rajasthan, India." *Antrocom Online Journal of Anthropology*, 8(1): 73-81.

Surabhi Singh et al., 2013. "Anthropometric Measurements and Body Composition Parameters of Farm Women in North Gujarat." *Ergonomics*, 3(1): 1-4

Tara.1989. "An Exploratory Study of the Women Constrains, Felt Needs and Preferences of Rural Women for Economic Development." *Indian Journal of Training and Development*, 19(5): 45-49.

www.census.co.in 2011.

Regional Cuisines for Local Economic Development and National Branding: A Case of Awadhi Cuisine

By

Mahendra Singh

Institute of Hotel Management

Bundelkhand University, Jhansi

Abstract

The rise of the experience economy has ushered in a growing role for food experience in tourism. This review of recent developments in the field of food and tourism experiences underlines the ways in which food experiences can be adapted to meet tourist needs, how culinary tourism can play a role in local development, create new tourism products, stimulate innovation and support marketing and branding. Food is a key part of all cultures, a major element of global intangible heritage and an increasingly important attraction for tourists. The linkages between food and tourism also provide platform for local economic development, which can be strengthened by the use of food experiences for branding and marketing destinations. This paper provides an understanding of the role of food tourism in local economic development and its potential for country branding. Desk research was adopted for data collection from past literature while analysis is based on review of referred articles, discussion and research papers from key academic hospitality and tourism management journals. The paper seeks to assist budding entrepreneurs to make informed decisions in the food tourism sector and the experience industry. Findings indicate that viable economic opportunities exist for food tourism, and recommendations which include food safety and quality control in internal markets were proffered to tackle the constraints facing food tourism development.

Keywords: *food tourism, economic development, tourist destination, food entrepreneurs.*

INTRODUCTION

The increase in the culinary travel goes along with a rise in emphasis on food throughout the world. Today's tourist is better informed, more cultured, well-traveled and looking for new experiences and adventures. He is interested in leading a healthy lifestyle and wants to experience the local culture when he goes on holiday (Walker & Evans, 2012). Food is a key part of all cultures, a major element of global intangible heritage and an increasingly important attraction for tourists. The linkages between food and tourism also provide a platform for local economic development (Geng-qing Chi, AbKarim&Gursoy; 2010), which can be strengthened by the use of food experiences for branding and marketing destinations.

One of the major challenges in the experience is dealing with the shift towards intangible culture and heritage (Organization for Economic Co-operation and Development, 2012). The focus of many tourists has changed from the classic 'must see' physical sights such as museums and monuments towards a 'must-experience' imperative to consume intangible expressions of culture such as atmosphere, creativity and lifestyle (Geng-qing Chi, et al,

2010). This provides new opportunities for tourist destinations as well as new challenges, particularly in the area of experience development, marketing and branding.

Food is of course a physical necessity, but it embodies cultural identity and individuality, giving the tourist an insight into a new experience, the exotic, the unusual and a deeper insight into the place they are visiting. Food tourism could be commercial or domestic, festive or ordinary, involving restaurants, festivals, cookbooks, specialty food stores, food events, cookery classes, films, brochures, food and wine tours and other similar ways of physically experiencing the product (Walker & Evans, 2012). But there are also the tangible aspects of food and drink that provide a knowledge base into the religion, traditions, customs and history of other places, in which food entrepreneurs can explore for business and wealth creation. This paper therefore provides an understanding of the role of food tourism in local economic development and its potential for country branding.

STATEMENT OF PROBLEM

Most localities in India are endowed with cuisines that are of special interest to both local and international tourists. The lack of understanding of food tourism as a veritable tool for developing tourism and the local economy has caused the nature of these festivals to remain parallel over the years devoid of new innovations in product diversification and marketing, as well as community branding.

OBJECTIVE OF STUDY

This paper is intended to create awareness on the importance of food tourism in developing the local economy through the adaptation of food experiences as a means of generating new tourism products to meet tourism needs, stimulate innovation and budding enterprises in the food industry as well as support marketing of various tourism products, branding of the local economy and by extension, national branding.

UNDERSTANDING FOOD TOURISM

Food and wine are vital components of the tourism experience and are increasingly being seen as prime travel motivators in their own right. In defining food tourism, there is a need to differentiate tourists who consume food as a part of the travel experience and those tourists whose activities, behaviors and, even, destination selection is influenced by an interest in food. Still, it does not mean that any trip to a restaurant is food tourism; the definition is more complex. Culinary tourism or food tourism is experiencing the food of the country, region or area, and is now considered a vital component of the tourism experience. Dining out is common among tourists and food is believed to rank alongside climate, accommodation, and scenery in importance to tourists.

Culinary tourism can rightly be defined as the pursuit of unique and memorable eating and drinking experiences. Culinary tourism differs from agritourism in that culinary tourism is considered a subset of cultural tourism (cuisine is a manifestation of culture), whereas agritourism is considered a subset of rural tourism, but culinary tourism and agritourism, according to Wolf (2006), are inextricably linked, as the seeds of cuisine can be found in agriculture.

Yeoman (2008) wrote that food is a significant aspect of the tourist's experience of a destination, driven by the growing trends of authenticity and the need to have a high-quality experience. Food tourism shapes gastro destinations such as France, Italy and California (Organization for Economic Co-operation and Development, 2012). Emerging

destinations like India should take a cue from these exotic destinations and ensure that food plays an important role in the overall tourists' experience.

Type of Experience Required

Food tourism includes all unique and memorable food experiences, not just four star or critically acclaimed restaurants. Price is not necessarily indicative of quality. According to a research by Tourism Queensland (TQ) in 2003, true food tourists are perfectly happy at a roadside café in the middle of nowhere, as long as there is something memorable about their visit (TQ, 2003). Tourist consumers (in Australia) were asked to list aspects that make a place a good food destination. Results of the research revealed that regional food got 36% of the responses. Variety in the cuisine got 73%, tradition 9% and the reputation of the food service destination got 18% of the responses.

In addition to sampling local food and dishes, food tourists are also likely to engage in some other activities (visit museums, go shopping, attend music and/or film festivals, participate in general outdoor recreation) during their holiday (Hall, Sharples, Mitchell, Macionis & Cambourne; 2003), and this can have a positive multiplier effect on the economy of the immediate environment (Wolf, 2006).

IMPORTANCE OF FOOD TOURISM TO THE LOCAL ECONOMY

Food is so important to the tourism industry. Food, wine and alcohol are key elements of anybody's vacation. Most day trips begin and end with a local food treat of food and/or drink. Visitors may have become a lot choosier on what they spend their money on, but they are also highly experimental and open to new ideas and tastes. A location can now become a tourist hotspot purely because of its local food and drink.

Food and wine plays a significant role in the tourism strategy for many destinations, whether they are large and small. Hall (2012) wrote that in Scotland Whisky tourism is estimated to add £30.4 million to the economy in 2013, with 86% of all distillery visitors coming from outside of Scotland. Food tourism's primary role is to package visitor experiences that already exist and market them to the different tourism markets.

Boosting Food and Tourism-related Regional Economic Development

Intangible assets are fast becoming the basis for regional economic competitiveness through tourism strategies (Organization for Economic Co-operation and Development, 2012). The question of who benefits should be fundamental in assessing regional economic development policies and strategies. In order to utilize food tourism as an economic development driver, it is important to encourage visitors to stop, spend and stay longer (Hall, 2012). Retaining visitor expenditure, developing networks with a host of regional stakeholders and the development of intellectual capital are important if food tourism is to be integrated within wider regional development strategies. However, the extent to which food producers become part of the business mix in tourism development initiatives depends on overall business goals, location and target market.

Economic Opportunities Created Through Food Tourism

The food tourism niche market presents a new aspect of destination marketing, which can enhance the attractiveness of a destination without necessarily involving extensive new product development. Food tourism can essentially be viewed as a subset of cultural tourism, with the local cuisine being a product of the local culture and the natural environment (TQ, 2003). Therefore, regions that possess unique dishes and food products

as a result of their culture and environment may be transformed into food tourism destinations with minimum marketing and product development.

In terms of regional aspects, food tourism can be divided into a rural and an urban/city experience (McKercher et al, 2008). The urban/city experience usually presents travelers with a wide variety of food tourism products, and convenience in the form of restaurant precincts and culturally distinct cuisine. Rural food tourism on the other hand is not usually considered as a developed tourism product (Hall et al, 2003). Activities such as visits to farms and farmers' markets, fruit picking and agricultural farm accommodation may provide important supplemental activities to struggling rural areas.

Research suggests that in many instances, consumers attribute their lack of satisfaction with food on their holiday to the reason their trip did not become an overall memorable holiday (TQ, 2003; Hall et al, 2003; and McKercher et al, 2008). Destinations could develop higher consumer satisfaction levels (and hence higher return and recommendation rates) if they could guide tourists to food products that provide memorable experiences (whether it is service, quality, value for money, or uniqueness). This may be achieved through either consumer marketing (e.g. a tourist restaurant/food tourism brochure) or through cooperative product development.

No state or local food tourism associations currently exist in India. The marketing and development of new food tourism products could be assisted and facilitated by the formation of such an organization. Membership could also act as a strong indicator to consumers of quality tourism food product.

CONSTRAINTS ON FOOD TOURISM DEVELOPMENT

Food Safety and Quality Constraints: Safety and quality problems are related to inadequate food collection infrastructure, poor handling during production, collection, processing and distribution. There is little effort to integrate good practices in local food production and collection. Most processing facilities in India have not established modern food safety/quality management systems, unlike similar establishments in Asia, which have full-fledged HACCP based food safety/quality management systems in local food supply chains (Offiong, 2011).

Poor Linkages between Producers and Processors: The major constraint faced by medium scale processing establishments is the weak linkage between producers and processors.

Poor Market Analysis: Small scale food business operators often do not carry out market studies prior to the establishment of the enterprise and think they can produce and sell as they wish. There is generally little effort to analyze market requirements and tourists expectations (Hall, 2012). As a result, production is not market oriented and products do not meet consumer expectations.

Religious Issues: Tourists are often restricted from culinary experiences intended by them due to religious issues and certain religious beliefs of the region visited. In strict Islamic regions for instance, restrictions are applied on cuisines such as pork, as well as alcohol due to the existing Sharia (Islamic) Law; hence both local and foreign visitors are faced with these religious restriction/challenges on their cuisine of choice.

CONCLUSION

For food tourism to actually impact on the economy of the host community, a linkage has to exist between tourist attraction managers and stakeholders (food entrepreneurs) in the food industry especially at the local level in order to create a synergy in providing adequate food requirements of food tourists, in terms of quality and quantity, and to ultimately

enhance their travel experience. If destinations encourage visitors to spend longer periods within the environment, the local economy will benefit from the multiplier effect as a result of businesses generated by the network of entrepreneurial activities of local stakeholders.

RECOMMENDATIONS

Food Festival: The idea of aAwadhi Food Festival will provide a huge platform for the appreciation of Regional cuisine. In this case, the need to explore indigenous knowledge regarding local food production is necessary. Export variation is a major challenge facing Awadhi foods. Packaging and presentation is therefore essential as packaging makes food attractive before the taste, first and foremost. With the global food packaging industry raking in about \$100b annually, India needs to tap into this trend, hence the need to showcase the richness and nutritional value of Indian dishes beyond our borders.

Food Safety and Quality Management in Internal Markets: Food and water borne diseases are major public health problems worldwide and an important cause of malnutrition, in infants and young children. Food safety and quality management systems should control food safety hazards and ensure safe food supplies for a well-nourished and healthy nation. In addition, food safety and quality management often reduce post-harvest losses and increase food availability to enhance food security. Integrating food safety and quality in food supply chains increases and sustains the supply of quality safe foods in internal markets.

Opportunities Created by Improved Food Safety and Quality Management in Internal Markets; Creating Niche Markets for Local Food Products in Major Hotels and Restaurants: The growing tourism industry in India has opened new markets for local food products, both fresh and processed. However, small scale producers often fail to compete against high quality imported foods because they lack skills and information about market requirements. Supporting producers and local food entrepreneurs with market studies and relevant training and technical assistance in food safety and quality would enable them to exploit the existing market opportunities in the food tourism sector.

Orientation and Training: Adequate periodic training should be organized for stakeholders in the local food industry so that they would meet contemporary challenges in the food tourism sector as they frequently arise. In similar vein, it is imperative to for certificate courses to be introduced in the polytechnic sector to assist in the skills development of budding food entrepreneurs and local intermediate tourist personnel to further equip them to appreciate the necessity of sustainable tourism development.

References

Anegbu, N. D. C. (2012). Foods eaten in Nigeria. Retrieved October 5, 2012, from Total Facts About Nigeria website: <http://www.total-facts-about-nigeria.com/foods-eaten-innigeria.html>

Byanyima, M. (2011). Value adding through food processing, food safety and quality management. Groupe d'Expertise, de Conseil et d'Appin au Développement. Retrieved September 14, 2012 from GECAD website: <http://www.ifad.org/english/operations/pf/rwa...>

Geng-qing Chi, C., AbKarim, S., &Gursoy, D. (2010). Examining the relationship between food image and tourists' behavioural intentions. *Eurochrie Journal of Hospitality and Tourism Management* 10(15) 6-7. Retrieved from EuroCHRIE database.

Hall, C. (2012). The importance of food tourism. Retrieved September 10, 2012, from 3Mi Advantage website: <http://www.3miadvantage.co.uk/sme-marketing-business-blog>

Hall, M. C., Sharples, L., Mitchell, R., Macionis, N., & Cambourne, B. (2003). *Food tourism around the world: Developing management and markets*. Butterworth-Heinemann/Elsevier.

Kivela, J., & Crofts, J. C. (2006). Tourism and gastronomy: Gastronomy's influence on how tourists experience a destination. *Journal of Hospitality and Tourism Research*, 30(3) 4.

McKercher, B., Okumus, F., & Okumus, B. (2008). Food tourism as a viable market segment. It's all how you cook the numbers. *Journal of Travel and Tourism and Tourism Marketing*. Vol. 25(2) 137-148.

Organization for Economic Co-operation and Development (2012). *Food and the tourism experience: The OECD workshop. OECD studies on tourism*. OECD Publishing.

Offiong, A. V. (2011). Indigenous foods: Enhancing Nigeria's tourism potential. Retrieved September 12, 2012, from Weekly Trust website: <http://www.weeklytrust.com.ng/index>

Tourism Queensland (2003). Food tourism. TQ standard visitor survey. Retrieved September 16, 2012, from TQ website: http://www.tq.com.au/fms/tq_corporate/research/fact_sheet/food_tourism

Walker, W., & Evans, S. A (2012). The importance of food tourism. Industry comment from ITTFA. Retrieved September 14, 2012, from ITTFA website: http://www.travelmole.com/news_feature.php?news...

WIKIPEDIA (2012). Nigerian cuisine. Retrieved October 5, 2012, from WIKIPEDIA website: http://en.wikipedia.org/wiki/Nigerian_cuisine

Wolf, E. (2006). *Culinary tourism: The hidden harvest*. London; Kendall/Hunt Publishing

Yeoman, I. (2008). Why food tourism is becoming more important. Retrieved September 21, 2012, from <http://www.hospitalitynet.org/news...>

ARCHITECTURE IDENTITY OF INDIAN CITIES: HISTORY AND TRANSFORMATION

Ahmad Jawad NIAZI¹, Dr. Navneet Kumar²
Department of Architecture

^{1,2}OPJS University, Churu (Rajasthan) – India

Abstract: Each city has its remarkable and important identity, this identity is uncovered through its physical and visual structure, it is seen through the eyes of its residents and clients. The city creates after some time, and its identity advances with it. Reflecting the fast and steady changes the city is exposed to, Architecture and Arts, is the exemplification of the social, chronicled, and economical qualities of the city. This gathering was committed to the investigation of the distinctive new methodologies created in Architecture and Contemporary expressions. It has concentrated based on urban life and personalities. The Indian architect, who turns 90 this year, said that a large number of the nation's architects are excessively worried about copying the style and practices of different nations, instead of gaining from the inheritance of their forerunners. It is in the quickly growing urban territories of India that the biggest ventures and investigations in architecture are occurring. Also, it is here where the issue of identity gets most intense and challenged. Ongoing changes in the urban zones demonstrate a few kinds of new landscapes where the identity statements are articulated. Contemporary architecture is ending up more an articulated style of architecture the nation over, from the bigger, urban communities to littler, rustic zones. Through a study of ordinary points of view on the connection among architecture and identity, which base themselves upon the talks of 'symbol' and 'local', the paper presents a defense for the essential commitment with the bigger cultural landscapes to recognize a perusing of identity. The main aim of this article is to discuss the architecture identity of Indian cities through their history and transformation.

I. INTRODUCTION

Indian architecture has taken on numerous styles and structures from the beginning of time. Huge numbers of these past structures have turned out to be all inclusive iconic, for example, the TajMahal and South Indian Temples. Vaults, minarets (thin towers), complex latticework, and calligraphy work are altogether traditional qualities of Indian architecture that can be found on locales like the TajMahal. In spite of the fact that pictures of resplendent structures with vaults and minarets may strike a chord when we consider Indian architecture, present day Indian architecture appears to be much unique than its traditional lineage.

The changing society of architecture in current India, both as a lifestyle and as a calling, has been educational. As far as lifestyle, we never anticipated the degree to which architecture and configuration could influence us just as the society and culture we live in, nor did we foresee how profoundly symbolic of our beliefs and attitudes they'd become. As a calling, the enormous rush of improvement and innovation that made us attempt and primate everything that didn't have a place with us, has made us question and quest for our own identity and incited us to return to the strong traditional roots and establishment of Indian architecture.

Two spine talks that have been reliably utilized in architectural hypothesis, to build up the connection among architecture and identity are the talk on symbolism and the possibility of the local. Utilizing the instance of Architecture in India, we make primer contentions that

both these talks stay deficient and now and then wrong to illuminate the connection among architecture and identity.

Architecture is especially appropriate for such a multimodal approach to city identity development. The material sign framework characterized by geology, for example, waterways, mountains, roads, parks, dividers or landmark buildings, supports city identity and offers the most prompt understanding of uniqueness: is the city walkable, are its open spaces welcoming, do they trigger collective memory of key individuals and occasions? The visual sign framework relies upon the material in light of the fact that a style must be encoded into material structure, ordinarily buildings. Along these lines, the visual aids occupants or guests as much as does the material. It renders the material simpler to peruse and translate, helping city's clarity. Whenever material and visual adjust, they strengthen identity, while their disparity creates perplexity about that identity. The expository sign framework offers translations and offers significance to the material and visual. Its impact in molding city identity relies upon the writings' reverberation with group of spectators' encounters and desires. For instance, papers are more probable referenced by inhabitants and manuals by guests, yet the picture of a city depicted in the last can make pride in or upset its inhabitants. Architecture is crucial in building city identity through these three modalities. Our investigation pushes past collective identity thinks about that depend principally on logical writings—either meetings or written reports—to uncover that materiality and visuality are incredible types of distinguishing proof that interface with each other, and with talk as content, and that are fundamental to how we experience a city and what implications we partner with it.

Architecture is especially reasonable for uncovering the fleeting part of identity since buildings residue the historical past and furthermore uncover desires for an imagined. By inspecting the fleeting procedures of city identity and multimodality, we broaden the fleetingness point of view from organizational identity change (Schultz and Hernes, 2013) [1] to city identity dynamic, acquiring extra memory frames in the making of importance and representing the job of institutional on-screen characters, for example, architects, urban planners, pundits and manual journalists. Institutional on-screen characters, particularly architects and urban planners, take part in changing decisions regarding which materials express best city identity, for example traditional, new or a mix (Jones et al, 2012) [2], what city design is fitting, where to put parks and squares, regardless of whether to obliterate or restore a building. These decisions are transiently moored; they may try to 30 reflecting and respecting the past, broadening and reinterpreting it or adjusting it by presenting new implications for what's to come. The visual style of new buildings may draw upon a city's vocabulary adding to progression, or comprise break; it might be tied down before or may look to express an alternate future. As far as explanatory framework, talk that takes advantage of the lived or expected encounters of individuals is bound to be taken care of and strengthen a feeling of city identity.

A. The Myth of the Symbol

In managing the identity question in architectural practice and hypothesis, the talk of the symbol winds up central (Lang, Desai and Desai, 1997 [3]; Curtis, 1985,[4] Khosla, 1985)[5]. Georges Bataille's (1929)[6] investigation outlines "architecture as the outflow of the very being of societies":

“It is as houses of prayer and royal residences that the Church and State talk and force quiet on the hoards... It is self-evident, that landmarks motivate socially satisfactory conduct, and regularly an undeniable dread.”

The discourse of the symbol recommends that Architecture turns into an instrument to comprehend the identity of a culture. While the utilization of traditional materials and procedures, in the symbol-discourse are likened with a declaration of a regionalist identity, the utilization of imported glass and steel get related with a mission for looking for a global identity. There is by all accounts here a somewhat oversimplified connection between the architectural symbol and the comparing claim of a specific identity.

Architectural symbols stay deficient to depict an identity since every symbol can all the while signify contradictory implications and contradictory symbols can propose comparative implications. This logical inconsistency is shown in the accompanying precedents from the Indian architectural Landscape. Give us a chance to take the case of the *TajMahal (Agra)*. While the TajMahal speaks to love and sentiment and the stylish taste of the way of life, it likewise speaks to the urgent abuse of work, the assignment of assets and the disparity common in that culture. Architecture here all the while depicts love and oppression. We could maybe think about various instances of such contradictory portrayals: the Babri Masjid of Ayodhya could be perused as a record of Indian Heritage or a symbol of Hindu disdain, the Capital Complex in Chandigarh, as an indication of just innovation or a sign of western authority. Likewise the National Crafts Museum of New Delhi could be viewed as a portrayal or affirmation of Indian identity or the separation or externalization of the Indian Folk Arts through the formal museum format; a chawl in Mumbai could speak to a beneficial vitality focus of the city or the injurious living state of the work (not lodging but rather warehousing individuals), a slum as a festival of business enterprise or urban rot. Every one of these models appears to propose that every symbol can at the same time signify diverse as well as contradicting meaning.

Then again we could likewise recognize how different contradictory symbols recommend comparative implications: the *Hiranandani Complex (Mumbai)* shopping centers with Greek sections and pediments and the innovative glass and steel strip mall of Gurgaon close Delhi, both propose the presence and growth of a similar shopper white collar class. The new Jain sanctuaries in Mumbai that utilize traditional materials and procedures, the Bahai Temple in Delhi planned as a cutting edge shell structure and the *RadhaParthasarathi Temple in New Delhi*, exploring different avenues regarding strengthened solid, all recommend a sort of religious fundamentalism that supports bleeding edge and costly building procedures. Also, the authoritative get together of Bangalore with its traditional and old style symbols, the get together of Mumbai with a commanding present day structure and the gathering of Bhopal that obtains symbols from antiquated history, all speak to a similar seat of power, that of the state expert.

To confuse things further, it is very hard to discover any relations between formal reflections and identity. For instance a momentous scale does not really demonstrate and force power. The Red Fort (Delhi) in all its strength today is a standout amongst the most open places; the pristine arcades of the Fort zone in Mumbai today harbor a huge casual industry. These spots never again speak to an Empire. They never again apply power (like Bataille's landmarks) or are symbols of colonization – their symbolism has been transformed, changed over and disguised.

From these precedents we could reason that the connection between a symbol and identity is a development of the architectural scholar and consequently it is deluding to examine the issue of identity exclusively through the discourse of the symbol.

B. Role of Cultural Landscape

In this segment we would investigate the possibility of the cultural space to express a system for examination of architecture to manage the identity issue. One of the principal deconstructions required for such an investigation is in regards to the situation of "urban experts, for example, planners and architects who trust themselves to be popularity based moderators, network advocates, unbiased social researchers, types of the excellent and mind blowing shapers of room". Anyway they appear to act just as a feature of an a lot broader cultural space, which is represented by "deeper frameworks of power, economics and implication" (Borden, Rendell, Kerr and Pivarro, 2002) [8] and in such bigger and deeper frameworks, architecture and architects remain too weak to even think about creating or control identity. To build a comprehension of identity, maybe there is a need to broaden the point of view from taking a gander at architects and architectural structure to a bigger cultural landscape

To build up the possibility of the cultural landscape, Edward Soja's definitions are critical. He expresses a study of the architectural order's vision of the city as a "gathering of isolated cells with built environment compacted together to shape a urban mass" (Soja, 2002).[9] His investigate admonishes the architectural network to comprehend "a fundamentally unique huge scale spatial or regional vision of the city as an extensive urban arrangement of movement and flows of merchandise being created and individuals living in built environments as well as in developed geologies described by various examples of income, unemployment, education levels, ethnic and racial societies, lodging and employment densities and so forth." Soja encourages architects to "think and work at the regional scale since it gives a significant section point into the core of what has been reshaping our urban areas". It is the thought of the "regional" in Soja's composition that we adjust here towards figuring the possibility of the cultural landscape which permits us not just an a lot broader investigations into the different settings of architectural mediation, yet additionally steals away from the limitations and implications of the terms – space, locale and the city.

C. Protection of City Environments

The other significant wonder that is affecting the type of the urban regions as of late is the growing concern for preservation and security of city environments furiously pushed by Non Governmental Organizations (NGO), native gatherings, Private Practitioners just as different individuals from urban society. The ongoing affirmation of local networks by the state constitution 6 towards empowering their interest in city advancement procedures has been an unmistakable sign of the procedure of the decentralization of power and basic leadership.

There have been different sorts of alliances like gathering of experts and industrialists meeting up to frame a NGO, or a gathering of slum occupants meeting up with social specialists to shape cooperatives, or certain ethnic local gatherings shaping a Community Based Organization, or even inhabitants of old buildings shaping an affiliation. We discover a progression of these gatherings battling for issues of cleanliness, public open spaces, better guidelines, land allocation, environmental security, and so on. In a few occasions, these gatherings have been fruitful in achieving an adjustment in the physical

landscape of the city. Their weight declarations have been effective to the point that in a few late events, the city organization has named these gatherings as advisors in the improvement of the city. The power holding of these alliances can be comprehended when one takes a gander at the occurrence where one such NGO is engaged with building up a vision plan for the city of Mumbai that has the endowments of the political and managerial network.

The occurrences of public space assurance attempted by a portion of the Community Groups are best delineations of power-shifts and changes in physical landscapes of the city. These gatherings in a few bodies of evidence have battled against the assignment and security of Public Open Spaces in the city. On account of Oval Maidan, the residents' affiliation was not just effective in assembling considerable assets to battle the case in the official courtroom, yet in addition to attempt the advancement of these open spaces themselves. In another occurrence viz. that of the Bandra Reclamation Grounds, a local residents' gathering had the option to shield an open space from being sold to a private developer by the local government officials. We find here that local gatherings have progressed toward becoming overseers of some significant open spaces in the city. They not just appear to ensure and keep up the open space yet additionally manage the way where it is being utilized and by whom. We find here, again power being shifted from the land mafia and the government officials to these local gatherings who claim to speak to 'public intrigue'. Be that as it may, the new cognizance for environment has additionally been a reason for making profoundly reductionist positions like battling for the privileges of panthers and sparing the mangroves in the city. It is progressively winding up obvious that this sort of awareness for the green eco-living is utilized from the ideas of cleanliness, great living, wrongdoing free environment, health food and so forth that are principally promoting methods of the worldwide economy.

II. IDENTITIES OF CITIES

India's more seasoned, increasingly old; urban communities were unfathomably fruitful in creating singular characters. Obligated by topography and innovation, constrained to local assets and molded by one of a kind chronicles and atmospheres, each formed into its own. The expression "identity" can be explained through the inquiry: "what is one's/your/my/our/its/their identity? Regularly troubled descriptive words like Brahmin, rich, Indian, Punjabi, male, NRI 4, urban, worldwide and so on are utilized to answer this. At times much increasingly hazy descriptive words like traditional, society, contemporary, progressive, orthodox, old style and so forth outline the appropriate response. The issues with these descriptors are that they themselves are summations for a complex cultural subjectivity, which may have a few layers of contradicting portrayal. For instance, the term Brahmin could be portrayed as the minister network, the Indian upper caste, the knowledge bearing network, the illuminated network, the power holders, the exploitative feudal lords and so forth. The rendering of the specific portrayal relies on the aims of the describer. Subsequently the modifier itself does not have an unmistakable definition. The issue of decoding identity turns out to be more intense when more than one such descriptive word is utilized to depict identity. Truth is told, posing such inquiries or noting the inquiry in such modifiers recommends a very essentialist comprehension of the idea which does not get a handle on the intricacy and the procedure significant to the production of identities. [10]

For instance, **Udaipur** developed at the foot of an uneasy tradeoff between the government spoken to by the royal residence at the highest point of a hill and organization some route

down its slope. The white surfaces of terraced, stone urbanity were an immediate reaction to warmth and geography.

Varanasi [prior known as Benares], supposed to be the most established living city on the planet, developed along the straightforward stream that was its backbone. The Brahmanal was secured after some time to be the principle course to the Ganges and the religious class. In the city's marking as the sacrosanct residence Shiva, it was set up as a way to paradise, which in the long run guaranteed its assurance. Its urban structure is rich, unpredictable and layered with progressive times: sanctuaries built over houses, built over sanctuaries, in houses, over houses, under sanctuaries.

Mumbai[earlier Bombay] is one more precedent. An amalgamation of seven islands and the seat of India's economic power, the city is home to the biggest repository of neo-Gothic and Victorian architecture outside of the United Kingdom, and still bolstered by the maturing, perplexing and rich urban framework built by the British colonizers.

A. Identity issues for Indian Architecture

Our built environment is the most substantial record of our reality, our lifestyle and our legacy. Indian architecture possesses stood the trial of energy for a considerable length of time, yet with globalization and modernism, it is gradually and consistently losing its identity. Grasping present day architecture isn't an irregularity, yet increasingly like a gradual detachment from our roots and identity. Advancement is constantly welcome on the off chance that it accompanies better answers for arrangement with climate, habitation, space, and urbanization. In any case, totally abandoning our inheritance resembles leaving our home and leasing space in another's residence.

B. Bringing Back the Lost Heritage of Indian Architecture

A compromise of both indigenous techniques and modern innovation is the thing that is by all accounts the best arrangement. A unique mix that consolidates the substantial knowledge of universal measures with pertinent traditional architectural strategies such an approach would accomplish the better of the two universes while subsisting with the cultural subtleties of the Indian architecture.

Why Le Corbusier was known as the dad of Modern Architecture in India is apparent from his works. His creations were progressive but then somewhat antiquated in approach. Nehru's fantasy city 'Chandigarh' was structured by Le Corbusier, which is as yet a standout amongst the best arranged urban communities in India. At that point came Kahn, whose impact was likewise significant during the 1960s. He is the architect of Indian Institute of Management (IIM Ahmedabad). His works as well, similar to Le Corbusier, were animated by antiquated Indian customs and architecture. Asian Games Village structured by architect Raj Rewal, has additionally increased global acknowledgment as a fine mix of modern lodging and Rajasthanihavelis. Charles Correa was another architect who intertwined the best of modern and Indian vernacular architecture to structure the Gandhi Ashram in Ahmedabad.

III. CONSTRUCTING CITY IDENTITY THROUGH ARCHITECTURE BY USING A MULTIMODAL APPROACH

Architecture is, all things considered, an illustrative craftsmanship – a specialty of representation, maybe – and what is depicted in it is absolutely the various structures of wanted connections between individuals, their institutions, and their normal world.

Henry Cobb, architect

What makes urban areas like London, Paris, or Vienna unmistakable and conspicuous for residents and visitors? What job do institutional entertainers play in developing a city's identity after some time and what sign frameworks do they use? City identity is a particular type of collective identity that depends on different on-screen characters' apparent uniqueness and implications of spot instead of association or social movement built on devotion to a reason or a gathering (Owens, Robinson) [11]. City identity is built after some time and comprises of collectively shared observations about a city's supported "character" or "ethos" (Bell and de-Shalit, 2011) [12], which architectural scholars call *virtuoso loci*—the particular soul of a spot (Norberg-Schultz, 1970). [13]

A city's identity, developed and conveyed through its architecture, is contained three sign frameworks—material, visual and rhetorical—interfacing to characterize in what ways a city might be particular and how its implications have advanced after some time. We separate these sign frameworks for analytical clarity, however the built environment is multimodal (Ravelli and McMurti, 2016) [14] in light of the fact that a similar sign imparts materially, outwardly and rhetorically. For instance, the Eiffel Tower is a material referent, outwardly observed from numerous areas, which empowers individuals to peruse and find themselves inside the city. It is a complex referent whose structure and configuration record the change from elegance to modernism. It is likewise a rhetorical referent, representing the city of Paris. [15]

To enlighten city identity, in our examination we utilize a multimodal approach (Kress and van Leeuwen, 2011) [16] which takes care of the material, visual and rhetorical sign frameworks grounded in 5 architecture, their trademark modes and affordances, just as the essential institutional on-screen characters that draw in with them. We likewise acknowledge the connection of the material, visual and rhetorical and how it helps develop city identity as well as makes a city's picture, e.g., how inhabitants think others see it. For instance, multimodality empowers clarity—how effectively inhabitants and visitors can peruse and explore the city (Lynch, 1960/2005) [17]. The material request and visual styles of a city communicate, for example, the winding restricted roads with white buildings of the Parisian Latin Quarter versus the straight avenues and modernist buildings of the thirteenth arrondissement of Place d'Italie, to outline neighborhoods and empower individuals to find them inside it. [18]

IV. CITY IDENTITY THROUGH ARCHITECTURE: EXPRESSIONS OF INSTITUTIONAL ACTORS

A city's identity is developed and settled through material, visual and rhetorical sign frameworks by various institutional entertainers: professionals and politicians who assemble or direct the built environment just as faultfinders who decipher it. These institutional on-screen characters are "culturally legitimated theorists" (Strang and Meyer, 1993) [19], who examine, teach and assess.

A. City Identity as Material Sign System: Topography, Landmarks and Iconic Buildings

The city's material sign framework explains and encodes her identity: incalculable choices, people groups and center institutions engaged with, repeated by or tested with these choices (Jones et al., 2012; Jones, Meyer, Jancsary and Höllerer, approaching) [20] after some time. For instance, Paris' particular material type of white stone and spatial format

(e.g., roads that divide round arrondissements) reflect her center institution of the State (Napoleon III), architect (e.g., Haussmann) and explicit history: Napoleon III contracted Georges-Eugène Haussmann to change Paris from a dim, medieval labyrinth of avenues into a modern city. The material request of a city is central to characterizing its neatness (simplicity of perusing the city) and directing its friendliness (who collaborates with whom); in this manner, material request offers the establishment for and plausibility of an unmistakable, shared city identity.

The material request of urban areas has three central qualities—eliteness, uniqueness and fixedness—that help shared cooperations and identity. Restrictiveness decreases identity disarray and hybridity: one can be in Boston or New York, yet not both at the same time and couple of inhabitants hold numerous residencies. Uniqueness is evoked by topography—normal and built. A city has an underlying material request characterized by its "characteristic conditions of topography, soil, and climate", which are utilized via landscape architects to inspire what is particular about a spot, which are characterizing highlights of every city's identity. Regarding the built topography, buildings can wind up iconic for a city, for example, Arc de Triomphe, Notre Dame Cathedral and Eiffel Tower for Paris, typifying the city's key chronicles and people groups. On the off chance that such buildings are annihilated, regardless of whether in urban recharging, war or fear monger acts, some portion of city identity is eradicated and "comprises lost historical memory" (Kostof, 2005: 7 141) [21]. Conversely, "conserving the memorable buildings and institutions of an area can safeguard the symbols of network identity" (Calthorpe & Fulton, 2001/2005: 335) [22].

B. City Identity as Visual Sign System: Architectural Styles and Visual Continuity

The visual sign framework, seen in architectural styles, records the city's history, manages its clarity, and reflects its uniqueness, going about as memory helper and "associate mémoire" that summons identity. The various styles of the city establish diverse identity layers, for example Paris' Art Nouveau and Art Deco buildings, or Barcelona's gothic and modern architecture. For instance, Gaudí "made an architecture rooted in Catalonia's Moorish and medieval past, on fire with hued tile, misusing the slender, bended tile vault development for which Catalonia had for quite some time been well known... It is a unique vision of a practical, fundamentally utilitarian, natural architecture that could have been made distinctly in Barcelona". [23]

At the point when architects capture and encode city identity in a style, they enable encounters of the city to be shared and make its history conspicuous through the built environment. On the off chance that buildings appear to be peculiar it is on the grounds that they are not built through shared visual vocabularies, for example the history and stories encoded into the buildings are not promptly perused or decoded by inhabitants and visitors. Architectural styles capture the history, encounters, shows, and cultural understandings of their designers and inhabitants to distil and convey a city's identity. They additionally convey institutional rationales related with the particular mix of customers behind the buildings.

Architectural styles improve a city's clarity—the straightforwardness with which the city can be perused—and empower portions of it to be "recognized and composed into a reasonable example" (Lynch, 1960/2005: 2-3) [16]. For instance, as noted prior, the wide roads of Paris lead to the middle and encourage route its inside. Styles likewise improve neatness by flagging limits of and shifts in neighboring social spaces. Neighborhoods

"share something for all intents and purpose, a sort of partiality of style" that is "quickly recognizable", notwithstanding errors or special cases (Bourdieu, 2005: 44). For instance, the Boston Commons situates one in the city, with shifts in style flagging new neighborhoods. On its eastern side is the performance center area contained nineteenth century buildings with expound exteriors and columns. On its northern top is Government focus with enormous twentieth century modernist solid workplaces flanking the little red block buildings of the Italian North end? Toward its south, Commonwealth Avenue associates seventeenth century normal to nineteenth century Parisian style residential brownstones. Architectural styles give obvious signals empowering individuals to peruse and find their place inside and along these lines explore the city.

C. City Identity as Rhetorical Sign System: Critics and Texts

Faultfinders participate in "rhetorical acts" that uncover city identity by deciphering the cultural importance of its architecture and featuring its uniqueness. These rhetorical demonstrations may uncover the city through intensifying what is available, however uncovering by what is missing — i.e., the "silenced" discourses. By inspecting featured and omitted territories, we can distinguish implications related with the city identity—her history, people groups and occasions—that are valorized or deleted. These rhetorical demonstrations include interesting expressions that expound the talk of walking. [24]

The shift in the interest and supply of architectural administrations and the adjustments in the subsidizing frameworks have considerably changed the sort of arrangements of the new practices with the cultural landscapes. They presently need to not just react to the quality and tasteful prerequisites enunciated by different worldwide and economic situations; yet in addition must be proactive to get work, sustenance and believability. We locate an enormous number of new works on creating fresher systems to consult with the cultural landscape and these incorporate:

- High interests in research exercises
- Careful outsourcing of specific work
- Aggressive systems administration with different partners
- Intensive activism for privileges of the partner

These new arrangement methodologies of the new practices have made them progressively responsible; however have carried them a lot nearer to the general population for whom they would design. The adjustments in the sort of arrangements have likewise made new plans for practices. While the more seasoned practices were fixated on making identity utilizing Modern and Indian iconography, we see the new works on articulating plans of value production and assurance of rights.

V. COMPULSION OF LOOKING AT 'CITIES,' INSPITE OF 'BUILDINGS'

Huge numbers of India's real urban communities are encountering issues of foundation, essential planning, and sanitation, however they get little consideration. While smaller urban communities are demonstrating to be incredible models, there is as yet a need to take a gander at urban planning starting with no outside help. India has a couple of architects, for example, Christopher Charles Benninger, whose center has been to incorporate architecture and urban planning. Various architects in the nation have understood that working in storehouses and for their own buildings alone probably won't work. Many are starting to take a gander at the bigger picture inside their urban communities, and as

opposed to concentrating exclusively on individual activities, are seeing the requirement for architecture to draw in with urban areas.

Taking into account how architecture can influence the socio-cultural engraving of a city, the social obligation of an architect is by and large significantly shown. Taking into account how architecture can influence the socio-cultural engraving of a city, the social obligation of an architect is in effect significantly shown by a bunch of architects in the nation who are taking a shot at community architecture and are energetically included with reestablishing or conserving heritage structures. At that point there are architects whose works have not just delivered the massive asset of 'craftspeople' that we have in the nation, yet have likewise helped in elevating these 'treasures.' Architects are participating in social movements and requesting public discourses to control separate between what individuals need and what is being offered to them. As far as wellbeing and security, architects like Neera Adarkar are bringing into center the 'gendering of spaces' and ideas, for example, 'eyes in the city.' There has additionally been a flood of non-benefit associations in the nation, which are not just voicing their feelings on the corruption of plan and urban areas, yet are physically chipping away at arrangements. Through this, natives can take an interest in building their urban areas more than ever. Presently, there are even open doors for residents to take part in and give criticism to ace planning, an ongoing precedent being Bengaluru.

VI. TRANSFORMATION

A ways into its post-1991 neo-liberal economy, India presently has an expanding group of urban designers, planners and activists – many prepared as architects – who have made the transformation of the Indian city their primary professional concern. From reexamining streets and public transit, reclaiming dismissed naalaas, planting public toilets, to recasting urban guideline, the expanding pervasiveness of such concerns is as reviving in post-liberal Indian architecture, as the quest for "Indianness" had been previously. Indeed, a scholarly shift has happened crosswise over India itself – from concerns of post-pilgrim identity to those of neo-liberal urbanity. There is the new Prime Minister's "100 Cities" declaration. There have been significant social affairs like the 2014 Urban Age Award occasion. There is the foundation of the Indian Institute for Human Settlements (a fascinating parallel to the Indian Institute of Technology that was incepted three years after India's autonomy.) Terms like "Liveable Cities," "Green Cities," "Smart Cities" are everywhere in India today (despite the fact that what precisely this implies is as yet not really clear.) For the first run through in its ongoing history, Indians from varying backgrounds – business visionaries, elites, politicians, civic leaders, activists, urbanists, architects, craftsmen, profound leaders and, the best part is that customary residents – are put resources into some structure or the other in the "city." Whether this speaks to the transitioning of a conceived again country, a scholarly result of its flourishing economy, or a commonsense reaction to living in the "century of urban communities," this shift can't be belittled. It is an extraordinary minute for the world's biggest popular government.



Figure 1: Transformation of Indian cities

The best thing pretty much this, is Indian natives are at long last recognizing that urban areas are not molded by architects, yet by various different elements to a far more noteworthy a degree – politicians, administrators, activists, transportation engineers, developers, planners – with architects coming a lot later into the

condition. What's more, progressive architects thus are recognizing their genuine spot in the unpredictable round of city making. This is something worth being thankful for, on the grounds that, for all the hypothetical positions and belief systems that are making "better urban communities" in the West, the truth of the matter is that Indian urban areas are unreasonably unpredictable for clean pronouncements and movements. Indian urban areas are and will be molded by a mind boggling web of practices – unquestionably more unpredictable than the West. The Indian city will keep on requiring sparks of strategic splendor – like NGO's, resident gatherings and activists – that can backer and act towards prompt change, especially at the tremendous base of its economic pyramid. It will require thoughts with desire and positive thinking, and this is now occurring through experiments in "smart innovation" by business visionaries, technocrats and researchers. What's more, it will need rushes of long haul and foundational arrangement change, and this should originate from edified politicians and directors. They may not be effectively unmistakable; however numerous such progressive battles are well under way. These endeavors should be featured and brought to the cutting edge. The new saints of Indian city-production (not architecture) – diverse and multidisciplinary – should be distinguished and recognized, with the goal that their work may motivate and advise numerous different battles and attempts. In their battles, victories and disappointments lay the seeds of India's urban future.

VII. CONCLUSION

We accept that city identity and the job of architecture and different wellsprings of multimodality in its development is a dynamic and significant new region of research for understudies of association. Research that utilizes a multimodal and temporal approach can feature the progression and mutability of various sign frameworks and their affordances on the activity and affected by various institutional on-screen characters, just as how they work in cooperation, bringing novel bits of knowledge into collective identities, which means making and institutions with regards to urban communities. While traditional discourse as of late stays engrossed with exchanges on endeavors to make worldwide identities (through the new improvements of glass boxes, shopping centers, hoardings and tall structures) and attest local identities (through local celebrations, slum societies and the utilization of vernacular and antiquated building methods), the broader and progressively textured analysis of architecture and identity praises the incalculable endeavors at arranging the intricate contemporary Indian cultural landscape. These arrangements, all the while, make a multiplicity of simultaneous liquid identities, subsequently forsaking the reductive parallel of the unadulterated worldwide or unadulterated local. This perusing praises this dynamic procedure making a vivid portrayal of identity as opposed to a solitary, clear and unmistakable portrayal featuring the thought of identities being dynamic as opposed to static - growing out of various just as consistently changing societal aspirations. It is this festival and declaration of increasingly pluralistic indigenous identities that would make a more genuine comprehension of the connection among architecture and contemporary Indian Identity.

REFERENCES

- [1]. Schultz, M., &Hernes, T. (2013). A Temporal Perspective on Organizational Identity. *Organization Science* 24(1):1-21.
- [2]. Jones, C., Maoret, M., Massa, F, &Svejenova, S. (2012). Rebels with a Cause: Formation, Contestation, and Expansion of the De Novo Category "Modern Architecture," 1870–1975. *Organization Science*, 23(6): 1523-1545.

- [3]. Lang, J; Desai, M. and Desai, M. (1997): *Architecture & Independence. The Search for Identity – India 1880 to 1980*. Oxford University Press, New Delhi
- [4]. Curtis, W. (1985): *The ancient in the Modern*. In Rewal, R., Veret, J.L. and Sharma, R. (eds) *Architecture in India*, ElectaMoniteur, Paris
- [5]. Khosla, R (1985): *Including Iconography and Images in Architecture*. In *Architecture In India, Techniques And Architecture*.
- [6]. Bataille, G. (1929): *Architecture, Dictionnaire Critique* (trans. Paul Hegarty) in Neil Leach ed. (1997) *Rethinking Architecture*, Routledge, London.
- [7]. Bahga, S., Bahga, S., and Bahga, Y. (1993): *Modern Architecture in India. Post-Independence Perspective*, Galgotia Publishing Company, New Delhi
- [8]. Borden, I., Rendell, J. Kerr, J. and Pivaro, A. (2002): *Things, Flow Filters, Tactics*. In Borden, I., Rendell, J. Kerr, J. and Pivaro, A. (eds.) *The Unknown City: Contesting Architecture and Social Space*, MIT Press, London.
- [9]. Soja, E (2002) In *TransUrbanism*, edited by Joke Brouwer, Arjen Mulder, Laura Marz. V2 Publishing/NAI Publishers
- [10]. Abel, C. (2000). *Architecture and Identity: responses to cultural and technological change*. Routledge.
- [11]. Owens, T.J., Robinson, D.T. & Smith-Lovin, L. (2010). Three faces of identity. *Annual Review of Sociology*, 36: 477-499.
- [12]. Bell, D.A. & de-Shalit, A. (2011). *The spirit of cities: Why the identity of a city matters in a global age*. Princeton University Press.
- [13]. Norberg-Schulz, C. (1970). *The Phenomenon of Place*. *Architectural Association Quarterly*, 8(4): 3-10.
- [14]. Ravelli, L.J. &McMurtrie, R.J. (2016). *Multimodality in the Built Environment: Spatial Discourse Analysis*. Routledge.
- [15]. Bezemer, J., & Kress, G. (2016). *Multimodality, Learning and Communication: A social semiotic frame*. London and New York: Routledge.
- [16]. Kress, G., & van Leeuwen, T. (2011). *Multimodal Discourse: The modes and media of contemporary communication* (2nd ed.). London, UK: Bloomsbury Academic.
- [17]. Lynch, K. (1960/2005). *The city image and its elements*. In R.T. LeGaztes& F. Stout (Eds.), *The city reader*: 424-428. London, UK: Routledge
- [18]. Ravelli, L.J. &McMurtrie, R.J. (2016). *Multimodality in the Built Environment: Spatial Discourse Analysis*. Routledge.
- [19]. Strang, D., & Meyer, J.W. (1993). *Institutional conditions for diffusion*. *Theory and Society*, 22: 487–511.
- [20]. Jones, C., Maoret, M., Massa, F, &Svejenova, S. (2012). *Rebels with a Cause: Formation, Contestation, and Expansion of the De Novo Category “Modern Architecture,” 1870–1975*. *Organization Science*, 23(6): 1523-1545.
- [21]. Kostof, S. 2005. *The city assembled: The elements of urban form through history*. New York, NY: Thames & Hudson.
- [22]. Calthorpe, P., & Fulton, W. (2001/2005). *Designing the region and designing the region is designing the neighborhood*. In R.T, LeGaztes& F. Stout (Eds.), *The city reader*: 331- 336. London, UK: Routledge
- [23]. Vale, L. (2008). *Architecture, Power, and National Identity*, 2nd edition. Oxon: Routledge.

- [24]. Sala, T.-M. (2007). Images of the city of modern life. Ideals, dreams and realities. In Sala, T.-M. (Ed.) Barcelona 1900: 15-73. Amsterdam, The Netherlands and Brussels, Belgium: Van Gogh Museum and Mercatorfonds
- [25]. DjamelBoussaa (2017) – “Urban Regeneration and the Search for Identity in Historic Cities”, *Sustainability* 2018, 10, 48; doi:10.3390/su10010048
www.mdpi.com/journal/sustainability
- [26]. Jones, Candace & Svejenova, Silviya. (2017). Constructing City Identity through Architecture: A Multimodal Approach. *Research in the Sociology of Organizations*. Forthcoming.
- [27]. Kesavaperumal, Thirumaran & Kiruthiga, K. (2018). Cities' Identity through Architecture and Arts Proceedings of the International Conference on Cities' Identity through Architecture and Arts (CITAA 2017), May 11-13, 2017, Cairo, Egypt.

A STUDY ON THE SCOPE OF MULTI LEVEL MARKETING IN COMPETITIVE MARKET

RAM NIWASH

ASSISTANT PROFESSOR OF COMMERCE
GOVERNMENT COLLEGE, JIND (HARYANA)

ABSTRACT

Multilevel marketing which is also known as the networking marketing where the sales forces are awarded for the purpose of sales and their recruitment. A hierarchical structure is attained in this kind of marketing where the forces of sales is placed at the top level with the objective of achieving the target of getting more and more level of recruitment.

Here, the advantage of the upper level workforce is that the reward points of the down side are also awarded to the upper level forces. In this type of marketing, all the forces of sales are attached together in the form of a chain. Sometimes, this type of marketing is related to the group marketing as a bundle of the workforces is created here. This marketing has a good scope of raising the performance level of the firm. The current paper highlights the scope of the multi-level marketing in the competitive market.

KEYWORDS:

Multi-level, Marketing, Organization, Sales

INTRODUCTION

In the case of the multilevel marketing, the sales forces play a major role as most of the activities are performed by them. Here, the job of the manager is to monitor all the activities of the sales forces so that maximum output can be obtained from these sources.

These sales forces are asked to recruit more and more sales forces under them which not only benefit them individually but the organization also. Hence, the size of the hierarchical chain goes on increasing throughout the life span of the scheme.

The sales forces with higher number of newly added recruitment are awarded with the points which encourage them for the purpose of the promotion. Hence, the sales forces show their tendency in gaining more and more rewarding points by making efficient amount of the recruitments in the down side.

Here, the more and more facilities are provided to the sales forces which are placed at the top level as they get the opportunity to gain some promotional points as a consequence of the performance of the lower level sales forces.

This trend of implementing the multi-level marketing is getting more and more popular with the fact that a number of the multi-national companies have adopted this kind of marketing strategies. Hence, it can be said the future scope of the multi-level marketing is secure and bright in the competitive market.

Here, the key point of this kind of marketing is that all the decisions in terms of the finances are taken by the higher management. The hierarchy followed in multi-level marketing is such that the all the orders of the top management are passed to the manager and it is the responsibility of the managers to implement these orders among the lower level sales forces.

Also, the task of controlling and managing the sales forces is performed by the manager of the organization. Hence, in order to get the success in this kind of marketing, there should

be higher level of coordination between the managers and the sales forces of the related organization. Hence, the role of managers is very important here.

The major problem which is observed in the multi-level marketing is that the sales forces at the top level are sometimes show low intensity while working and much of the burden is shifted to the sales forces working at the lower levels. Hence, it is the biggest challenge for the managers to maintain the performing intensity among the work forces.

Another feature of the networking marketing is that it facilitates for the better compensation plan as compared to other type of marketing strategies. It also provides the opportunities to the work forces to start their own business.

MLM (multi-level marketing) is another name for network marketing and surprisingly is the second highest paid profession behind professional athletes. At the end of the day, many network marketers have said, it isn't about the money, it's about helping someone in need get to where they want to go in life. "Network Marketing is the big wave of the future. It's taking the place of franchising, which now requires too much capital for the average person."

SCOPE OF MULTI LEVEL MARKETING IN COMPETITIVE MARKET

About eighty percent of the people that call it a pyramid scheme just because it's structured like a pyramid, but so is the structure of a school and church. Some network marketing companies that have succeeded are Avon, Herbalife, and Amway. The best ways to choose a great network marketing company are to see if it's have been out for at least five years, because if a company fails, it's usually in the first five years.

Multi level marketing is a form of direct marketing. Here, the goods do not pass through the layers of intermediaries but reach directly to the end-users. The traditional method of selling through retailers is not adopted here, rather the sales take place through a network of independent dealers.

Unlike traditional marketing, the goods are sold to the final consumers without the involvement of intermediaries. In traditional marketing, the sales team is recruited by the company but in multi level marketing the dealers further recruit members and enhance the company's network. The sales people in Multi level marketing are not the employees of the company, rather they are self-employed with no pre-decided sales targets to meet.

They are not liable to promote company's products. The sales team in traditional marketing is paid commission on units sold by them, but in multi level marketing the dealers are paid commission not only on the units sold by them but also on the sales made by the members recruited by them.

The investment requirements for Multi level marketing are low.

The companies save heavily on products' promotion costs and employees' recruitment costs. Moreover, the transactions are done on cash so no problem of debts arises. Not much training is required for the members so it saves on training costs also. However, the disadvantages include no direct contact between the company and consumers, lack of commitment from the sales team, and inability to forecast demand and adjust inventory.

Multi level marketing is a marketing technique where products are sold directly to the final consumers through a network of independent dealers. The dealers further appoint dealers and form a network. However, mass marketing is a marketing technique where same marketing mix is offered to a very large group of customers who are homogenous in their demands.

The multi level marketing targets individual consumers who are profitable to the company. The objective of the company here is customer retention. However, in mass marketing the

company targets all customers who are similar in some demographics and the objective is to attract more and more customers.

The multi level marketing involves no expenditure on advertising the product as the product is promoted by the members through word-of-mouth communication. However, mass marketing involves heavy expenditure on advertising as the message needs to be communicated to the masses.

A company that adopts the multilevel marketing as a core business value marketing word-of-mouth, bet on the relationship of people to make sales.

A Network Marketing company linked with the product, opportunity, a recruitment process easy to duplicate, an attractive compensation plan, and systems that provide a joint effort of all this. We conclude that multilevel marketing is a marketing trend to higher growth and profits for major companies. The company derives a series of intermediaries that would increase the cost of the product and focus on simplicity of marketing products.

DISCUSSION

Through multi level marketing businesses reach the end-users of the products while through mass marketing it can reach only to the customers. Moreover, mass marketing involves the services of intermediaries for distributing the products to the customers whereas MLM involves independent dealers who directly reach to the final consumers of the products.

In contrast to this statement, the twentieth century in turn, was the era of big companies, because the conditions for this were obvious, such as: high costs and management technologies that are not accessible. This revolution has provided an opening horizon in the choice of workers, there were now other options on the market, but what made this possible was the new technology was used exclusively by large corporations, but not for long.

The changes continued over the decades, and new opportunities have arisen for workers around the world, and a segment was particularly aligned with these changes.

With all the changes, the current world has become competitive and the products and services were so very similar. Prices, deliverables, benefits and attitudes can no longer differentiate, given the standardization of manufacturing and distribution. This is where direct sales are unrivaled in the view of the distribution channel.

The companies that will prosper will be those that adopt the direct sales model with independent distributors who focus almost exclusively on intellectual distribution, i.e, teaching people about new products and services that will improve their lives.

Distributors operating in the industry marketing multilevel business have connected to the Internet and this brings a lot of agility and reducing costs and they can talk about your product or service to any prospect in the world.

Another advantage of a virtual enterprise is its ability to appear and disappear in a very fast, because it has no link with corporate divisions and not with government agencies, they last only enough to soak up the opportunity for which they were designed, and the MMN is place in this dynamic business structure

.

The entrepreneur who works with direct sales, has much more power of decision in your business that had 20 or 30 years, he usually makes his choices based not on the past, but in exchange of this information, so it strengthens the point of being more efficient in their jobs than large companies. "The individual entrepreneur today is much more competitive than a large corporation".

Thus, some people have realized the magnitude of representing a product through the MLM or corporation, where he can have a voice to the point of becoming a member of the company, including suggesting strategic decisions, as he more than anyone can feel the market. Nowadays, we are forced to be entrepreneurs, some more than others, but definitely we are more proactive than before.

The marketing in recent years is among the major highlights of current events, present at all times, covering all activities in society, and has constantly bombarded consumers either directly or indirectly.

Marketing can provide various types, work was highlighted the practice of multi-level marketing as a good way to boost sales of a company. The expenses that would be made in marketing the products have become for business gains for the distributor, which to mount a network of distributors receive part of the company's profit on the same network.

CONCLUSION

The multi level marketing works through developing dealer network. The existing dealers further recruit their relatives, friends and acquaintances to promote the company's products.

These dealers are often called members and these members do not work as employees of the company they are promoting. However, under mass marketing the sales people are the employees of the company and are recruited by the company's Human Resource (HR) department through proper recruitment process.

REFERENCES

- Govindarajan, M. 2nd Edition. (2014). *Marketing Management: Concepts, Cases, Challenges and Trends*. New Delhi: Prentice-Hall of India Private Limited.
- Lancaster, G. & Reynolds, P. (2012). *Marketing Made Simple*. Elsevier Science.
- Lao, F. 1st Edition. (2010). *Marketing Management: Concepts and Applications for Strategic Marketing Planning*.
- Rubino, J. (2012). *The 7 Step Success System to Building a \$1,000,000 Network Marketing Dynasty: How to Achieve Financial Independence through Network Marketing*. John Wiley & Sons, Inc.
- Kelly, S. (2013). *Customer Intelligence: From Data to Dialogue*. John Wiley & Sons, Ltd.
- Panda, T. 2nd Edition. (2014). *Marketing Management: Text and Cases*. New Delhi: Excel Books.

DEMOGRAPHIC DIVIDENDS IN INDIA'S PERSPECTIVE

Prof. (Dr.) Anand Mittal: Corresponding Author, Associate Professor, Department of Economics, Hansraj College, University of Delhi, Delhi, India Mobile : +91-9810082979, email: dr.anandmittal@yahoo.com*

Divisha Goyal: Assistant Professor, Mata Sundri College for Women, University of Delhi, Delhi, India

Arjun Mittal, Assistant Professor, Shri Ram College of Commerce, University of Delhi, Delhi, India

ABSTRACT

According to the International Labour Organisation (ILO), the 21st century may belong to India as it has three main assets which no country has: *demographic dividend*, *democracy*, and *demand*. India is having one of the youthful populations across the world; by 2020, the median age in India will be only 28, compared to 45 in Western Europe, 37 in US and the China, and 49 in Japan. The experience of recent decades in the country suggest that poor states are growing slow economically and fast demographically and conversely, country's better off states are growing fast economically and slow demographically. In both cases, cumulative causality implies faster demographic changes will bring about faster economic changes and vice versa. In this paper, endeavour has been done to understand various trends in the demographic transition and the demographic bonus potential in India; to study various factors responsible for this India's experience of trend of demographic transition; and understand the opportunities lying before India in respect of demographic dividend and India's response to it; basis which future projections have been analysed and solutions have been recommend to utilise India's biggest window of opportunity. Authors suggest that investing more efficiently in the welfare of people shall enable the country to tap into its demographic divided and prepare the economy for the future. There is a robust linkage between the economic growth and these investments, stability and security. Investing in human welfare through provisioning of jobs, healthcare, quality education, and skills shall help in building human capital, support the economic growth, reduce the extreme poverty, and, develop more inclusive societies. To meet the challenges in future and to prepare for them, it's important for India to exploit the window of opportunity available for a short period of time; One-time gift from demographic transition with suitable social and economic policies.

KEY WORDS:

Demographics of Innovation, Demographic Transition, Window of Opportunity, Demographic Dividend, Death Rate, Birth Rate, Mortality, Fertility

INTRODUCTION

Demographic transition is a process of change whereby societies move from a situation of high mortality and fertility to one of low mortality and fertility. The process leads to population explosion due to rapid decline in mortality rate, shift in age structure of population resulting in long term age structural transition. Demographic transition differs

from region to region within India. In Southern Indian states, level of fertility has reached beneath the replacement level, while it is still high in many states of north India, though decreasing but at a steady pace. Initially there is an increase in number of children both in relative and absolute size due to high fertility rate and rapid decline in mortality. After some time lag, fertility rate also declines which contributes to a fall in relative share of young population; thereby reducing the cohort size of children in this phase. So the past changes in mortality and fertility causes varying cohort sizes leading to changes in age structure. In this process, there shall be a span of 'window of opportunity' where child dependency ratio (ratio of child population to working age population) decreases because of fall in fertility and rise in working age population while children born in high fertility age now move to working ages. The period of demographic dividend may be categorised in three ways to give demographic dividends, which are discussed as follows: (i) Productive employment of labor force increases total GDP; (ii) By directing accumulated wealth and savings into productive investment, window of opportunity may give high incentives to save as improved health, longevity; smaller family size makes savings easier and attractive. Also when fertility declines, the demand on household resources for raising children decreases, allowing households to save more of their income. (iii) If appropriate investment is made for the formation of large supply of human capital, then a decrease in fertility will impact school going population, with respect to an increased opportunity to invest more in their education and health. Further women with fewer children are more able to participate in labor force and invest additional income in education and health of their children. Nevertheless, there is a requirement of appropriate intervention to ensure that society reaps the advantage of window of opportunity which will be one-time opportunity and its length shall depend on the velocity of demographic transition.

Demographics of Innovation take hold of an investigative, deep look at the linkage between innovation, economic growth, entrepreneurship and vitality for a mature population, and gives smart blueprint for the future. *Demographics of Innovation* gives intriguing strategy and analysis for business leaders, investors, policy makers, and entrepreneurs concerned about economic future planning and is an important feature of India's development. Demographic Transition began during 1920s and 1930s (with declining average death rate); saw a fall in scale and frequency of famines and epidemics which led to a rise in life expectancy, fall in fertility rate at young age, the rise in modern methods of contraception- especially female sterilization. The remote cause of decline in fertility in India has been mortality decline in India. Despite the decline in birth rate, India's population growth rate remained in the vicinity of 2% per year in each intercensal decade after 1951, therefore comparing 1951-61 and 1991-01, birth rate has fallen but reduction in death rate is much faster causing population size to triple during 1951-2001. In India, there was a delay between the phenomenon of sustained reduction in death rate and initiation of fall in birth rate. Even during 1960s, women had six live births each; and the birth rate begin to decline from 1970s, since the country witnessed an increase in the average age of women at marriage from 15 years in 1951 to over 20 years now and an improvement in life expectancy. In late 40's and 50's however, there was rapid mortality gains which further led to an rise in population. The annual average growth rate was over one percent per year with small mortality gain during 20's, 30's, 40s. Major southern states such as Kerala, Tamil Nadu, Andhra Pradesh, Karnataka, Maharashtra; remains two decades forward in their experience of demographic transition, compared to northern states like Uttar Pradesh, Rajasthan, Madhya Pradesh and Bihar. During 1996-2001, life expectancy in southern states averages 66 years compared to 59 years in four northern

states. Similarly, during the same period, total fertility in southern states average 2.2 births per women, compared to an average of 4.4 births per women for Uttar Pradesh, Rajasthan, Madhya Pradesh and Bihar.

LITERATURE REVIEW

AnamitraRoychowdhury, C P Chandrasekhar, Jayati Ghosh (2006) concludes that demographic dividend in India has led to a rise in the dependency ratio causing the hypothesis that the prominence in the working population shall lead to the growth acceleration. This demographic dividend provides India great opportunity but it also poses a great challenge. David E. Bloom, David Canning, Jaypee Sevilla (2011), observed the integrated impact of the large working-age population, family, labor, financial, human capital and health policies can generate righteous cycles of wealth creation. K. S. James (2011), India's demographic dividends likely to remain for the next few decades as more states, especially the northern part, experience rapid fertility transition. The demographic changes have high potential for swift economic growth. Roy Kumar Swapan and Roy Suhas (2014), inferred that demographic dividend shall benefit India if the country's population is more educated, healthy, and appropriately skilled. PattanaikSubidita&MoharanaTapas Ranjan (2016), suggest that Indian demographic dividend is one of the foremost in the world, possessing the potential to make country the largest one in the world. Financial Express (2017), states that India is having almost 41% of population less than 20 years age and may reap the demographic dividend if only this population set gets righteous education. MittalAnand, Mittal Arjun, Goyal Divisha (2018, October-December), inferred that since after demonetisation in India, millions of new users have been added into the country's digital economic transactions, the objective of potentially realising the demographic dividend can be achieved faster.

OBJECTIVES:

- (i) To understand various trends in the demographic transition and the demographic bonus potential in India.
- (ii) To study various factors responsible for this India's experience of the trend in demographic transition.
- (iii) To understand the opportunities lying before India in respect of demographic dividend and India's response to it.
- (iv) To analyse the future projections and recommend solutions to utilise India's biggest window of opportunity.

DATA AND METHODOLOGY

The analysis in the study is basis the secondary information collected through survey/information sources. Newspapers, books, relevant websites and Journals have been referred. Keeping in mind the demographic trends, bonus in the country; suitable recommendations have been made for the country to exploit the demographic dividend potential that India is experiencing.

ANALYSIS

(1) Window of Opportunity for India

Age structure is classified according to life cycle stages and their impact on economy.

Broad stages are discussed as below:

Age structure	Life Cycle Stages
Young (0-14 age)	Dependent on adults for consumption, incur education and health expenditure
Youth (15-24 age)	Consume education and health but their consumption pattern is different from that of children (0-14 age) due to different needs and services
Young Working Age (25-49 age)	Saves little
Mature Working Age (50-64 age)	Possibly shall earn higher income due to work experience and have a higher saving rate than the population of (25-49 age)
Elderly (65+)	Dependent on others for their consumption needs. Eg: healthcare and social support.

(2) Trends

Fertility rate started to decrease from 1970's, the share of population under 15 years of age began to decline and will continue till 2025-30, the decrease is forecasted to be rapid since 2000's. Child dependency ratio is decreasing since 1980s, this will continue till 2030 because of the fall in fertility rate and increase in working age population (both absolute and relative terms), Therefore, it's an opportunity for India to improve the quality of human life which will impact labor productivity and economy and later provide an opportunity to increase the saving rate if appropriate policies are in place. The share of working age population has been increasing since 1980's and will peak by 2025. Challenge is to foster the new employment opportunity to meet the growing working age population. Amongst working age population, share of youth segment (15-24) will decrease from now on while that of mature labor force shall be increasing thereby putting less constraint on the economy to foster employment opportunity and can lead to a reduction in unemployment. The increased saving rate and generation of higher tax revenue has the potential to supplement the investment and social program funding. Regarding the old age population, size of their share will increase during age structure transition, this increase will be greater after 2025, old dependency ratio will increase rapidly after 2025. Thus, meeting the health care and social security requirements of the elderly will be a challenge especially after 2025.

(3) Estimated Demographic Bonus for India

Extent of demographic bonus is derived from the difference in the working age population growth rate and total population. During 1951-71, this bonus was negative as the population growth rate exceeded the working age population growth rate. After 1971, working age population growth rate is higher than growth rate of population thereby leading to *positive demographic bonus*. The bonus is estimated to be highest for 2001-11 decade. Further, the bonus is anticipated to prevail till 2031 and will be negative later. This age structure transition is different in different states. For demographically advanced states like Kerala, Tamil Nadu, Punjab bonus was positive till 2011 and negative later. For BIMARU states however; the process of Demographic transition initiated at a later stage, started getting higher dividend since 2001 and will continue till 2031. Since there exist regional contrast in the age structure transition, internal migration could be of importance in future as young workers move from an underdeveloped to developed nations. This regional difference in age structure transition will play an important role in terms of convergence in economic growth among states in India, provided efforts are made to invest in human capital among BIMARU states as large share of labor supply in future will come from them.

(4) Urbanization

The increase in proportion of population residing in urban areas- facilitated a fall in mortality and fertility rate which is integral to the demographic transition. Urban areas offer economies of scale in terms of providing health and family planning amenities and modern form of water supply, sewage, and access to education. Thus, life expectancy in urban areas is higher than in rural areas; specifically, it is the sustained mortality decline of demographic transition that the rural sector effectively causes the process of urbanization. eg: In India during the period from 1871 to 1941, data shows slower upsurge in the level of urbanization. Main reason why level of urbanization was low and urbanization and urban growth was constrained was because mortality from most infectious diseases varied directly with the population density. Before demographic transition got underway, death rate in urban areas was much greater than those in rural areas. Crucially, the death rate in urban areas was much higher than in birth rates. The huge and sustained fall in mortality that occurred in the second half of 20th century further transformed situation with respect to urban growth and urbanization and thus, India's urban sector benefitted much more from mortality decline than has the rural sector, as the life expectancy in urban areas is much larger than life expectancy in rural areas. Further, the massive improvement in urban mortality removed the restriction related to the ceiling on the level of urbanization essentially. Also, reclassification of areas from rural to urban areas occurred because certain villages crossed their threshold limit to be designated as urban. Though in recent decades, majority of the urban population growth has resulted from urban natural increase rather than net rural towards urban migration.

(5) India's Response to Window of Opportunity

Experience of India suggests that Window of Opportunity has not been exploited though it is available since 1980's. It is argued that employment growth rate was low in 90's specifically in the rural areas and therefore unemployment rate was high. In this period the growth of youth population was higher as new employment opportunity did not grow at the same rate as the number of youth, the unemployment rate among the youth increased. It's likely that in future there will be an increase in mature working age population (50-64 age),

which will contribute to a higher saving rate as they tend to have greater capacity to save due to higher income and decreased consumption, as age structure creates different opportunities and challenges across different age group. The relative share of childhood population will decrease in future providing an opportunity to improve human capital through public policy measures with respect to nutrition, education, and healthcare. Rapid growth of labor force will benefit India if employment opportunities are increased with speed to match the labor supply growth. The size and share of elderly population will increase rapidly after 2031 so will pose policy and program challenge. To meet the challenges in future and to prepare for them, it's important for India to exploit the window of opportunity available for a short period of time (a one-time gift from demographic transition with suitable social and economic policies).

(6) National Population Policy of 2000

Government announced population policy on 15th February 2000. This policy is based on short term, medium term and long-term objectives. The short-term aim is to implement the need and use of modern means of contraceptive, health awareness and child health care infrastructure and integrated health services. The medium-term aim is to reduce the fertility rate to the level of replacement level of 2.1 by 2010; however, the long term aim is to attain a stable population by 2045, corresponding to the level consistent with the need of environment protection, sustainable economic and social development. A National Population Stabilisation Fund in the name of "Jansankhya Sthirate Kosh" has been set up to provide an incentive for stabilization of population and National Commission on population has been established.

CONCLUSIONS AND FUTURE PROSPECTS

Projection bases study between 2001 and 2026 states that all demographic growth will occur at ages above 15 years: there shall be a decline in child population (0-14 years). More than half of the demographic growth during 2001-2026 will occur in northern states- Uttar Pradesh, Rajasthan, Madhya Pradesh and Bihar. Population of these states will increase by 45-55% over this period and most of the other states will grow by only 20-30%. Regarding fertility and mortality, can consider that by 2026, total fertility rate for country as a whole will be two births per women. Average life expectancy can reach more than 69 years (combined) with 3 years in favour of females. There is scope for future mortality gains- through higher level of immunization and better control and treatment of respiratory infections. But India may face an increasing double burden of diseases- various degenerate ailments (cancers, diabetes) etc. may grow.

Authors suggest that investing more efficiently in the welfare of people shall enable the country to tap into its demographic dividend and prepare the economy for the future. There is a robust linkage between the economic growth and these investments, stability and security. Investing in human welfare through provisioning of jobs, healthcare, quality education, and skills shall help in building human capital, support the economic growth, reduce the extreme poverty, and develop more inclusive societies. Demographic dividend without productive human capital investments shall be a wasted opportunity for development, and it shall further widen the social and economic gaps, rather than narrowing them. India's future demographic evolution will have a significant implication for economic, education, environment. Economic growth can be enhanced by "demographic bonus" deriving from projected diminishing age dependency ratio. Benefits

may arrive if there are increase in savings and investment. Country's worrying age population is going to grow faster than total population, may be 50% bigger in 2026 compared to 2001. Though economic growth during 1990's was not quite employment friendly, it is recommended that economic growth be made more employment intensive in nature. Without the gains in employment intensity of output and rapid economic growth; it is argued that there could be an increase in unemployment. Concerning environmental issues, future demographic growth has implications for the food production. Future population growth will impact country's demand for water resources; further population growth will have implications for common pool resources (food and forest products). Additionally, population by 2051, will have administrative ramifications, political issues. Over the long run, further population growth will produce an increased differentiated administrative hierarchy and contribute to an increasing decentralization of governance. Finally, the experience of recent decades suggest that poor states are growing slow economically and fast demographically and conversely, country's better off states are growing fast economically and slow demographically. In both cases, cumulative causality implies faster demographic changes will bring about faster economic changes and vice versa.

REFERENCES

- *Anamitra Roychowdhury, C P Chandrasekhar, Jayati Ghosh (2006) "The 'Demographic Dividend' and Young India's Economic Future," 41(49)*
- *David E. Bloom, David Canning, Jaypee Sevilla (2011) "Economic Growth and the Demographic Transition" NBER Working Paper No. 8685 (internet: <https://www.nber.org/papers/w8685>)*
- *Financial Express (2017)- (Internet: <https://www.financialexpress.com/budget/budget-2017-how-india-can-reap-demographic-dividend-via-education/528321/>)*
- *K. S. James (2011), "India's Demographic Change: Opportunities and Challenges", Science, Vol 333(6042): 576-80*
- *Mittal Anand, Mittal Arjun, Goyal Divisha (2018, October-December), "Demonetization: A dual Edged Sword", International Journal of Research in Electronics and Computer Engineering; Vol 6(4), ISSN: 2348-2281(online), pp:1754-1759,*
- *Pattanaik Subidita & Moharana Tapas Ranjan (2016), "Demographic Dividend: An Opportunity for Indian Economy", website: https://www.researchgate.net/publication/309565290_Demographic_Dividend_An_Opportunity_for_Indian_Economy*
- *Roy Kumar Swapan and Roy Suhas (2014), "Demographic dividend in India: A synoptic View", International Journal of Business and Administration Research Review, ISSN No. 2347 – 856X, Vol 2(4), pp- 166-175*
- *Your article library, (2016). Demographic Transition in India, website: <http://www.yourarticlelibrary.com/essay/demographic-transition-in-india/43137/>*

- <https://www.livemint.com/Opinion/Eo1PgYgUyKl9xgWLPwJP/Demographic-dividend-growth-and-jobs.html>
- <https://www.unfpa.org/demographic-dividend>
- https://www.business-standard.com/budget/article/india-s-demographic-dividend-to-peak-by-2020-economic-survey-117013101013_1.html
- <https://www2.deloitte.com/in/en/pages/about-deloitte/articles/india-to-make-massive-gains-from-its-demographic-dividend-press-release.html>
- <https://www.dsij.in/article-details/ArticleID/18083/Economic-Survey-2017-Indias-demographic-dividend-to-peak-in-5-years>

PROFITABILITY PERFORMANCE OF INDIAN POWER SECTOR DURING THE POST-RECESSION ERA

Monojit Saha

Kalna College, Kalna, Purba Bardhaman, WB, India

Abstract

The need of electricity in the modern society can never be over emphasized. Its presence can be found everywhere, starting from a classroom to run a train. As India is a developing country, the need of a sound electricity industry is much more important compared to other countries. In India this industry has always been dominated by public sector undertakings. Besides, other companies also support the endeavor of the governments to enrich the country with enough electricity supply. The recession of 2008 has a poor effect on the performance of most of the business houses across the world. The Indian economy was also affected. In this paper the profitability performance of the selected companies in Indian power sector was analysed during the post recession era, i.e., from 2009-10 to 2017-18.

Keywords: Indian power sector, Profitability, Return on Capital Employed, Operating Profit Margin.

1. Introduction

The need of electricity in the modern society can never be over emphasized. Its presence can be found everywhere, starting from a classroom to run a train. As India is a developing country, the need of a sound electricity industry is much more important compared to other countries. In India this industry has always been dominated by public sector undertakings. Besides, other companies also support the endeavor of the governments to enrich the country with enough electricity supply. The recession of 2008 has a poor effect on the performance of most of the business houses across the world. The Indian economy was also affected. In this paper the profitability performance of the selected companies in Indian power sector was analysed during the post recession era, i.e., from 2009-10 to 2017-18.

2. Review of related literature

Before stepping into the empirical study, a review of the existing literature was made. The following few paragraphs explain in brief some significant studies carried out during the last few years on this issue and the final paragraph of this part deals with the identification of the research gaps.

Gupta and Gupta (2014) studied the financial performance of Power Grid Corporation of India Ltd. They considered current asset turnover ratio, working capital turnover ratio, fixed assets turnover ratio and total assets turnover ratio. The study found that the liquidity position of the selected company was at alarming level.

Maji and Sur (2014) in their study compared the value generating capability of NTPC Ltd. in the pre-liberalisation period with that in the post-liberalisation period. They also examined the relationship between the value generating capability and its determinants and the joint effect of the determinants on the value generating capability. A considerable improvement in value generating capability of NTPC Ltd. was found during the post-liberalisation period. Only fixed assets management and inventory management had a significant impact on the value generating ability of the firm.

Parikh and Dave (2014) in their study analysed the liquidity, profitability and solvency positions of some selected in Indian power sector. Data for the period 2005-06 to 2011-12 were collected for nine companies in Indian power sector. These are Torrent

Power, NTPC Ltd., Adani Power, Power Grid Corporation, Tata Power, NHPC Ltd., JSW Energy, Gujrat Industries Power Companies and CESC Ltd. Current ratio, fixed assets turnover ratio, inventory turnover ratio, debtors turnover ratio, interest coverage ratio, return on net worth and long term debt-equity ratio were evaluated in the study. Mean values of all these ratios with Std. deviation were calculated for each company. One-way ANOVA was also employed in the study, which concluded that only in the case of inventory turnover ratio there was no significant mean difference among the companies under study.

Vyas (2015) in his study selected five companies of Indian power sector, namely, NTPC Ltd., NHPC Ltd., Tata Power, Torrent Power and Adani Power, to analyse financial performance. Data for the period of 2009-10 to 2012-13 were collected from annual reports. Net profit ratio, return on net worth, return on long-term fund, gross profit ratio, return on capital employed, current ratio, quick ratio, long-term debt-equity ratio, debtors turnover ratio, inventory turnover ratio, earning per share and equity dividend were used for the analysis of the study. ANOVA was applied in the study which concluded that financial performance of NTPC Ltd. was better compared to other companies selected for the study.

Narayanan and Hamsalaxmi (2015) studied the financial leverage and operating leverage of power sector companies in India. Tata Power and Reliance Power were selected among the private companies along with NTPC Ltd., Power Grid Corporation of India Ltd. and NHPC Ltd among the CPSEs in Indian power sector. Data for the period of 2009-10 to 2013-14 were collected from annual reports of the selected companies. The researchers prepared Pearson's correlation matrix individually for each company to find out the relationship among earning before interest and tax, interest, profit before tax, operating cost and sales. One-way ANOVA was also applied which found that the financial leverage ratio of the selected companies were not significantly different from each other.

Singh and Sur (2016) analysed the financial performance of NTPC Ltd. on the basis of technical efficiency score (TES) to compare with other Maharatna CPSEs. TES as non-parametric approach based Data Envelopment Analysis was employed in this study. Data for the period 2001-02 to 2013-14 were collected from secondary sources. Return on capital employed was used as a proxy of profitability and fixed assets turnover ratio, inventory turnover ratio, debtors turnover ratio and cash turnover ratio were selected to assess the efficiency of the firms. A wide variation across the selected companies in the level of TES was found in the study. The composite score based on the average profitability and its consistency aspects revealed that the performance of NTPC Ltd. could occupy the second last position among the selected Maharatna CPSEs.

Narang (2018), in a study, attempted to compare the financial performance of NTPC Ltd. during the pre-disinvestment with that during post-disinvestment period. Data for the period of 1997-98 to 2010-11 were used. The period from 1997-98 to 2002-03 was considered as pre-disinvestment period and the period from 2003-04 to 2010-11 was taken as post-disinvestment period. Operating profit margin, net profit margin, return on total assets, return on capital employed and return on net worth were used to represent profitability and total assets turnover ratio, fixed assets turnover ratio, current assets turnover ratio and inventory turnover ratio were selected to represent management efficiency. Operating cost ratio, non-operating cost ratio, net sales per employee and net profit per employee were also analysed in this study. The researcher found that during the post disinvestment period the company performed better in terms of profitability.

Saha (2018) made a comparative analysis of financial performance of selected units in Indian power sector. Data for the study of NTPC Ltd., NHPC Ltd., Tata Power and Reliance Infra for the period 2001-02 to 2015-16 were collected from Capitaline database of Capital Market Publishers (I) Ltd. Current ratio and acid test ratio were used to measure the liquidity; return on capital employed and return on owners' equity were used to assess the profitability, and working capital ratio and fixed assets turnover ratio were used to measure the efficiency in assets management of the selected companies. Statistical techniques, such as, one-way ANOVA and statistical tests like F test, test of homogeneity of variances, Welch's and Brown-Forsythe's robust test of equality of means etc. were applied in appropriate places of the study. The researcher found that all the ratios selected for the study were significantly different for the companies under study and in most of the cases NTPC Ltd. performed best during the study period.

Mushahid (2018) analysed the impact of liquidity, solvency and profitability ratios on sales of NTPC td. Data for the period of 2011-12 o 2015-16, collected from annual reports of the company, were used in the present study. Current ratio, quick ratio, debt-equity ratio, proprietary ratio, interest coverage ratio, gross profit ratio and net profit ratio were considered for analysis in the study. The researcher applied pearson's simple correlation analysis and simple regression analysyis to find individual impact of the said ratios on sales of the company. No significant relationship was found.

Saha (2018) attempted to find the effect of Global Recession, 2008 and Companies Act, 2013 on the financial performance of Indian power sector. 14 companies were five CPSEs in were selected for the study. The 15 years' data for the period of 2003-04 to 2017-18 were collected form Capitaline Corporate Database of Capital Market Publishers (I) Ltd. The total data were devided into three periods to compare the performance. A number of liquidity, profitability and efficiency ratios were considered in the study. Wilcoxon Signed Ranks test was applied in the study to compare the mean values. The study found that the global recession did not affect the profitability ratios of the selected companies but ROA, ROCE and NPM decreased significantly after the Companies Act, 2013 was implemented. TATR of the selected companies decreased significantly and the overall liquidity of the selected companies increased significantly after the 2008 global recession.

From the above discussion it is revealed that a number of studies were conducted in the recent past on the topic to anlyse the financial performance of Indian power sector, but a very few of these were related to profitability of thr selected companies. However, the outcomes derived from these studies were contradictory in nature, which were unable to provide a concrete conclusion. Further no such studies made an intra company comparision of financial performances of the selected companies. To bridge this gap the present study was made in which only the profitability of Indian power sector was taken into consideration.

3. Objectives of the study:

The study analysed the profitability performance of the selected companies in Indian power sector for the period 2009-10 to 2017-18. More specifically the objectives are:

1. To measure the profitability performance of the selected companies considering the major profitability indicators.
2. To compare the financial performance of the selected companies among the first half of the study period, i.e. from 2009-10 to 2012-13 and the second half of the study period, i.e. from 2013-14 to 2017-18.

4.Data Collection and Research Methodology:

Fourteen companies operating in Indian power were selected for the study. Name of selected companies for the study is shown in Appendix-1.

Financial data for the period 2009-10 to 2017-18 (Total 9 years) were collected from Capitaline Corporate Database of Capital Market India Pvt. Ltd. Return on capital employed (ROCE) and operating profit margin (OPM) were used to assess the profitability.

It was decided to compare the means of the selected ratios divided in two halves. A test of normality was run to know the applicability of paired "t" test in the study. Appendix-2 shows the result of the test of normality. It was found that data related to most of the ratios categorised in respect of time period were not normal. It led to use of non-parametric test to substitute the paired "t" test. Wilcoxon Signed Ranks test was applied in the study to compare the mean values.

5. Observations:

Profitability of the selected companies was measured in terms of ROCE, and OPM. Table-1 shows that both the measures of profitability for both the periods were satisfactory. During the first half the average values of the aforesaid ratios were 29.83 and 56.55 respectively; during the second half the values were 24.60, and 62.35 respectively.

In the above paragraph it is clear that while the average operating profit margin of the selected companies increased over the period under study the return on capital employed decreased.

In Table-2, the results of Wilcoxon Signed-Ranks test are shown. In respect of profitability the test found that the mean values of the ratios for the second period were significantly different from the first period. It means that during the second half of the study period ROCE of the selected companies decreased significantly while OPM was increased significantly.

6. Conclusion:

The study found that

i) profitability performance of the selected companies was highly satisfactory during the period under the study.

ii) ROCE of the selected companies decreased significantly while OPM was increased significantly during the second half of the study period.

Table-1: Descriptive Analysis

First Half		ROCE	OPM
	Mean	29.8261	56.5462
Second Half	Std. Deviation	29.3472	27.2379
		ROCE	OPM
	Mean	24.5964	62.3541
	Std. Deviation	22.5926	31.1452

Table-2: Wilcoxon Signed Ranks test

Second Period, minus First Period		ROCE	OPM
	Z	-2.132 ^b	-2.214 ^c
	Asymp. Sig. (2-tailed)	0.039	0.036

Appendix-1: List of the companies selected for the study

Sl.No.	Name of Companies
1	NTPC LTD.
2	NLC INDIA LTD.
3	SJVN LTD.
4	NHPC LTD.
5	POWER GRID CORPORATION OF INDIA LTD.
6	TATA POWER CO. LTD.
7	SURYACHAKRA POWER CORPORATINO LTD.
8	RELIANCE INFRASTRUCTURE LTD.
9	NAVA BHARAT VENTURES LTD.
10	LANCO INFRASTRUCTURE LTD.
11	JSW ENERGY LTD.
12	JAIKASH POWER VENTURES LTD.
13	INDOWIND ENERGY LTD
14	GUJRAT INDUSTRIES POWER COMPANY LTD

Appendix-2: Tests of Normality (Kolmogorov-Smirnova Test)

First Half			Second Half		
	Statistic	Sig.		Statistic	Sig.
ROCE1	0.167	0	ROCE2	0.219	0
OPM1	0.129	0.03	OPM2	0.186	0

Bibliography:

Angappallai, A., & Kandasamy, P. (2017). AN ANALYSIS OF FINANCIAL PERFORMANCE OF POWER SECTOR IN TAMILNADU. *International Journal of Management Research & Review, Volume 7/Issue 7/Article No-4* , 781-792.

Chaudhary, K., Gupta, S., Sethi, P. K., & Gupta, M. (2016). A study on the Profitability Analysis of Power Grid Corporation of India Ltd. *International Conference on Industrial Engineering and Operations Management, Kuala Lumpur, Malaysia, March 8-10, 2016* (pp. 1818-1825). Kuala Lumpur: IEOM Society International.

Dilli, S., Gurumurthy, N., & Reddy, K. J. (2016). Working Capital Management in Transmission Corporation Ltd. of Andhra Pradesh. *BIMS International Journal of Social Science Research* , 44-49.

Gupta, S., & Gupta, M. (2014). A Case Study of Efficiency Analysis on Power Grid Corporation of India Ltd. *International Journal of Science and Research (IJSR)*, Volume 3 Issue 12, December 2014 , 1950-1953.

Khan, A. (2017). Financial Performance Evaluation of National Thermal Power Corporation Limited (NTPC). *Arabian Journal of Business and Management Review*, Volume 7, Issue 2 .

Leepsa, N. (2102). MERGER MOTIVES, TRENDS AND POST MERGER PERFORMANCE: EVIDENCE FROM ELECTRICITY COMPANIES IN INDIA. *Journal of Business Economics and Finance* , 59-82.

Maji, S., & Sur, D. (2014). VALUE GENERATING CAPABILITY OF NTPC LTD. IN THE PRE- AND POST- LIBERALIZATION PERIODS: A COMPARATIVE ANALYSIS. *Time's Journey/ISSN : 2278-6546 1 Vol. 3, No. 1* , 1-9.

Mishra, P., & shukla, K. (2017). "An Empirical Analysis of Financial Performance of Leading Power Sector Organisation - NTPC. *International Journal of Research in Economics and Social Sciences(IJRESS)*, Vol. 7, Issue 11 , 706-719.

Mushahid, S. (2018). EVALUATION OF FINANCIAL PERFORMANCE OF NATIONAL THERMAL POWER CORPORATION LIMITED. *International Journal of Accounting Research* , 43-53.

Nandal, S. (2012). A COMPARATIVE ANALYSIS OF FINANCIAL HEALTH OF SELECTED UNITS IN POWER SECTOR. *INTERNATIONAL JOURNAL OF MANAGEMENT RESEARCH* , 1405-1413.

Narang, M. (2018). Pre and post disinvestment analysis: A case of national thermal power corporation (NTPC). *International Journal of Academic Research and Development*, Volume 3; Issue 1 , 959-964.

Narayanan, R., & Hamsalakshmi, R. (2015). Leverage analysis of selected Indian power sector companies. *International Journal of Multidisciplinary Research and Development* 2015; 2(3) , 829-834.

Pandey, M., & M.K. Choubey. (2011). Appraisal of NTPC Financial Strength. *Tecnia Journal of Management Studies*, Vol.5, No.2, Dated: Oct, 2010-Mar, 2011 , 65-69.

Parikh, P., & Dave, A. (2014). AN EMPIRICAL ANALYSIS OF THE FINANCIAL PERFORMANCE OF THE SELECTED POWER SECTOR COMPANIES OF INDIA . *International Journal of Management, IT and Engineering* , 34-46.

Patidar, V., & Movalia, N. (2016). An Empirical Study on Financial Health of NTPC and NHPC. *Pacific Business Review International* Volume 8, Issue 9, March 2016 , 16-22.

Rashid, N., & Manivanan, B. (2017). A study on liquidity and profitability position of national thermal power corporation limited New Delhi. *International Journal of Commerce and Management Research* Volume 3; Issue 2 , 112-116.

Rathod, D. T. (2011). Management of Power Generation Projects in Karnataka: A case study of KPCL . *Eighth AIMS International Conference on Management*. BANGALORE.

Saha, M. (2018). Financial Performance of Selected Units in Indian Power Sector: A Comparative Analysis. *Asian Journal of Research in Bankng and Finance*, Vol. 8, No. 1 , 36-46.

Sharma, A. (2013). An Analysis of Financial Performance in Power Industry in India. *Asia Pacific Journal of Management & Entrepreneurship Research (APJMER)*, Volume 2, Issue 2, April 2013 , 143-148.

Singh, K., & Sur, D. (2016). Profitability of Maharatna enterprises in India during the post-liberalisation era: a cross-sectional analysis. *Int. J. Management Concepts and Philosophy*, Vol. 9, No. 3 , 239-254.

Saha, M. (2018). An Analysis of the effects of Global Recession, 2008 and the Companies Act, 2013 on the financial performance of Indian power sector. *International Journal of Management, IT and Engineering*, Vol.8, Issue 11,p 173-188

Vyas, V. (2015). Financial performance analysis of selected companies of power sector in India. *International Journal of Applied Research* , 212-219.

**“THE IMPACT OF HUMAN RESOURCE MANAGEMENT ON
SUSTAINABILITY OF EMPLOYEE’S PERFORMANCE”**

Correspondence Author

Ms. Nandini Singh Bhati

Research Scholar

Department of Business Management and Commerce,

Mandsaur University, Mandsaur (MP), India

*Mailing Address - SH 31, Bypass square, Rewas Dewda Road, City - Mandsaur, State -
Madhya Pradesh- 458001*

Co – Author

Dr. Lokeshver Singh Jodhana

Associate Professor & HOD

Department of Tourism & Hospitality Management,

Mandsaur University, Mandsaur (MP), India

*Mailing Address - SH 31, Bypass square, Rewas Dewda Road, City - Mandsaur, State -
Madhya Pradesh- 458001*

ABSTRACT

Sustainability initiatives are mostly & largely define as new strategy for improving the environment and human activities. As long as this attitude prevails, the paper suggests and recommends that sustainable human resource management can be carryout in all field of human endeavor. It is base on the foregoing that the paper discussed the impact of sustainable human resource management on the organizational performance, and the interplay that exist between the two construct, it additionally ensure leadership's responsibility to the frame of sustainability, as the business issue, employees need to understand the strategic for pursuing sustainability as means of achieving management of objectives, the threats associated with ignoring sustainability, and the opportunities it presents for business improvements, that made it paramount and worth adopting.

The study examined the impact of HRM on Sustainable employee's performance , The study ascertained how HRM affects employee's performance in an organization, to effectively do that the study formulated two research questions and one null and alternative hypothesis in order to achieve the research objectives. The findings of the study indicated that large number of the respondents strongly agreed that HRM has positive and significant impact on the sustainable employee's performance, the finding also shown that, the computed value of r is 0.692, and the p-value is 0.000, which shows a significant result. This leads to the acceptance of H1, i.e. there is a positive and vital relationship between human resource management and sustainable employee's performance and that lead us to rejection the Null hypothesis. The content analysis from the findings of the semi structured interview conducted with three managers of the organization of study indicated that HRM has positive and significant impact on employee's performance.

Keywords: *Human resource management, organizational performance, Sustainability and Employee's performance,*

INTRODUCTION

Sustainability has been subject of thought and reflection in the field of management for a long time, only recently, however that the link between sustainability and HRM issues, seem to have received attention, where sustainable human resource management has developed different approaches, in identifying the benefit of the perception, against the traditional HRM, which is a drive towards a Sustainable development (Ehnert, 2006). Sustainability is a now evolving approach that promotes the use of human, natural and financial resources to improve the economy, the environment, and society in an integrated way for the benefit of current and future generations. The concept is a global policy theme, widely use since 1987 when the United Nations World Commission on Environment and development (the Brundtland Commissioner) defined sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." Human Resources Management (HRM) is the function within an organization that focuses on recruitment of, Management and providing direction for the people who work in the organization. Human Resource Management is the organizational function that deals with issues related to people such as compensation, hiring, growth management, organization development, safety, wellness, benefits, employee motivation, communication, administration and training. Human resource is a term with which many organizations describes the Combination of traditionally administrative personnel functions with growth management, employee relations and resource planning. It can be view in more comprehensive manner. Human resource management may be viewed as administrative activities that are associated with planning, recruitment, selection, orientation, training, appraisal motivation and remuneration (Storey, 1992). Human resource management aims at developing people through work (Bratton and Gold, 2001). Human resource management has a multidimensional approach on organizational function that build on theories and ideas from various disciplines such as management, psychology, sociology anthropology and economics, Human resource management is a distinctive approach to employment management which seeks to achieve competitive advantage through strategy deployment of a highly committed and capable workforce using an integrated array of cultural, structural and personal techniques (Senyucel, 2009).The global declaration of sustainability, drawn the connection the two concepts to form sustainable human resource management which will serve as a step stone, or a propeller for economic development which is the target of the sustainability declaration.

Sustainable human resource management is those long-term oriented conceptual approaches and activities aimed at a socially responsible and economically appropriate recruitment and selection, development, deployment, and release of employees." (Thom and Zaugg, 2004) this implies that, as long there are different managers with different training and experience, there will be inconsistencies particular where managers are change often in an organizations, this will result to change in approaches, it is in this light that there is a need for sustainable human resource management which will create a long term approach in managing organizational assets in attempt to achieve organizational performance.

Since the acceptance of HRM practice in the mid 1980, by commercial and academia, it has evoked several kind of unsolved debate of what variables among the two important variables is responsible for organizational success or failure. Storey (1992) argued that HRM is an important variable that determine organizational success when properly manage in the phrase competitiveness. While Ojo (2009) claims that employee's

performance is supreme in a drive to organizational success. Managers and other organizational leaders faced the problems of resources: how to find a skilled persons for the right tasks, how to make sure people do what they should be doing, how to keep people going when the time are tough (Senyucel, 2009) these and many other has been the challenge faced by organizations whether public, private or nonprofit.

Today's managers and organizational leaders are not only responsibly for getting the job done but finding the right people for the right job, getting the job done on the right time, save cost liaise with the stakeholders, develop and retain existing employees, keep employees morale high and increase employee's performance. (Senyucel, 2009).Despite the importance attached to these two variables as drive force to organizational success, there is little empirical study to ascertain the impact of human resource management on employee's performance. Hence this studies at hand. Academic interest in HRM is also evidenced by the level of attention it has received over the last few decades. The relationship between HRM and employee's performance has been the subject of concern and interest, to dig deeper into the field in order to obtain finding that can easily be use for generalization.Sustainable employee's performance has gained the acceptance in human resource management literature, though since 1980 only little work has been carried out by researchers to examine the impact of human resource management on sustainable employee's performance (Senyucel, 2009). Previous research conducted has been found to be inclusive while others recommended further research (Aycan et al., 2000). This study aims to contribute to the body of knowledge that relates human resource management, sustainability of employee's performance for organizational excellence.

In summary, the study will contribute to the pool of knowledge and practice to benefit students of business administration, human resource management practitioners, public sector, businesses, non-governmental organizations and other business consultants. Specifically, the study would be of benefit in the following ways:

1. CONTRIBUTION TO KNOWLEDGE

The study will contribute to the literature of sustainable human resource and employee's performance in its attempt to provide theoretical understanding of the key concepts. It will bridge the literature gap found in some current studies. It can also be used as basis for comparing findings of similar studies and building theoretical, conceptual frameworks.

2. CONTRIBUTION TO PRACTICE

The study will be useful to employees, the management team and human resource management practitioners, as it would help establish the relationship that exists between the constructs of human resource management sustainable development and employee's performance. This can enable the stakeholders to understand which aspect of their culture needs to be changed and why and employees would realizes the reasons for higher performance having understood the cultural framework of their organization. The management would then be able to nurture a culture that can promote sustainable employees commitment while mending lapses or oversight of the past.

3. CONTRIBUTION TO FURTHER RESEARCH

The study should evoke new approaches either to validate the findings or dispute, or to expand its findings. Hence the study will result in further or new research in the same or related areas.

OBJECTIVES OF THE STUDY

- i. Ascertain how HRM affects employee's performance.

- ii. Determine empirically the relationship between HRM and employee's performance.
- iii. Formulate recommendations regarding iii. HRM and employee's performance

RESEARCH QUESTIONS

- i. Does HRM impact on sustainable employee's performance in any way?
- ii. What ways does HRM affects on employee's performance?

MOTIVATION AND THE SIGNIFICANCE OF THE STUDY

The aim of this study is to examine the impact of human resource management on sustainable employee's performance. The motivation behind the selection of this topic is that researchers and authors have explore HRM more comprehensively in the business and public sectors, without bring to fore the sustainable development of employee's performance in the face of sustainable organizational excellence. Hence this paper became paramount in bridge the gap.

Some research findings reveal that HRM share common culture with employee's performance as such culture is consistent (Schein, 1988). The research will examine how consistent the influences of human resource management on sustainable employee's performance in organization.

HYPOTHESES

H1: There is positive and significant relationship between HRM, Sustainable and employee's performance.

H0 There is no positive and significant relationship between HRM, sustainable and employee's performance

HUMAN RESOURCE MANAGEMENT

Human resource management is a multidisciplinary organizational function that draws theories and ideas from various fields such as management, psychology, sociology and economics (Storey, 1992). Aimed at developing people through work (Bratton & Gold, 2001), human resource management includes administrative activities that are associated with planning, recruitment, selection, orientation, training, appraisal motivation and remuneration (Storey, 1992). Robbins and Judge (2009) sum up human resource management by five key concepts: motivating, disciplining, managing conflict, staffing and training. Similarly, Storey (1992) describes the five functional areas of human resource management as staffing, rewards, employee development, and employee maintenance and employee relations.

In addition, human resource management may be viewed as a distinctive approach to employment management which seeks to achieve competitive advantage through strategy deployment of a highly committed and capable workforce (Storey, 1992) using an integrated array of cultural, structural and personal techniques (Senyucel, 2009). Likewise, Armstrong (1995) proposes human resource management as a strategic and rational approach to managing of organization's most valued assets, the employees who contribute to the achievement of their goals and objectives. In summary, human resource management involves all management decisions that influence the relationship between the organization and its employees (Gregory, Harris, Armenakis & Shook, 2009).

SUSTAINABILITY

Sustainability has been subject of thought and reflection in the field of management for a long time, only recently, however that the link between sustainability and HRM issues, seem to have received attention, where sustainable human resource management has developed different approaches, in identifying the benefit of the perception, against the traditional HRM, which is a drive towards a Sustainable development (Ehnert, 2006). Sustainability is a now evolving approach that promotes the use of human, natural and financial resources to improve the economy, the environment, and society in an integrated way for the benefit of current and future generations. The concept is a global policy theme, widely use since 1987 when the United Nations World Commission on Environment and development (the Brundtland Commissioner) defined sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

Human Resources Management (HRM) is the function within an organization that focuses on recruitment of, Management and providing direction for the people who work in the organization.

EMPLOYEE'S PERFORMANCE

Employee's performance is an issue that has received wide attention in literature and research due to its importance since every organization aims to achieve higher performance (Ojo, 2009). For clarity, the two concepts, employees and performance, will be defined separately as follows to ensure common understanding.

- (a) Employees are people who are hired, working on the basis of part time or full time under an employment arrangement, whether it is in written or oral expression. It also includes agreement on the remuneration and the kind of duties expected of the employee within a time frame (Shumen, 2009).
- (b) Performance is the achievement of a set of assigned tasks that are anchored to time, with a result indicator that will measure the accomplishment level of the task assigned, which can be measured only when a performance standard has been put in place (Shumen, 2009). Performances are activities that ensure goals are consistently being met in an effective and efficient manner (Cardy & Selvarajan, 2004; McNamara 2005). Employee's performance refers to the observable behaviors and actions which explain *how* a job is done, plus the results that are expected for satisfactory job performance (McNamara, 2005). Achieve or encourage higher performance from employees, the following criteria should be considered (Cardy & Selvarajan, 2004).
 - (i) Performance standards

The purpose of performance standards is to communicate expectations, and it is often behaviors that determine whether performance is acceptable (Cardy & Selvarajan, 2004). Collins (1998) and Cooper (1998) view employee's performance as a process for establishing a shared workforce understanding about what is to be achieved at organization level. Employees are involved in the development of standards, and performance standards should form the basis for performance evaluation that clearly states how employees would be recognized when expectations have been met, exceeded, or not met (Gruman & Saks, 2010).

Performance standards should be position oriented and not individualistic; it should be visible, with anchored indicators for success which may be expressed in terms of quantity, quality, and within time frame (Cardy & Selvarajan, 2004; Armstrong, 1995). Though the

concept is differentiated by the views put in place by www.ispi.org (2002), performance standard is a result that positions an organization to question, confirm and reconfirm that people share the same vision and goals, that the job procedure is sufficient, and that people have the skills and knowledge they require (www.ispi.org 2002).

My working definition is that of Richer (2005): Performance standard refers to the kind of behaviors or results that are expected of performance to be considered satisfactory. In this case, standards are the criteria against which performance is judged; these standards should be achievable, unique, monitored, purposeful, measurable, and stated in terms of quality, quantity and time.

(ii) Performance appraisal

Performance appraisal tools and systems of appraisal vary greatly from countries, organizations and managers, although all aim at achieving the purpose of best performance practice (Jones, 1995). Performance appraisal is the process where managers examine, evaluate and assess employee's behavior and performance at work against set standards. The appraisal must be documented and the results used as feedback to the employees to indicate where improvement is needed and why (Cardy & Selvarajan, 2004). The appraisal also serves as both punishment and reward to performing and non-performing employees. It is also a major determinant of who needs what training and at which time; it can also be a reward mechanism (Jones, 1995).

Elgin (1993) views performance appraisal as the process of cognitively processing information in order to make judgment and evaluation which is summarized as follows:

- (a) Acquisition of information about those to be evaluated,
- (b) Organization and storage of this information in a memory, and
- (c) Retrieval and integration of the information in a fashion that leads to the recording of an evaluation of the person being evaluated.



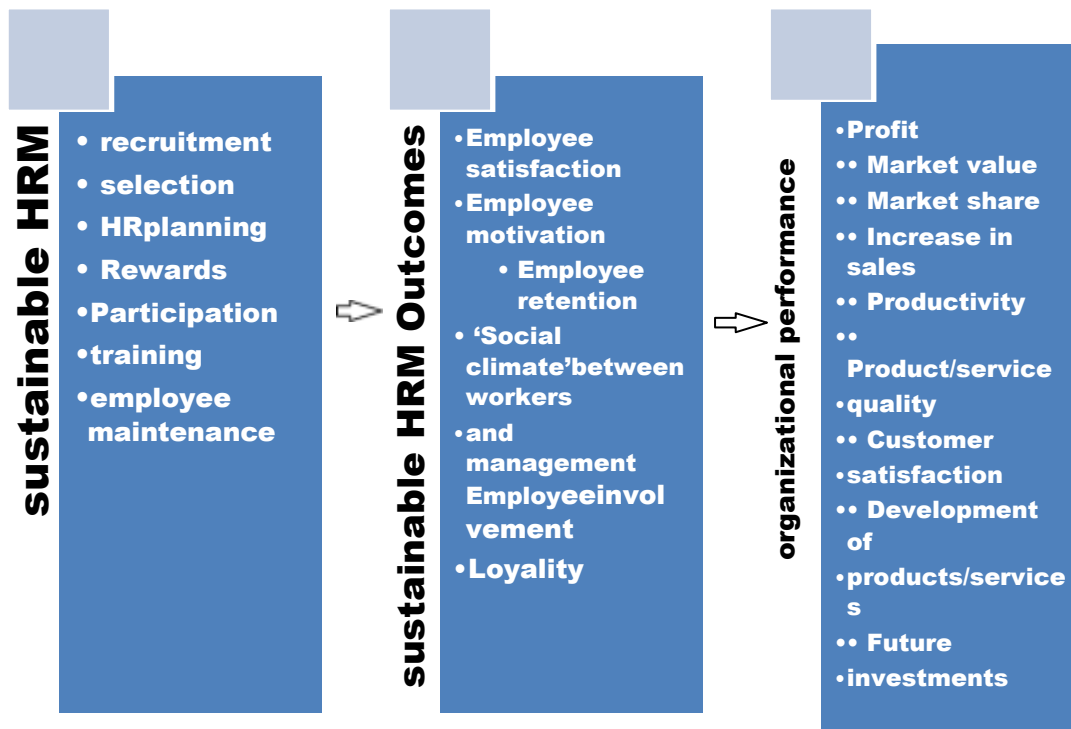
Source: General model relating employees' personal values, high-performance human resource practices, and organizational sustainability

SUSTAINABLE HUMAN RESOURCE MANAGEMENT AND ORGANIZATIONAL PERFORMANCE

The sustainable development of the organization is taking a more far approach, in its attempt for achieving a long term goals and objectives which the organization aimed to achieve within a specific period , the long term input directed on the organization to produces an output in relation to the organizational goal and objectives, is a clear interplay of the sustainable human resource management and the organizational performance , the construct of sustainable human resource management represents the inputs that is directed to the organization with view for an expected results and the construct of organizational performance represents the outputs of the construct, expected by the first construct sustainable human resource management (Anand, and Sen,2000).. Those long-term oriented conceptual approaches and activities aimed at a socially responsible and economically appropriate recruitment and selection, development, deployment, and release of employees, to produces a sustainable HRM outcomes like Employee satisfaction, Employee motivation, Employee retention, employee presence, Social climate' between workers and management

Thus the review has proven that sustainable human resource management has a significant impact on organizational performance. This finding concurs with that of David, Gorge and Bill (1999) who attest that sustainable HRM can influence organizational; employee morale and goodwill; productivity and efficiency; the quality of work; innovation and creativity and the attitude of employees at the workplace.

Proposed Model of Sustainable HRM and Organizational Performance

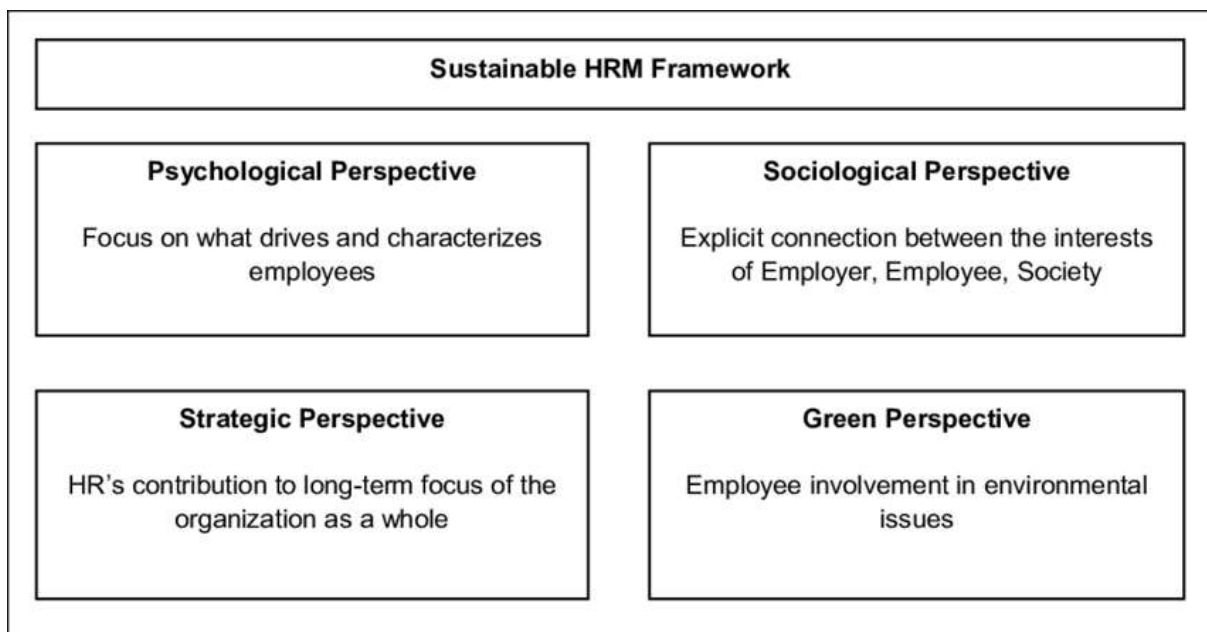


Source: summary of researcher's approach (2013)

THE ROLE OF HRM ON DRIVING POSITIVE EMPLOYEE'S PERFORMANCE

In human resource management has organizations focus its attention on competition and quality rather than cost, so that means organizations relying heavily on their human resources. They realize that high performance and competitive advantage is achieved by

employees with their skills and abilities, motivation, commitment and job satisfaction. Most organizations now see employees as the most essential tool that help the organization to achieve its goals and objectives, leading to the achievement of organization's high performance and profit (Storey, 1989). As employees' performance is essential to service quality and performance, the organization will need to empower their employees to work with their best interests for the organization (Storey, 1989). High commitment work system is another key that enhances employees to become highly involved in the organization, where employees could be included in the decision making process as well as have their inputs reflected in the organization decision outcomes. As a result, employees are expected to perform consistently at a high level, as well as show their initiatives and willingness to put extra effort out for the organization. Guest (1989) describes the channel through which HRM is linked to employee's performance as follows: promotion, job security and workplace reward system, and recognition of employees as equal (Guest 1989). HRM and employees' performance appear to establish the fact that HRM has a positive effect on organizational performance (Guest, 1989). Guest (1989) opines that HRM will not only improve employee involvement but enhance organizational performance and productivity, and manage capability. Employee's performance management is a critical aspect of HRM effectiveness because it is the key process through which work is accomplished to meet goals and objectives (Guest, 1989). However employees believe that performance management process lays more emphasis on improving employees' performance through human resource management practice, without giving much attention on challenges facing employees. This is seen on how employees are often instructed to refocus attention on their performance management and not on the challenges they face (Cardy, 2004).



Source: Sustainable HRM Framework (adopted from De Prins, 2013)

CONCLUSION

With the two research questions being addressed through both qualitative and quantitative analyses, the three objectives of the present study have been fulfilled. The conclusions of the study are summarized in the following paragraphs: The outcome of the data analyzed shows that the computed value of r is 0.692, and the p -value is 0.000, which shows a

significant result. This leads to the acceptance of H1, i.e. there is a positive and significant relationship between human resource management and employee's performance and that lead us to rejection the Null hypothesis

The qualitative analysis conducted through the semi- structured interviews on three respondents who responded to the seven questions. The content analysis of their separate responses shows that HRM has significant and positive impacts on employee's performance.

RECOMMENDATIONS

Based on the findings of the study, the following are recommendations for the stakeholders of organizations concerned Organizations should articulate their HRM practice clearly, if possible explicitly in codified form (Storey, 1992). For example, this could be done by publishing the HRM in the employee's handbook, on the company website or through any suitable media

The findings from both quantitative and qualitative results are matching with the findings of Qureshi M. Tahir (2006) where he concluded that all these practices are positively correlated but correlation .These results are also matching with the findings of Singh K (2004), and Tahir, Ramay &.Mohammad (2006). Who respectively concluded that Training and compensation are having positive effects on organization and employee's performance?

All those organizations who are interested for High growth through increasing employee participation must pay attention on Training, Selection, and Compensation and employee participation for policy development.

REFERENCES

1. Armstrong, P. (1995). Accountancy and HRM, in J. Storey (Ed.), Human Resource Management: A Critical Text. Routledge, London. 142-16.
2. Bratton, J. and Gold, J. (2001). Human Resource Management Theory and Practice. Hound Mills, Palgrave Macmillan
3. Cardy, R.L. and Selvarajan T.T. (2004). Assessing ethical behavior. Development of behaviorally anchored rating scale, Proceeding of Southern Academy Management Meeting.
4. Collins, D.(1998). Organizational Change: Sociological Perspectives, USA: Routledge.
5. Cooper, D. (1998). Improving Safety Culture, a Practical Guide. Canada: Routledge.
6. Elgin, D. (1993). Awakening Earth: Exploring the Evolution of Human Culture and Consciousness. New York: Morrow.
7. Ehnert, I. (2006). 'Sustainability Issues in Human in Human Resource Management: Linkages, theoretical approaches, and outlines for an emerging field'. Paper prepared for 21st EIASM SHRM Workshop, Aston, Birmingham, March 28th-29th, 2006.
8. Gregory, B.T. Harris, S.G. Armenakis, A.A. Shook, C.L. (2009). Organizational culture and effectiveness: A study of values, attitudes, and organizational outcomes Journal of Business Research, 62/2 673-679.
9. Gruman, J.A. and Saks, A.M. (2010). Performance and employee engagement, Human Resource Management Review, 30, 1-14.

10. Guest, D. (1989). Human resource management: its implications for industrial relations and trade unions in Storey, J. *New Perspectives on Human Resource Management*. London: Routledge, 41–55
11. Jones, T.W. (1995). Performance management in changing context. *Human Resource Management Fall*. 13/6,425-442
13. Margolis, J. S. (1987). *Science Without Unity Reconcile Science Narrative*. New York: Basil Blackwell

“Exploring the linkages between Workplace Climate and Job Satisfaction”

Dr. Ameer Agrawal

Assistant Professor (CES)

Department of Commerce & Business Management

Faculty of Commerce

The Maharaja Sayajirao University of Baroda

Abstract

The paper aims to study the impact of Workplace Climate on Job Satisfaction. Data was collected from a private organization with a sample of 220 employees. This data was further analyzed using correlations and regressions to derive meaningful conclusions. The findings suggest that there are strong, positive, and significant relationships between Work place Climate and Job Satisfaction.

This research relates to only Private Organization. Hence, it is highly recommended that further research can be carried out in other organizations and areas with a broader view and a longitudinal research design. Some recommendations and suggestions are provided in the end to enhance employee productivity and organizational performance by maintaining a conducive Workplace climate which helps in enhancing Job Satisfaction.

Keywords: Workplace Climate, Job Satisfaction.

Introduction:

People work for many reasons. Understanding how people approach their work, triggers and enablers, and desired outcomes, are vital to learning how to create great environments in organizations. Today, organizations are looking for newer and newer sources of competitive advantage (Aravamudhan&Krishnaveni, 2014). Creating a conducive work place climate is one of them. Work place climate, is individual perception which is derived from how the enterprise is regarding policies, routines, practices, and rewards. Job satisfaction can be defined as an individual's evaluation of different facets of their job. This research paper explores the relationship between Work place Climate and Job Satisfaction.

2.0 Review of Literature:

2.1 Job Satisfaction

Locke (1976) defines job satisfaction as an individual's evaluation of different facets of their job. Job satisfaction has a central variable involving studying work-related attitudes by management scholars. To better understand how PJP influences job satisfaction, we need to study the Self-Determination Theory (Ryan & Deci, 2000). Self-Determination Theory posits that people have an innate tendency toward growth and intrinsic motivation, and that intrinsic motivation and well-being require satisfying the three psychological needs for relatedness, competence, and autonomy (Gagne & Deci, 2005). In many social settings, including the workplace, external regulations or stimuli—including pay, supervision, goals, and directives—are used to induce desired behavior. To the extent that these three needs are satisfied, people internalize and integrate external regulations. That is, they take in external values and contingencies and transform them into personal values and self-motivation. Through this process of internalization and integration, extrinsically prescribed behavior becomes internally or autonomously regulated so that motivation to act becomes self-determined. Illardi et al. (1993) found that employees who felt strongly that their work allowed them to experience autonomy, competence, and relatedness reported higher levels of job satisfaction.

2.2 Work place Climate

Dutton & Dukerich (1991) stated that climate appears to be a more intimate set of attitudes, values, and beliefs that embraces a work unit. Bowen & Ostroff (2004) conceptualized workplace climate as two types: organizational climate and psychological climate. Employees could be affected by organizational climate, which is derived from perceptions of how the enterprise is regarding policies, routines, practices, and rewards. Psychological climate applies to employees in their own specific work contexts, on the basis of the experiential-based evaluation of what people “see” and notice occurring to them as they are aware of their environment. According to Burke & Litwin (1992), a psychological state of workplace climate is a set of employees’ perceptions on the local work unit, the way it is managed, and the interconnectedness of them to others. According to previous research, it is suggested that climate has positive impacts on performance regardless of various dimensions of climate across studies. Burke & Litwin (1992) regarded workplace climate as one of the transactional determinants that has a profound impact on motivation, and in turn affects job performance. Likewise, Griffith (2006) concluded that warm and supportive climate enhances job performance at the organizational level. As stated by Robert (2007), many studies by a plethora of scholars were indicative that workplace climate not only correlates to but also has a crucial part to play on job performance. According to Holloway (2012) and Suliman & Obaidli (2013), a positive work climate triggers off motivation and high performance.

From the above review of literature the following Hypothesis can be framed:

Hypothesis 1: There is a significant and positive relationship between Workplace Climate and Job Satisfaction.

3.0 Research Methodology

3.1 Instrument Design

Based on the review of the literature of the identified variables a structured non disguised questionnaire consisting of 16 questions was designed based on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). The first 5 questions were related to demographic details of respondents pertaining to gender, age, marital status, education and experience added to the questionnaire, and the next 11 questions addressed Work place Climate and Job Satisfaction. Judgment sampling, a non-probability sampling technique was used to select the respondents. A self-administered questionnaire was used to collect data. Respondents were requested to participate in the survey. Data collection was done over a period of one month in March 2018. A private sector engineering major was selected for data collection.

The measures Job satisfaction Questionnaire of were adapted from questionnaires used in the studies from literature contained six items with reliability ($\alpha = 0.839$) was taken from Schmidt (2004). The Work place Climate scale developed by Elsa et al (2013) contained 5 items.

The total sample size was 220 which consisted of managers and Senior Managers from various departments who were selected through Judgment sampling

In total, 250 questionnaires were distributed. Of which 30 questionnaires were discarded due to incomplete nature, resulting in 220 totally filled questionnaires that were used for the statistical analysis of the study. Collected data was subjected to correlation and simple linear regression analysis by using Statistical Package for the Social Sciences (SPSS) version 20. Cronbach's alpha test was conducted to check the reliability of the questionnaire.

The total alpha coefficient of the questionnaire was 0.857 ($p < .001$) and alpha coefficients for all items were ≤ 0.70 ($p < .001$), which are in the acceptable range (≤ 0.70) suggested by Nunnally (1978). The internal consistency of the items was also calculated. A careful examination of item-total correlations showed that all correlations ranged from 0.67–0.74, which are above the 0.32 level suggested by Saxe and Weitz (1982).

4.0 Results

Demographic analysis showed that both male employees were more than females (72.3% male and 27.7% female). 50% of the respondents were between the age group of 31 to 40 years and the rest were in small numbers like 15.5% in the age group of 21 to 30 yrs, 20.5% in the age group of 41 to 50 yrs and 13.6% of the employees were in the age group of 51 and above. Of the respondents, 31.8% had undergraduate degrees, 59.5% of the respondents were postgraduate and 5.5% of the respondents were professionally qualified. The composite score for all the two variables of Work place climate and Job Satisfaction was calculated by averaging representing items on the questionnaire. First, correlation analyses were used to examine the relationship between both the research variables. The results suggested that all the variables are positively correlated, and correlations were significant and equal to $+0.449$ $p < .001$, two-tailed.

Toward testing the hypothesis and finding whether Work place Climate (independent factor) is the predictor of Job Satisfaction (dependent variable), a simple linear regression analysis was conducted. Regression analysis was first confirmed by testing the assumptions of normality, linearity, homoscedasticity, and independence of residuals, revealing that the residuals are normally distributed (Tabachnick & Fidell, 1996). According to an F-value of 54.962, with significance of $< .01$ of the regression test, it can be said that the model has a good fit for the data. Both results showed that there is a positive and significant relationship between Work place climate and Job Satisfaction, hence the proposed hypothesis is accepted.

5.0 Discussions

The current study tried to investigate the effect of Workplace Climate on Job satisfaction in the context of a Private engineering Company. The correlation and regression analysis demonstrated that Work place Climate has a positive and significant impact on Job Satisfaction in private companies. The R^2 and the Adjusted R^2 are .201 and .198 respectively. This implies that 20% of variance of Job Satisfaction can be predicted by the Work place Climate.

This signifies that, the organization has to build a workplace where a large number of employees could find their work meaningful and purposeful as well as feel passionate,

grateful and suitable with the work they are in charge of. Thus, it is advisable for employers to maintain and enhance the meaningfulness of work at the workplace. Work processes must be developed in such a way that it satisfies them to the core. There should be a two way communication where the subordinates are given an opportunity to voice their opinion about the work processes which in turn enhances job performance. The role of superiors must be to encourage and mentor the subordinates to solve their problems. They must be provided the necessary resources and must be encouraged to come up with new ideas to improve the work processes. There must also be clarity in terms of expectations for employees, enhancing their involvement and leading to new ideas and innovation and increasing Job Satisfaction.

6.0 Limitations

Although Work place Climate is one of the crucial factors for Job satisfaction there are other organizational factors that should also be considered. This research is conducted in the context of a private concern, and the results might be different for other industries. Due to the limitation in access to all employees, only managers and senior managers were selected as the sample of the study. Future studies with all staff may show different results.

References:

1. Aravamudhan, N., & Krishnaveni, R. (2014), "Spirituality at Work: An emerging template for organization capacity building?", SMS Varanasi, Vol. VII No.1, pp. 63-78.
2. Bowen, D.E. & Ostroff, C. (2004). Understanding HRM-firm performance linkages: the role of the 'strength' of the HRM system. *Academy of Management review*. 29(2), 203-221.
3. Burke, W. W. Burke & G. H. Litwin. (1992). A causal model of organizational performance and change. *Journal of Management*, 18, 523-545.
4. Elsa Peña-Suárez, José Muñiz, Ángela Campillo-Álvarez, Eduardo Fonseca-Pedrero & Eduardo García-Cueto (2013). Assessing organizational climate: Psychometric properties of the CLIOR Scale. *Psicothema* 2013, 25(1), 137-144.
5. Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, 26(4), 331-362. Doi:10.1002/job.322
6. Griffith, J. (2006), "A compositional analysis of organizational climate-performance relation:
7. Public schools as organizations". *Journal of Applied Social Psychology*, 36(8), 1848-80.

8. Ilardi, B. C., Leone, D., Kasser, T., & Ryan, R. M. (1993). Employee and Supervisor Ratings of Motivation: Main Effects and Discrepancies Associated with Job Satisfaction and Adjustment in a Factory Setting. *Journal of Applied Social Psychology*, 23(21), 1789-1805. Doi:10.1111/j.1559-1816.1993.tb01066.x
9. Jane E. Dutton and Janet M. Dukerich (1991). Keeping an eye on the mirror: The role of image and identity in organizational adaptation. *Academy of Management Journal*, 34, 517–554.
10. Joseph B. Holloway (2012). Leadership Behavior and Organizational Climate: An Empirical Study in a Non-profit Organization. *Emerging Leadership Journeys*, 5(1), 9- 35.
11. Locke, E.A. (1976), “The nature and causes of job satisfaction”, in Dunnette, M.D. (Ed.), *Handbook of Industrial and Organizational Psychology*, Rand McNally, Chicago, IL, pp. 1297-349
12. Nunnally, J. C. (1978). *Psychometric theory*. New York, NY: McGraw-Hill.
13. Robert J. Lichtman (2007). Effects of an organization’s climate on performance of supply chain managers in Michigan: A Perception Study. *International Journal of Quality and Productivity Management*, 7(1), 38-46.
14. Ryan, R. M., & Deci, E. L. (2000). Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. *Contemporary Educational Psychology*, 25(1), 54–67.
Doi:10.1006/ceps.1999.1020
15. Saxe, R., & Weitz, B. (1982). The SOCO scale: A measure of the customer orientation of salespeople. *Journal of Marketing Research*, 19, 343–351.
doi:10.2307/3151568
16. Schmidt, S.W., (2004). *The Relationship Between Job Training Satisfaction and Overall Job Satisfaction Among Employees in Customer Contact Positions* (Doctoral dissertation, University of Wisconsin ñ Milwaukee, 2004)
17. Suliman, A. and Al Obaidli, H. (2013). Perceived work climate and employee performance in public security organizations in the UAE. *Transforming Government: People, Process and Policy*, 7(3),410-424.
18. Tabachnick, B. G., & Fidell, L. S. (1996). *Using multivariate statistics*. New York, NY: HarperCollins.

Effect of Financial Sector Reforms On the Indian Capital Market

Harneet Kaur

Assistant Professor

Post Graduate Govt College For Girls

Chandigarh

ABSTRACT

India's capital markets have experienced tremendous and sweeping changes since the beginning of the last decade. Its market infrastructure has advanced while corporate governance has progressed faster than in many other emerging market economies. Another important element in the globalisation movement was the Government's policy of promoting the stock market as a major institution and an instrument in India's foreign exchange management. This has led to the introduction of a voluminous set of securities law in our country alongwith effective corporate governance practices in our financial system to provide a sound and transparent system of operations. This paper argues that with the recent economic reforms, an efficient and active debt market, with a sound system for the corporate governance makes it is imperative for the country to realize the full benefits of the reform process and to achieve its potential. Also it throws light on how the reforms have led to the transparency in the Indian capital market.

Introduction

Indian Capital Markets have shown tremendous growth in the post Liberalization era. It remains one of the most resilient globally and poised to be one of the Top destinations for domestic and global businesses to expand and invest into. As global economy moves for imminent recovery, India has shown extraordinary strength to bounce back with greater stability and sustainability.

It is important to point out that the concept of banking has widened over time. Commercial banks have become universal banks (moving away from their traditional roles to modern ones), development banks are becoming commercial banks, life insurance and general insurance is expanding in the private sector and many non banks financial intermediaries and companies are coming to the fore to supplement the efforts of commercial banks with regulatory framework in place. Besides, private and foreign banks have been allowed to set up shop. In addition to wide range of financial services like merchant banking, underwriting, leasing, hire purchase, venture capital, factoring services, credit rating and financial counseling are available to facilitate the mobilization and transformation of savings in to investment which is so essential for economic growth.

The last decade (2000-10) was probably one of the best for the Indian capital markets, even a shade better than the 90s decade which actually established the base for the '00s decade through economic liberalization. The 90s got blemished and diluted due to 2 domestic scams – Harshad Mehta and Ketan Parekh, while the '00s had the subprime crisis that had shaken the economies worldwide.

The difference was, the last 10 years saw access to global capital become easier for the Indian corporate sector and size multiplied through some of the largest global acquisitions by Indian conglomerates.

Since 2003, Indian capital markets have been receiving global attention, especially from sound investors, due to the improving macroeconomic fundamentals. The presence of a great pool of skilled labour and the rapid integration with the world economy increased India's global competitiveness. No wonder, the global ratings agencies Moody's and Fitch have awarded India with investment grade ratings, indicating comparatively lower sovereign risks.

The Securities and Exchange Board of India (SEBI), the regulatory authority for Indian securities market, was established in 1992 to protect investors and improve the microstructure of capital markets. In the same year, Controller of Capital Issues (CCI) was abolished, removing its administrative controls over the pricing of new equity issues. In less than a decade later, the Indian financial markets acknowledged the use of technology (National Stock Exchange started online trading in 2000), increasing the trading volumes by many folds and leading to the emergence of new financial instruments. With this, market activity experienced a sharp surge and rapid progress was made in further strengthening and streamlining risk management, market regulation, and supervision.

Reforms in Capital Market of India

There have been significant reforms in the regulation of the securities market since 1992 in conjunction with the overall economic and financial reforms. A key element of the reform strategy was building a strong independent market regulator. The SEBI Act, which came into force in early 1992, established SEBI as an autonomous body. The apex capital market regulator was empowered to regulate the stock exchanges, brokers, merchant bankers and market intermediaries. The Act provided SEBI the necessary powers to ensure investor protection and orderly development of the capital markets.

The **major** reforms undertaken in capital market of India includes:-

Establishment of SEBI: The Securities and Exchange Board of India (SEBI) was established in 1988. It got a legal status in 1992. SEBI was primarily set up to regulate the activities of the merchant banks, to control the operations of mutual funds, to work as a promoter of the stock exchange activities and to act as a regulatory authority of new issue activities of companies. The SEBI was set up with the fundamental objective, "*to protect the interest of investors in securities market and for matters connected therewith or incidental thereto.*"

The main functions of SEBI are:-

- To regulate the business of the stock market and other securities market.
- To promote and regulate the self-regulatory organizations.
- To prohibit fraudulent and unfair trade practices in securities market.
- To promote awareness among investors and training of intermediaries about safety of market.
- To prohibit insider trading in securities market.
- To regulate huge acquisition of shares and takeover of companies.

Establishment of Creditors Rating Agencies: Three creditors rating agencies viz. The Credit Rating Information Services of India Limited (CRISIL - 1988), the Investment Information and Credit Rating Agency of India Limited (ICRA - 1991) and Credit Analysis and Research Limited (CARE) were set up in order to assess the financial

health of different financial institutions and agencies related to the stock market activities. It is a guide for the investors also in evaluating the risk of their investments.

Increasing of Merchant Banking Activities: Many Indian and foreign commercial banks have set up their merchant banking divisions in the last few years. These divisions provide financial services such as underwriting facilities, issue organising, consultancy services, etc. It has proved as a helping hand to factors related to the capital market.

Free Price Regime: The introduction of free pricing in the primary capital market has significantly de-regulated the pricing control instituted by the erstwhile CCI regime. While, the issuers of securities can now raise capital without seeking consent from any authority relating to the pricing, however the issuers are required to meet the SEBI guidelines for Disclosure and Investor Protection, which, in general, cover the eligibility norms for making issues of capital (both public and rights) at par and at a premium by various types of companies.

Candid Performance of Indian Economy: In the last few years, Indian economy is growing at a good speed. It has attracted a huge inflow of Foreign Institutional Investments (FII). The massive entry of FIIs in the Indian capital market has given good appreciation for the Indian investors in recent times. Similarly many new companies are emerging on the horizon of the Indian capital market to raise capital for their expansions.

Rising Electronic Transactions: Due to technological development in the last few years. The physical transaction with more paper work is reduced. Now paperless transactions are increasing at a rapid rate. It saves money, time and energy of investors. Thus it has made investing safer and hassle free encouraging more people to join the capital market.

Growing Mutual Fund Industry: The growing of mutual funds in India has certainly helped the capital market to grow. Public sector banks, foreign banks, financial institutions and joint mutual funds between the Indian and foreign firms have launched many new funds. A big diversification in terms of schemes, maturity, etc. has taken place in mutual funds in India. It has given a wide choice for the common investors to enter the capital market.

Growing Stock Exchanges: The numbers of various Stock Exchanges in India are increasing. Initially the **BSE** was the main exchange, but now after the setting up of the **NSE** and the **OTCEI**, stock exchanges have spread across the country. Recently a new Inter-connected Stock Exchange of India has joined the existing stock exchanges.

Investor's Protection: Under the purview of the SEBI the Central Government of India has set up the Investors Education and Protection Fund (IEPF) in 2001. It works in educating and guiding investors. It tries to protect the interest of the small investors from frauds and malpractices in the capital market.

Growth of Derivative Transactions: Since June 2000, the NSE has introduced the derivatives trading in the equities. In November 2001 it also introduced the future and

options transactions. These innovative products have given variety for the investment leading to the expansion of the capital market.

Insurance Sector Reforms: Indian insurance sector has also witnessed massive reforms in last few years. The Insurance Regulatory and Development Authority (IRDA) was set up in 2000. It paved the entry of the private insurance firms in India. As many insurance companies invest their money in the capital market, it has expanded.

Commodity Trading: Along with the trading of ordinary securities, the trading in commodities is also recently encouraged. The Multi Commodity Exchange (MCX) is set up. The volume of such transactions is growing at a splendid rate.

Disclosure standards: The disclosure standards were enhanced to improve transparency and uphold the objective of investor protection. The issuers are now required to disclose information on various aspects, such as, the track record of profitability, risk factors, etc. Issuers now also have the option of raising resources through fixed price floatations or the book building process.

Clearing houses: Clearing houses have been established by the stock exchanges and all transactions are mandatorily settled through these clearing houses and not directly between the members, as was practiced earlier. The practice of holding securities in physical form has been replaced with dematerialised securities and now the transfer is done through electronic book keeping, thereby eliminating the disadvantages of holding securities in physical form. There are two depositories operating in the country.

Margin system: The margin system, limits on intra-day, trade and settlement guarantee fund are some of the measures that have been undertaken to ensure the safety of the market. The trading and settlement cycles have been significantly reduced. The cycles were initially shortened from 14 days to 7 days. The settlement cycles were further shortened to T+3 for all securities in 2002. The settlement cycle is now T+2.

Reporting: Listed companies are required to furnish unaudited financial results to the stock exchanges and also publish the same on a quarterly basis. To enhance the level of disclosure by the listed companies, SEBI decided to amend the Listing Agreement to incorporate the segment reporting, accounting for taxes on income, consolidated financial results, consolidated financial statements, related party disclosures and compliance with accounting standards.

The last few years have seen significant interaction with the international capital markets. A major step towards that was the inclusion of Foreign Institutional Investors (FIIs) such as mutual funds, pension funds and country funds to operate in the Indian markets. As a quid pro quo, Indian firms have also raised capital in international markets through issuance of Global Depository Receipts (GDRs), American Depository Receipts (ADRs), Euro Convertible Bonds (ECBs), etc.

Progress and Growth

In the recent past, the Indian securities market has seen multi-faceted growth in terms of:

- The products traded in the market, viz. equities and bonds issued by the government and companies, futures on benchmark indices as well as stocks, options on benchmark indices as well as stocks, and futures on interest rate products such as Notional 91-Day T-Bills, 10-Year Notional Zero Coupon Bond, and 6% Notional 10-Year Bond.
- The amount raised from the market, number of stock exchanges and other intermediaries, the number of listed stocks, market capitalization, trading volumes and turnover on stock exchanges, and investor population.
- The profiles of the investors, issuers, and intermediaries.

The growth in the economy was duly supplemented by a significant increase in the capital

markets activity. There were significant changes to the legal framework, with Securities Exchange Board of India (SEBI) being entrusted with the regulatory power to govern the capital markets to ensure compliance. There was also technological advancement in the capital markets with the introduction of terminal based trading replacing the open outcry system and launch of the integrated market surveillance system, to monitor market malpractices, by the regulator.

Corporate Governance

The Corporate Governance framework was also strengthened through a series of amendments to the existing governance structure, by introduction of Clause 49 to the Listings Agreement and setting up of committees like the Naresh Chandra Committee Report on Corporate Audit and Governance. So far India has risen up to the challenge of a growing economy by ensuring that the requisite infrastructure is put in place to ensure market best practices and restore investor confidence.

The story of growth is incomplete without the presence of governance. The strong fundamentals of an economy are based on the virtues of good governance and ethical practices.

Corporate Governance has been a much debated issue in the western world. In India the Corporate Governance Code has been largely modeled on the lines of the Cadbury Committee (1992) in the United Kingdom. The gaining prominence of Corporate Governance in India has been primarily attributed to the three large scams, the Harshad Mehta scam, the Ketan Mehta scam and the more recent Satyam Computers Limited fraud involving Ramalinga Raju. There have been smaller incidents like the C.R. Bhansali case and the UTI scam, which have further augmented the cause for a strong governance framework.

The World Bank's corporate governance assessment for India has shown that over the last few years, a series of legal and regulatory reforms have transformed the governance framework and significantly improved the level of responsibility and accountability of insiders, board and transparency. A giant step towards the endeavour was the Kumarmangalam Birla Committee Report, which led to the inclusion of Clause 49 in the listing agreement, in the year 2000. The second committee on Corporate Governance was under the Chairmanship of N.R. Narayana Murthy, formed in late 2002. Based on the recommendations of the second committee, SEBI issued a circular in 2003 revising Clause 49 of the listing agreement. The recommendations of the Committee included revisions to the independence of the chairman and proportion of independent directors.

Clause 49 prescribed formation of an audit committee and a shareholder grievance committee with independent directors representing two-thirds of the membership of the audit committee, and with at least one committee member possessing an expert knowledge in the field of finance and audit. Clause 49 also enhanced the disclosure requirements, including disclosure of compensation to non-executive directors. SEBI has introduced the concept of IPO grading, done by a credit rating agency registered with SEBI, for all primary market issuers, who file their draft Red Herring Prospectus, on or after 1 May, 2007. The grading is performed after due consideration to governance structure and financial strength.

Conclusion

The Indian capital market has undergone significant change in the last two decades. It has become efficient through use of modern day technology and proactive legislation. It has attracted significant global interest and has managed to establish confidence of both global and local investors. However, as the economy grows, so does its requirements. Change is a constant and therefore the Indian capital markets also need to continue to evolve to ensure that it meets the challenges of the current day. Corporate governance is a key focus area and capital markets needs to ensure introduction of swift legislative changes to ensure confidence in the market. As the global financial crisis begins to recede and normalcy returns in the market, India needs to set forth infrastructure to provide the necessary boost to the corporate debt market and introduce innovative financial products, while ensuring the best interests of the investors in mind.

References

- Gupta, L.C. 1998. "What Ails the Indian Capital Market?" Economic and Political Weekly, 23 (29-30).
- Securities and Exchange Board of India. SEBI Annual Report (various issues). Mumbai. India.
- Bose, S. and Coondoo, D. and Bhaumik, S.K., "The Emerging Indian Bond Market: A First Glimpse".
- Pathak, Bharati V., The Indian Financial System: Markets, Institutions and Services, Pearson Education India

ROLE OF INFORMATION TECHNOLOGY IN GST

Anuradha Singh

Research Scholar, Department of Commerce

Magadh University, Bodh-Gaya

Abstract

Technology is one of the most fundamental pillars in implementation of GST. It plays a vital role in its successful implementation. As GST is a destination based tax, interstate trade of goods and services would need a robust settlement mechanism amongst the Centre and the States. This is possible only when there is a strong IT infrastructure and service backbone which enables capturing, processing and exchange of information among the different stakeholders. The government decided to make the GST tax structure easy by giving an online platform. The solution of various problems also relates with deployment of right technology. The present research paper is an attempt to study the role of information technology in Goods and Services Tax..

Keywords: GST, GSTN, GSP, ASP, TPU, NIU, ITC

Introduction

Prior to GST, there were serious problems in tax system. There were several cases of tax evasion and loss tax revenues to the government. Apart from these, the system was complicated which led to duplication of claims, fraudulent claims, input tax claims that do not form similarity with tax liability declared by the seller or the seller who has not declared his tax liability.¹ As a result, it was necessary for the department concerned to track the input claims against the liability of the seller.

In order to check these problems, GST introduced technology. Technology is the backbone and the most crucial part of the GST process.² Technology establishes a uniform interface for the taxpayer and a common man. It integrates multiple tax departments and their websites, stimulating all the tax administration (Centre, State and Union Territories) to the same level of IT maturity with uniform formats and interfaces for the taxpayers and other stakeholders. The solution of various problems also relates with deployment of right technology. It has always played an important role in ensuring tax compliance across the multiple systems.³ The government has established technology platform such as GSTN, GSP and ASP.

Goods and Services Tax Network (GSTN)

Goods and Services Tax Network (GSTN) is a non-profit and private partnership company. Its main purpose is to provide IT infrastructure and services to the Central and State governments, taxpayers and all the stakeholders for better implementation and functioning of GST. It acts as the nodal agency to provide assistance in terms of IT infrastructure and services to all. Actually, it acts as a common interface between government, taxpayers, accounting authorities and banks.⁴ It integrates the common GST portal with the existing tax administration IT systems for easy compliance. It is a single repository of information where details of each and every service are uploaded. Hence, a technology ecosystem is established which efficiently handles the information transfer. It plans to achieve this through a network of GSPs (GST Suvidha Provider) and ASPs (Application Service Provider). Basically, GSPs act as channels which transfer information between the GSTN server and the ASPs and finally provide a secure network for it. On the other hand, ASP is the application which performs all the activities which are needed for monthly return filing.⁵

Management, Shareholding and Structure of GSTN

The administrative and strategic control over the GSTN lies with the Central Government, state governments together with seven members in the overall 14-member GSTN board. Three members belong to private shareholders and rests are independent members. The CEO is responsible for its overall functioning.

The majority stake in GSTN (24.5%) is held by the central government and all the state governments together (24.5%) while financial institutions like ICICI, HDFC, etc hold rest of 51% of the stake in GSTN. Hence, 51% of the shares in GSTN are owned by private players while the rest is owned by the government which has been shown in figure.⁶

The authorized capital of GSTN is Rs 10 crores (US \$ 1.6 million). A non-recurring grant of Rs 315 crores has also been approved to GSTN and the contract for developing this technology has been assigned to Infosys in September 2015.

Objectives of GSTN

Following are the objectives of GSTN:⁷

- (a) To provide common and shared IT infrastructure and services to the Centre and the State governments, taxpayers and other stakeholders for implementation of Goods and Services Tax (GST).
- (b) To provide common Registration, Return and payment services to taxpayers.
- (c) To be partner with other agencies for creating and efficient, effective and user-friendly GST Eco-system.
- (d) To encourage and collaborate with GST Suvidha Providers (GSPs) to roll out GST applications for providing simplified services to various stakeholders.
- (e) To provide efficient and effective services to the tax department of the Central and State Governments on request.
- (f) To develop Taxpayer Profiling Utility (TPU) for Central and State Tax Administration.
- (g) To assist tax authorities in improving tax compliance and transparency in tax administration system.
- (h) To deliver any other services relevant to Central and State Governments and other stakeholders on request.

Special Features of GSTN

As GSTN is a complex IT initiative, it establishes a uniform interface for the taxpayer and also creates a common and shared IT between the centre and the states. Following are the salient features of GSTN:⁸

- (i) **Trusted National Information Utility**
The GSTN is a trusted National Information Utility which provides reliable, efficient, robust IT backbone for proper and smooth functioning of GST.
- (ii) **Handles Complex Transactions**
GSTN handles complex transactions because it is destination-based tax and adjustment of IGST for inter-state trade at the centre and various states level is extremely complex. This work is done with the help of a strong IT infrastructure.
- (iii) **Secured Information**
To keep the information of all taxpayers fully secure and confidential, the Government makes a strategic control over the GSTN. The Government has control over the overall composition of GSTN.
- (iv) **Shared Expenses**

The Central Government and State Government pay the user charges in equal ratio on behalf of users. These expenses are related with IT system, fraud analytics tools, operating expense such as rent, salary, office expenses, internal IT facilities, etc.

(v) Convenience for Taxpayers

GSTN has designed various types of services and technological tools for taxpayers for paying taxes and filing returns in comparison to previous period.

(vi) Checking ITC Claims

Checking of claim of input tax credit (ITC) is one of the basic and fundamental pillars of GST. For this purpose, data of business to business invoices are uploaded and matched. The invoice level data is directly entered on the portal by the taxpayer. In case the number of business to business invoices is higher, the taxpayer uses free online tool which has been developed by GSTN.

(vii) Helps in Maintaining Data

GSTN also helps in maintaining data. It has already released template of Excel sheet in which taxpayers keep the business data at invoice level. The tool pulls 19,000 line items from Excel sheet to generate a 5 MB file. This tool can be used multiple times to upload data for creating GSTR – 1.

(viii) Facility of GSPs

GSTN has provided GST Suvidha Providers (GSPs) to those taxpayers who have lakhs of invoices and they want one-stop shop for end-to-end functionality. The GSPs provide accounting services, inventory and reconciliation services and facility of direct upload into GST system.

(ix) GST Common Portal

GSTN has created and managed common GST portal for the taxpayers. Work related with interstate supplies is done where goods and services move from the state of origin to state of consumption. The claim of IGST and its utilization are settled on the basis of returns filed at the common GST portal.

(x) Settlement between Centre and States

GSTN creates and maintains the information on IGST based on returns of taxpayers which is used for settlement of funds between Centre and States.

(xi) Payment of Taxes

Payment of taxes takes place by using one challan for all types of taxes which is prepared on the GST portal. When the challan is created with GSTIN name of taxpayer amount under various tax heads and sub-heads, he has two options to pay the tax. He may use net-banking facility out of 25 authorized banks or print the challan and take it to the concerned authorized bank for payment over the counter (OTC). This OTP payment may be up to Rs.10,000 in a month. The other option is that the taxpayer can also use NEFT/RTGS from any bank operating in India. The money is deducted from the taxpayer's account and the amount is transferred to Reserve Bank of India through the bank.

Role of GSTN

Following are the roles of GSTN in GST regime:

- (i) GSTN is a trusted National Information Utility (NIU) which aims to provide efficient, robust and reliable IT backbone to GST so that the functions of GST can be done efficiently and effectively with almost zero corruption level.
- (ii) It controls and takes care of complex transactions and maintains all the tax details. At the government level, serious and extreme complexity is faced due to

large volume of transactions all over India. This work is done by GSTN with the help of strong IT infrastructure and service backbone.

- (iii) It also preserves all the information safe, secured and confidential. The Government of India also plays an important role in this work by assisting GSTN through strategic control over the GSTN.
- (iv) The primary duty of GSTN is to develop common and robust IT infrastructure so that the taxpayers may use this for registration purposes, filing of returns, tax payments and generation of business control over the statutory functions like approval of registration, audit, assessment, etc.⁹
- (v) The registration of taxpayers in the GST regime is done on common GST portal. The details regarding scrutiny and validation of application is carried out by the GST portal. After validation, the registration application is shared with central tax authorities and the concerned state. Hence, the GST portal acts as a common interface for all the registration applicants and taxpayers in the country.
- (vi) There are two available options to the taxpayers to pay the tax. They are online and offline.¹⁰
 - Online
There are various banks that have power to collect GST as per direction of the Reserve Bank of India. The taxpayer can choose one of them. The taxpayer can make the necessary payment on bank's website after the submitting the user ID and password of the bank. After confirmation of payment by the bank, the taxpayer can download the copy of paid challan from GST portal.
 - Offline
Another option for taxpayer is an offline tax payment. The taxpayer can print the challan and present it in the concerned bank for an 'Over the Counter' (OTC) Payment. After confirmation of the payment, the bank transfers money to Reserve Bank of India and send confirmation of the same to GST portal for accounting purposes.
- (vii) Input Tax Credit (ITC) available at various levels is one of the important characteristics of GST. To claim ITC, invoices of buyers and sellers are uploaded and matched every month. This work is done by the common GST portal developed by GSTN. However, the claim of IGST and utilization of credit is done on the basis of returns filed on the GST portal.

Functions of GSTN

GSTN is a special purpose vehicle setup to cater the needs of GST. The GSTN provides a shared IT infrastructure to central government, state governments, taxpayers and other stakeholders for the implementation of GST. For this, GSTN performs various functions which are mentioned below:¹¹

- (i) It provides help in registration process.
- (ii) It helps in filing returns and submits to the central and state government.
- (iii) It helps in calculation of IGST and its settlement.
- (iv) It reconciles payment details with banking network.
- (v) It analyses the taxpayer profile.
- (vi) It submits MIS report to Central and State Governments.
- (vii) It runs the matching computation engine for matching, reversal and reclaim of input tax credit.

(viii) It creates business intelligence.

GST Suvidha Provider (GSP)

GST Suvidha Provider (GSP) is one of the important players in success of tax regime. It allows taxpayers or users to implement the provisions of GST with the help of online platform. It means it helps the taxpayers to comply with the provisions of GST law through web platform. Individuals and taxpayers may file their returns through GSP. GSP is controlled by the government which is operated as per MOU. The government body (GSTN) and GSP make an agreement. Taxpayers file their returns online (100%) through GSP by giving their necessary details. It also focuses on taking out the details of the taxpayer and converts them into GST returns. These GST returns are filed on behalf of the taxpayers with GSTN via GSP.¹²

Application Service Providers (ASP)

ASP stands for Application Service Providers which is also one of the important players in success of tax regime. Through ASP, taxpayers or users can file their GST taxes. ASP can provide solution for taxpayers, corporate and consultants. Taxpayers and consultants can manage the sale and purchase of goods and services and GST filing with the help of ASPs. Businesses share their data of sales and purchases of goods and services to the ASPs. After obtaining such data, ASPs prepare the GST returns and file the returns through GSP.¹³

Hence, ASP plays an important role in filing returns and saves time of taxpayers. It gathers data from taxpayers and converts them into tax returns. Generally, ASP takes care of data protection, data verification, data archiving and retrieval, application and process control, etc.

Conclusion

Thus, it can be deduced that technology is one of the integral and the most crucial part of the GST process. It provides a uniform interface for the taxpayer and a common man. Use of technology makes the tax administration more efficient for registration, returns filing, data exchange and effective investigation, monitoring, auditing and performance analysis with little or no human intervention. It also provides several user-friendly features such as offline capabilities, altering capabilities, mobile/tablet interface and additional mechanisms to avoid duplicity of data. As this tax system has been introduced for the first time in India, businesses may encounter several challenges during the initial stages of implementation. However, once the system is streamlined, the two major important objectives envisaged – curbing tax evasion and increasing tax revenue and ease of compliance for taxpayers will be achieved. Finally, the success of this transformation will help our nation to create history in the world of GST compliance.

REFERENCES

1. GS Score, Role of IT in GST Regime, Chapter 5, p. 20 *www.iasscore.in*
2. RBI, State Finances: A Study of Budgets of 2016-17, p. 24
3. GS Score, *loc.cit.*, p. 20 *www.iasscore.in*
4. GS Score, GST: Cooperative Federalism, Chapter 2, p. 8 *www.iasscore.in*

5. Kumar, Prakash (2017), "Creating a Strong IT Backbone", Yojna, August, pp. 22-23.
6. Hazra, Abhijit (1990), *http://www.naapbooks.com/gst*
7. Swain, A.K. and G.P. Agrawal (2018), GST – Concepts and Applications, Himalaya Publishing House, Mumbai, p. 5.
8. Hazra, Abhijit (1990), *loc.cit.*,
9. Role of GSTN, *http://www.gstzen.in/a/role-of-gstn.html*
10. GSTN – Roles and Features, *http://www.quora.com*
11. Kumar, Prakash (2017), "Creating a Strong IT Backbone", Yojna, August, p. 23.
12. GS Score, *loc.cit.*, Chapter 5, p. 21 *www.iasscore.in*
13. *Ibid.*, pp. 21-22, *www.iasscore.in*

Impact Analysis of demographic variables on consumer buying behavior towards mobile phones in Nagpur

Dr. Reema Kamlani

Dada Ramchand Bakhru Sindhu Mahavidyalaya, Nagpur

Abstract

Demographic factors plays vital role in marketing in today's era. Mobile phones are in demand one can find thousands of customers using mobile phones in Nagpur. However it has also been observed that there is no scientific study in Nagpur in this area by the students.

This study will be useful for mobile phones manufacturer and sellers. As it is providing key insights on demographic variables affecting consumer behaviour towards mobile phone.

Keywords: Buying behavior, Mobile Phone, Impact Analysis

1. Introduction

The development of mobile phones and technologies has been an extended history of innovation and advancements cropped up due to dynamic changes in consumers' needs and preferences. Among these developments, mobile phone devices had one of the fastest household adoption rates of any technology in the world's modern history nowadays, mobile handsets have become an integral part of human daily life and personal communication across the globe. In the current highly competitive mobile phone market, manufacturers constantly fight to find additional competitive edge and differentiating elements to persuade consumers to select their brand instead of competitors. There are various studies conducted to identify factors that make companies better than their competitors in influencing the customers purchase decision. Consumers' of mobile phone found throughout the world greatly influenced by those different factors affecting mobile phones purchase decision. These factors may be related to the characteristics of the consumer and the features associated with the mobile phones. This leads mobile phone companies to come up with a variety of mobiles with different brands and features. There is various research studies conducted to identify factors affecting consumers' choice of mobile phones.

In this modern era, a wide variety of other services such as email, text messaging, MMS, internet access, audio and video, short range wireless communications (Inferred, Bluetooth), gaming etc. are also supported by the mobile phones. In addition to these, it also offers more general computing capabilities that are referred to smart phone. In Bangladesh many mobile phone brands are available e.g. Nokia, Samsung, Sony, HTC, Panasonic, Motorola, LG, Symphony, Micro max, Walton etc. and consumer choose their preferred mobile phone from this pool.

1.1. Factors affecting consumer behaviour

Consumer behaviour refers to the selection, purchase and consumption of goods and services for the satisfaction of their wants. There are different processes involved in the consumer behaviour. Initially the consumer tries to find what commodities he would like to consume, then he selects only those commodities that promise greater utility. After selecting the commodities, the consumer makes an estimate of the available money which he can spend. Lastly, the consumer analyses the prevailing prices of commodities and takes the decision about the commodities he should consume.

Consumer buying behaviour is influenced by four major factors:

- 1) Cultural
- 2) Social
- 3) Personal
- 4) Psychological

1) Cultural: - Culture is the part of every society and is the important cause of person wants and behavior. • It is the set of basic values, perception, wants and behaviour learned by a member of society from family and other important institutions. • The influence of culture on buying behavior varies from country to country therefore marketers have to be very careful in analysing the culture of different groups, regions or even countries.

2) Social: - Social factors consist of preference groups, family, roles and status. • A person's behaviour is influenced by many small groups such as family. It is the most important consumer buying organization in society and it has been researched extensively. • The position of an individual within his family, his work, his country club and his group of friends etc. all this can be defined in terms of role and social status.

3) **Personal:** - It includes such variables as age and lifecycle stage, occupation, economic circumstances, lifestyle (activities, interests, opinions and demographics), personality and self concept. Decisions and buying behaviour are obviously also influenced by the characteristics of each consumer.

4) **Psychological:** - Among the factors influencing consumer behaviour, psychological factors can be divided into 3 categories:

- a. Motivation
- b. Perception
- c. Learning

2. Objective

- To find out the impact of demographic factors on mobile phones purchases.
- To evaluate the impact of brand on consumers.

3. Research Methodology

The research primarily deals with following questions

1. Students buying behavior towards Mobile Phone's in the Nagpur Market?
2. Internal and External Factors affecting the students for purchasing Mobile Phone in Nagpur Market?

3.1. Data Collection Methods

Sampling Media: The respondents in the samples are reached through Google form.

Sampling Methods: Random sampling method

Sample Size- 200

Sampling area - Nagpur.

Age	No. of respondents
15-24	124
25-34	71
35-44	5

Gender	No. of respondents
female	95
male	105

Occupation	No. of respondents
Student	134
Employed	57
Housewife	9

4. Results

Age wise:-

- The different age group chooses different type of mobile phone while purchasing the mobile phone. e.g. The size of the mobile phone is important factor for 15 to 24 age group but the same factor 34 to 44 group doesn't consider as one of the important factor of mobile purchase.
- 25 to 35 age group give focus on the following features while purchasing a mobile phones, like availability of the front camera, high definition games in the handset and light weight of the handset but the 15 to 25 age group give less important to the same factor.

- The study found that, 34 to 44 age group looks following features in the mobile while purchasing. Like suitable battery with less charge time, power saving system, availability of more than 32 GB memory, high quality music/sound system as compared to 15 to 24 and 25 to 34 age group.

Gender wise:-

- The study found that, the male and female choice is different when they go for purchase a mobile. Female gives attention toward the looks & size as compared to male. The male customers are attracted towards internal features in mobile phone like battery backup, power saving system etc.
- It is found that female wants more features in the mobile in less price.
- The males give important to the availability of front camera, availability of more than 32 GB memory while purchasing a mobile phones. But the females doesn't focus on the same factor during purchasing a mobile phones.
- High definition games in the handset is one of the important factor for males while purchasing mobile phones. But female doesn't give important to the same factor.

5. Conclusion

The project started with the objective of finding the impact of demographic factors on purchases of mobile phones.

During this project, the researcher collected the data from 200 samples in Nagpur city. This survey was systematically served and interpreted. Which provided useful insights.

- It is concluded that there is significant impact of demographic factors on mobile buying decision.
- The technical features of mobile phone like battery back-up, power saving system, music system etc. are mostly consider while purchasing the mobile phones.
- There are various factors that consumer consider before choosing branded mobile phone, like function, quality, recommendation by friend.
- Majority of the respondents prefer EMI and zero down facility because of financial reason.

The above information shows that demographic factors play vital role in marketing and manufacturing of mobile phones. If these factors are taken into consideration, better result can be obtained.

Reference:

1. p. o. oladele1, k. k. arogundade2, a. m. awolaja3 (2016)"influence of demographic factors on mobile phone purchasing among university students in Nigeria." quarterly journal of business studies vol. 2, no. 4, 2016, 174-180.
2. Heikki Karjaluoto, Jari Karvonen, Manne Kesti, Timo Koivumäki ,Marjukka Manninen, Jukka Pakola, Annu Ristola, Jari Salo (2005) "Factors Affecting Consumer Choice of Mobile Phones: Two Studies from Finland." Journal of Euromarketing, Vol. 14(3) 2005
<http://www.haworthpress.com/web/JEM> ∆2005 by The Haworth Press, Inc. All rights reserved.
Digital Object Identifier: 10.1300/J037v14n03_04

3. Genet Gebre Tirfe1, Rajyalakshmi Nittala2 (2015) “demographic factors influencing customer’ life style on mobile phone usage: a case of dilla city, Ethiopia.” Int J Cur Res Rev | Vol 7 • Issue 12 • June 2015.
4. Parveen Kumari1, Satinder Kumar2 (2016) “Consumer Brand Preference towards Mobile Phone: Effect of Mobile Phone Attributes on Purchase Decision.” IOSR Journal of Business and Management (IOSR-JBM) e-ISSN: 2278-487X, p-ISSN: 2319-7668.
5. Prof. Dr. Abdul Ghafoor Awan, Nayyar Abbas (2015) “Impact of Demographic Factors on Impulse Buying Behavior of Customer in Multan-Pakistan.” European Journal of Business and Management www.iiste.org ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online) Vol.7, No.22, 2015.
6. Mesay Sata (2013) “Factors Affecting Consumer Buying Behavior of Mobile Phone Devices.” ISSN 2039-2117 (online) ISSN 2039-9340 (print) Mediterranean Journal of Social Sciences MCSER Publishing, Rome-Italy Vol 4 No 12 October 2013.

Marketing practices of seed and fertilizer manufacturing companies in India – Literature Review

Mr. PranayVinayakWankhede, Umred

Abstract:

Marketing management of fertilizers plays an important role in agribusiness input industry. Its development in broader perspective can bring about increase in agriculture income. Very few studies have been attempted on fertilizers marketing management in India (Anonymous, 2012).

This paper is an attempt to review the existing literature regarding marketing of fertilizers in India.

Keywords: Marketing Practices, Fertilizer manufacturing

1. Introduction:

As indicated by Department of Agriculture, Cooperation and Farmers Welfare, the horticulture creation in the nation has expanded regardless of the diminishing are under development. The generation of rice has arrived at 110.15 million metric ton in 2017 and wheat creation has arrived at 98.38 million metric ton from 104.41 million metric ton of rice and 92.29 million metric ton of wheat in 2016. Different of Initiatives of Government of India, for example, Initiative for heartbeats by giving sponsorship fo quality seeds delivered, group forefront exhibitions through KVKs, etc are additionally being attempted under National Food Security Mission (NFSM) for expanding the generation and efficiency of heartbeats in the nation.

Urea is the major devoured manure in India pursued by DAP. As per Department of fertile of India, the creation of DAP and Complex manures are expanding in the nation. The generation of DAP arrived at 4.3 million metric ton and the production of compel composts arrived at 7.9 million metric ton in 2017, which was assessed to arrive at 5.03 million metric ton and 9.03 million metric ton in 2018. The creation of DAP has expanded in the time of 2017-2018 when the worldwide costs for phosphate crude materials filled. This helped the generation of DAP in the nation attributable to the more popularity for the manure.

The India Fertilizer Market is a solidified market with significant players, for example, Coromandel International Limited, Indian Farmers Fertilizer Cooperative (IFFCO), Fertilizers and Chemicals Travancore (FACT), Deepak Fertilizers Limited and Chambal Fertilizers Limited, among others. The market is divided with a blend of government-possessed and co-agents gathering a high piece of the overall industry in the straight and complex manure space and privately owned businesses occupied with a high level of item advancement to tap the non-appropriation space.

2. Objectives:

To review the existing literature related to fertilizers marketing

3. Research Methodology:

The study is based on secondary data only. The available literature were reviewed by the author. Meaningful conclusions were drawn from literature review.

4. Results:

Venkateswaralu et al. (1984) endeavored to look at the purpose behind being brand faithful. It has been discovered that 50 percent of the shopper respondents favored a specific brand since they were persuaded that its quality was superior to that of different

brands. Another 38 percent of the example purchasers felt it was the taste, which caused them to go in for a specific brand, while not many shoppers in the example expressed low cost and simple accessibility as the primary purposes behind choosing a brand.

Sandhu (1992) saw that in Punjab, pesticides market was constrained by the private dealers as around 80 percent of the complete pesticides were taken care of by it, which showed oligopolistic nature of the market. The co-agents and the administration took care of just around 20 percent of the absolute pesticides devoured. The private dissemination channel was seen as more proficient than the others.

Rane (1996) contemplated the special procedures of Deepak Fertilizer and Petrochemicals Corporation Ltd. (DFPCL). He found that the business projects were helped out through agrarian alumni by conveying the organization items by and by to the ranchers. This program made great picture for organization's item. Likewise, the spot exhibitions were done on rancher fields thought about the effectiveness of items. Aside from these things DEPCL additionally led ranchers and sellers preparing project to bestow information about the utilization of P, K and micronutrients.

Gupta (1999) in her statistical surveying reasoned that brand inclinations among the shoppers might be identified with various components like individual characteristics, age, instructive capabilities, word related status, month to month pay and so forth.

Singh (1999) uncovered the issue of provincial showcasing in India, from an advancement point of view. The idea of three information markets (seeds, manures, pesticides) is inspected to land at the showcasing blend issues and the issues. Systems are talked about for explicit info promoting just as provincial showcasing by and large. The recognizable proof of issues in item use and effectiveness is one of the significant advances associated with better promoting administration. Agri-business firms have not been proactive around there, as of not long ago as business sectors were controlled; not focused and input utilization levels were generally low. In any case, the escalation of ranch creation is relied upon to increment because of new innovations, speculation and market openings. This will make extra chances and issues for information firms as they should manage the issues of manageability of creation frameworks. This will require better business the board just as moral and genuine associations with ranchers.

Ghayur (2000) saw that the advertising of bio-manures in India has been affected by an assortment of elements, including view of ranchers, Government intercession, and the challenges in utilizing the bio-compost innovation. The investigation found that regardless of the Government's endeavors to advance bio-composts, they have increased little acknowledgment from the ranchers. The issues of inaccessibility of bio-manures and their low quality are connected. On one hand, the State Agricultural Department and retailers are reluctant to stock and sell bio-composts as they feel that their quality is inconsistent. Then again, the low interest for bio-composts has avoided interest in cutting edge creation and storerooms, which are required for improving the quality. The examination reason that the present strategy of giving awards and low intrigue credits to bio-compost makers ought to be annulled, as it has prompted setting up of an enormous number of wasteful plants, which can't deliver great quality bio-manures. The strategy of advertising bio-manures at low costs ought to likewise be halted, as these costs are too low to even think about

attracting present day interest in current assembling units. Also, ranchers feel that nothing so modest can give a lot of nourishment to the plants.

Singh (2000) considered the status of manure showcasing framework in India and analyzed its potential improvement. The examination concentrated for the most part on sources and area of manure supply; dispersion channels; compost use advancement; degree of compost use and yield execution; wellsprings of data on compost practices and manure buy conduct of ranchers; proficiency of advertising frameworks; and issues experienced by the ranchers in getting composts. It examined significant issues about the following phase of advancement of the manure advertise. The fundamental conditions which influence the development of manure use have changed and new difficulties are rising. The new improvements which are an aftereffect of new monetary condition require another direction of endeavors and strategies.

Padmanaban (2002) saw that private vendors, expansion authorities and ads in broad communications were the significant wellsprings of data for ranchers, which guided them in determination of brands. The examination additionally demonstrated that people and promoting in broad communications may help the pesticide firms in expanding their turnover. With respect to value changes in favored brand, the examination uncovered that the greater part of the example ranchers keep on purchasing a similar brand and same amount, regardless of whether the cost was higher. This demonstrated the ranchers are delicate to brand and nature of pesticides.

Udaya (2002) examined the showcasing the board of pesticides in Karnataka. The aftereffect of the examination demonstrates that the cost of favored items was huge at 0.1

Per penny impacting the vendor's steadfastness to the huge degree. The acts of neglect winning at the vendors point likewise fundamentally affected the rancher. Credit accessibility, rebate/blessing/impetus, quality and accessibility of favored brands were noteworthy at 5 percent level impacting the seller faithfulness. The different assurance was seen as 0.57 clarifying the variety of 57 percent in sellers unwaveringness of ranchers to the factors incorporated into the capacity.

Ghosh (2003) expressed that there is a continuous endeavor to advance biofertilizers in Indian farming through open mediation, and with regards to the soul of the occasions, the strategy rouses private segment and benefit thought process to drive the new innovation. The inquiry brought up in the investigation is the way effective has the mediation strategy been in Indian horticulture. The Government of India and the different State Governments have been advancing the incipient biofertilizer advertise both at the degree of the client rancher and the maker speculator through the accompanying measures: (I) ranch level expansion and advancement programs, (ii) monetary help to financial specialists in setting up units, (iii) sponsorships on deals and (iv) direct generation in open part and co-employable associations and in colleges and research foundations. There has been no quickened development in dissemination with time, lacking spatial dispersion and regardless of passage of little private units into the business there is no reasonable sign of the accomplishment of privatization. The investigation anyway contends that considering the social advantages guaranteed the administration has plentiful grounds to mediate to set up a powerful market for the new item while empowering private players. Be that as it may, the strategy and the instruments of intercession should be planned with

consideration. Reliance on substance manures for future horticultural development would mean further misfortune in soil quality, conceivable outcomes of water defilement and unsustainable weight on the monetary framework. The Government of India has been attempting to advance an improved work on including utilization of bio-manures alongside composts. These sources of info have various useful effects on the dirt and can be generally modest and advantageous for use.

Grover and Luhach (2006) saw that in Hisar area of Haryana state uncovered that private pesticide sellers were the significant wellsprings of acquisition of pesticides by ranchers. A pesticide value control structure keeping in view the interests of the organizations, vendors and the ranchers might be planned. Reasonable measures might be taken to check and control the clearance of misleading and unacceptable pesticides.

Kottler (2006) depicted that situating means making a space in the client's brain. Promoting is a nonstop procedure of significant worth creation, esteem correspondence, esteem conveyance and brand situating. Brand situating enables advertiser in structure the showcasing to blend for each portion.

Sharma et al. (2009) ranchers counsel 'vendors' for taking data relating to horticulture and unified angles. The investigation directed on 50 sellers in Himachal Pradesh has uncovered that 'Monetary Price' and 'Brand picture' were the two conspicuous components liable for their choice to buy a specific brand of shower oil. A dominant part of them had favored 5 liter or 20 liter pressing of splash oil. 'Absence of sufficient mindfulness about the shower oil through notice', 'No normal visits of Sales Officers', 'Deficient staff' and 'No credit offices to the sellers by the organization' and so on were a portion of the primary issues experienced by the vendors in the advertising of HPCL splash oil in the Himachal Pradesh.

Chahal and Hundal (2011) examined that the ranchers were not having a solid brand devotion to the extent pesticides are concerned, however their unwaveringness increased as their relationship with the brand developed old. Additionally, the country market was extremely value delicate and this was one significant factor causing brand exchanging. Great limited time plans pulled in new clients somewhat. This has additionally made the brands being enjoyed more by the ranchers. Ranchers, buy choices were additionally seen as significantly impacted by others suggestions like companions and individual ranchers.

Lohana (2011) investigates on the topic Marketing Strategy, dealers and farmers expectation from company, Pricing policy of Syngenta India Pvt. Ltd. in Nanded. The findings show that the product quality and place (easy availability) has an impact on consumer motives, and the pricing strategy (competitiveness) has a significant positive impact on consumer buying behavior. These findings suggest that consumers look for product characteristics and store location when buying Agrochemicals products.

5. Conclusion:

The investigation presumes that there is a gigantic development potential trusting that the organization will accomplish groom in the market in light of the fact that there is by all accounts not very many subjective items dependent on exceptional specialized which are utilizing by the organizations of this section of business in this area.

Farming which records for one fifth of GDP gives sustenance to 66% of our populace. In addition, it gives significant in reverse and forward linkages to the remainder of the economy. Progressive five-year plan have laid weight on independence and confidence in nourishment grains creation and purposeful endeavors toward this path have brought about considerable increment in horticulture generation and efficiency. This is obvious from the way that from an unobtrusive degree of 52 million metric ton in 1951-52, nourishment grain creation rose to about 233.88 million metric ton in 2008-09. In India's achievement in farming division, not just regarding gathering complete necessity of nourishment grains yet in addition creating exportable surpluses the huge pretended by substance composts is very much perceived and built up.

Manure division was pivotal for Indian economy since it gives a significant contribution to horticulture. The manure business in India has assumed a significant job in accomplishing independence in nourishment grains just as in quick and continued farming development. India is the third biggest maker and purchaser of compost in world after China and USA. The development of the manure profoundly subject to government approaches. The administration practice broad controls on valuing, dissemination and development of composts.

References:

- Chahal, H.S. and Hundal, B.S. (2011). Factors responsible for brand liking, brand loyalty and brand switching among farmers of Punjab: a study of pesticides, *Indian J. Agric. Mktg.*, 24(1): 119-131.
- Ghayur, A. (2000). 'A Study of Bio-pesticides and Bio-fertilizers in Haryana', Gatekeeper Series, London
- Ghosh, N. (2003). Promoting biofertilizers in Indian agriculture. Research report, Institute of Economic Growth, New Delhi, India: 1-9.
- Grover, R.K. and Luhach, M.S. (2006). Study on marketing of pesticides in Haryana. *Indian J. Agric. Mktg.*, 20(1): 46-56.
- Gupta, S.L. (1999). Marketing Research. Excel books, New Delhi. pp.297.
- Kottler, P. (2006). Marketing management, Prentice Hall of India. New Delhi, pp. 718.
- Padmanaban, N.R. (2002). Brand loyalty of farmers towards pesticides in South Tamil Nadu. *Indian J. Agric. Mktg.*, 16(2): 119-131.
- Rane, N.B. (1996). Promotional strategies of DFPC. *Fertilizer News*, 4 (4): 75-77.
- Sandhu, M.S. (1992). Marketing of Pesticides in Punjab. Ph.D. (Ag.) Thesis, Punjab Agricultural University, Ludhiana (Punjab) India.
- Satpathy, A.R. and Sahu, U.N. (2011). Sabai grass marketing: The prime need for rural innovation and economic development of tribal community in Mayurbhanj district of Orissa state. *Indian J. Mktg.*, 17(5): 26-35.
- Sharma, D.D., Mai, Chand and Singh, U.C. (2009). Dealers' brand preference of spray oil in Himachal Pradesh, *Agric. Sci. Digest.*, 20(3): 169-173.
- Singh, P.K. (2000). Review of fertilizer marketing status and efficiency. *ArthaVikas*, 36(2): 11-35.
- Singh, S. (1999). Marketing of agricultural inputs: a perspective and strategies. Working Paper Institute of Rural Management Anand. (127): 19.
- Sitamber, G. and Manohar, K.M. (1990). Consumer's shopping behaviour – A study in a semi-urban city. *Indian J. Mktg.*, 11(3):72-79.
- Udaya, P. (2002). Marketing management of pesticide in Raichur district. M.Sc. Thesis, University of Agricultural Sciences, Dharwad (Karnataka) India.
- Venkateswaralu, H., Kumar, M. and Rajanatha, K. (1984). Factors influencing consumer decision making process towards biscuits – A behavioral analysis. *Indian J. Mktg.*, 17 (9): 3.

**STUDY ON ASSESSMENT AND ACCREDITATION OF QUALITY
MANAGEMENT OF CURRICULAR ASPECT OF COLLEGES OF EDUCATION IN
KARNATAKA**

**Dr.DIVAKARA NAIK K.S,
Principal
NUTANA COLLEGE OF EDUCATION DAVANGERE-577004**

ABSTRACT

Curriculum is the essential ingredient of any education system regardless of the education level. All other aspects whether teaching, learning and evaluation or research and development, infrastructure and learning resources, student activities and support system revolve around it. Therefore, curricular aspects and the best practices connected to curriculum design and development play a very significant dimension of the quality of colleges of teacher education since the curriculum has a decisive role in steering the other elements of quality. Reviewing and updating of the curriculum is the essential ingredient of any vibrant academic system. There ought to be a dynamic curriculum with necessary additions and changes introduced in it from time to time by the respective university with a prime objective to maintain updated curriculum and also providing their inputs to take care of fast paced development in the knowledge of the subject concerned. Designing of the curriculum to suit the clientele is important. Revising the curriculum should be a continuous process to provide an updated education to the students at large.

INTRODUCTION:

Every successful concept and project in life requires a proper framework and planning. This relates to all processes, including education. Whenever we embark on any new plan or procedure, we need to make sure that we have all the plans drawn up. What is on offer, what are the resources that we have, what are the steps, which we need to take and what are the goals that we need to achieve are some elements that need to be looked upon. A similar set of constraints when applied to education in schools and colleges gives birth to curriculum. A curriculum is a set of courses, including their content, offered at a school or university. The curriculum often contains a detailed list of subjects and the elements of teaching them. Higher education contributes to the promotion of the development of abilities and skills cognitive, affective and psychomotor domain. It contributes to the promotion of civic behavior, nation building and social cohesion through the transmission of democratic values and cultural norms. This supports the formation and strengthening of social capital, generally understood as the benefits of membership in a social network that can provide access to resources, guarantee accountability and serve as a safety net in terms of crisis. The institutions, relationships and norms that emerge from teacher education are instrumental in influencing the quality of society's interactions, which underpin economic, political and social development. In a changing context, the needs and aspirations of the students have to be met through the curriculum and curriculum transactions. The educationists and academicians need to take stock of the present scenario and introspect to transform the educational institutions to meet the present day challenges. The institutions of teacher education need to have a clear understanding of what they are seeking to achieve through their curricular offerings, research and extension programmes. There is an increasing pressure in the higher education system to equip students with not only the expertise derived from traditional academic programmes but also to give students

sufficient range of transferable skills to enable them to play effective role the employment sectors. Many different types of educations are evolving with diverse programmes. The thrust of education is shifting to employability based on the changing philosophy from idealism to pragmatism. From a specialized approach, there is a shift to multidisciplinary programme with modular approach on a life-long learning basis. Moreover, higher education should have access from the diverse section of the community to be able to make the necessary socio-economic development of the country.

Considering the analysis of the assessment reports by NAAC, Curricular Development and Transactions are important considerations, which we need to focus our attention in reforming the higher education.

The important initiatives we need to dwell on are:

- Development of need based and socially relevant programmes.
- Relevant curriculum in a fast changing world.
- Emerging areas in innovative and inter disciplinary areas have to be evolved.
- Periodic restructuring and updating of courses to match international standards.
- Extensive and intensive academic exercise for the restructuring of the courses.
- Additional emphasis on ICT component in upgrading content and transaction of curriculum at different levels.
- Cafeteria approach for diversification to enhance employability of graduates.
- Multi skill development with stress on communication skills.
- Promotion of science education.
- Promotion of vocational education.
- Enrich academic skills with computer use.
- Grant of autonomy to select number of colleges based on their performance record to facilitate innovations and flexibility in the curriculum.

Considering all these factors one needs to plan the educational process of the coming generation with much more far sight and vision. Knowledge is our most powerful engine of progress. The crucial role of education is the process of modernization, building up of a democratic and pluralistic society and development of both the socio-economic resources and human resource to achieve social justice and equity. Hence the role of higher education in contributing to the development of the economy and in changing the social structure was given a prime place duly recognizing the fact that human resource development would lead to the country's progress in its various spheres.

OBJECTIVES OF THE STUDY:

1. To investigate the relationship between institutional information and functioning of the institution with respect to curricular aspect of the colleges of education.
2. To study the difference among four divisions with respect to curricular aspect of functioning of the institution of colleges of education.

HYPOTHESIS OF THE STUDY:

1. There is no significant difference between four divisions (Bangalore, Belagavi, Gulbarga and Mysuru) with respect to institutional information scores about curricular aspects of colleges of education in Karnataka.
2. There is no significant difference between four divisions (Bangalore, Belagavi, Gulbarga and Mysuru) with respect to functioning scores about curricular aspects of colleges of education in Karnataka.

METHODOLOGY OF THE STUDY:

For present study, survey and comparative method was used as research method for collecting information.

SAMPLE:

In the present study, the sample was selected from all the 49 assessed and accredited colleges of teacher education in Karnataka state. For this purpose the 19 colleges of education were selected randomly from four divisions of Karnataka. All the selected colleges were recognized by NAAC and NCTE.

TOOLS USED TO COLLECT DATA:

Curricular Aspect scale was developed by the investigator on various dimensions of quality education of colleges of education. Validity and reliability were established for the scale. The Rating scale was developed to measure the quality management in colleges of education. The Rating scale was framed on the basis of objectives of the study.

STATISTICAL TECHNIQUES USED:

The appropriate statistical tools have been used such as simple mean, standard deviation, median, Inter quartile range (IQR), Non-parametric Kruskal Wallis analysis of variance and the Karl Pearson's correlation coefficient and other relevant statistical tests.

ANALYSIS AND INTERPRETATION:

Hypothesis: 01: There is no significant difference between four regions (Bangalore, Belagavi, Gulbarga and Mysuru) with respect to institutional information scores about curricular aspects of colleges of education in Karnataka

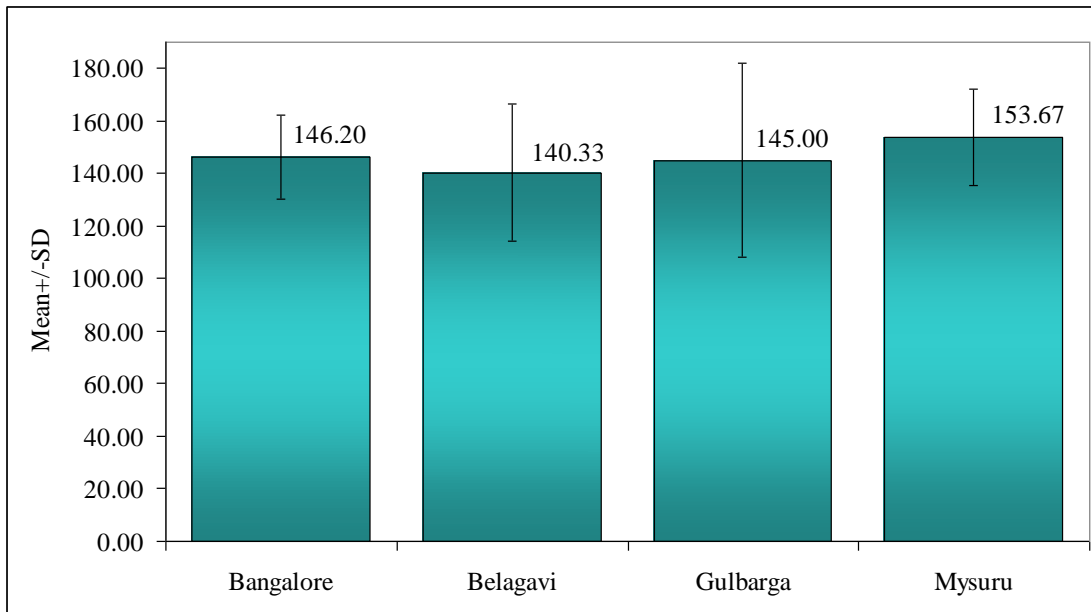
To test the above null hypothesis, the non-parametric Kruskal Wallis ANOVA test was performed and the results are presented in table given below

Table: 01: Results of Kruskal Wallis ANOVA between four regions (Bangalore, Belagavi, Gulbarga and Mysuru) with respect to institutional information scores about curricular aspects of colleges of education in Karnataka.

Divisions	Mean	SD	Median	IQR
Bangalore	146.20	16.07	144.00	10.50
Belagavi	140.33	25.93	145.00	26.00
Gulbarga	145.00	36.77	145.00	26.00
Mysuru	153.67	18.44	153.00	16.00
Total	158.63	16.52	159.00	9.25
H-value	1.1590			
P-value	0.7630			

The results of the above table reveal that, the mean±SD and median ± IQR of institutional information scores about curricular aspects of colleges of education in Karnataka are 158.63±16.52 and 159.00±9.25 respectively. In which, the mean of institutional information scores about curricular aspects is higher in Mysuru division (153.670±18.44) as compared to lowest in Belagavi division (140.33±25.93) followed by Bangalore division (146.20±16.072) and Gulbarga division (145.00±36.77). The difference between four divisions is not found to be statistically significant (H=1.1590, p>0.05) at 5% level of significance. Therefore, the null hypothesis is accepted and alternative hypothesis is rejected. It means that, the mean of institutional information scores about curricular aspects is similar in four divisions. The mean and SD scores are also presented in the following figure.

Figure: 01: Comparison of four regions (Bangalore, Belagavi, Gulbarga and Mysuru) with respect to institutional information scores about curricular aspects of colleges of education in Karnataka



Hypothesis:02: There is no significant difference between four regions (Bangalore, Belagavi, Gulbarga and Mysuru) with respect to functioning scores about curricular aspects of colleges of education in Karnataka

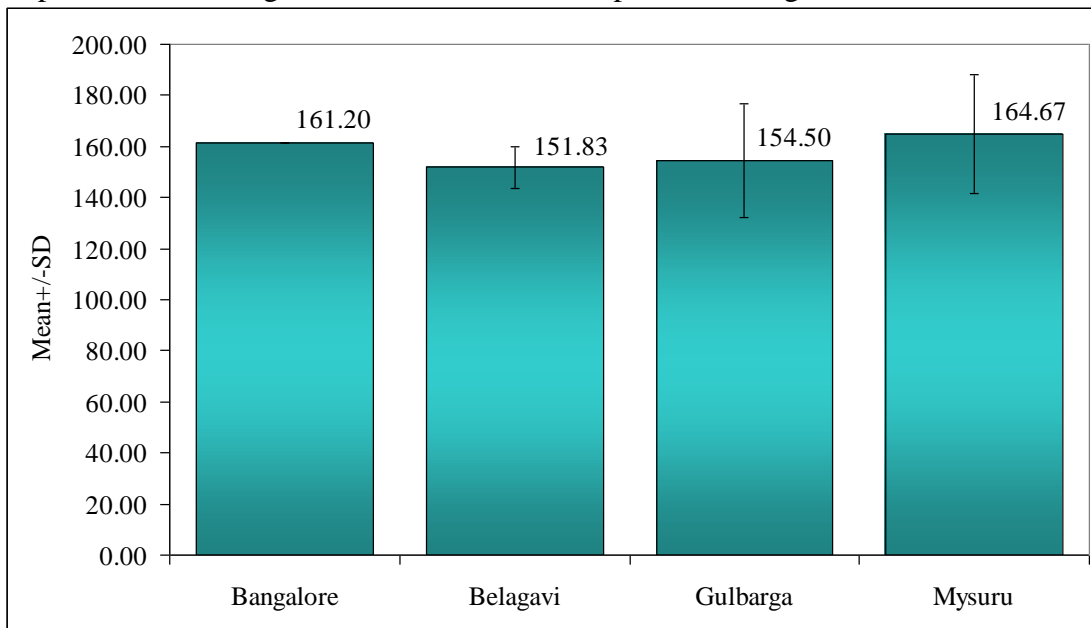
To test the above null hypothesis, the non-parametric Kruskal Wallis ANOVA test was performed and the results are presented in table given below

Table:02: Results of Kruskal Wallis ANOVA between four regions (Bangalore, Belagavi, Gulbarga and Mysuru) with respect to functioning scores about curricular aspects of colleges of education in Karnataka

Divisions	Mean	SD	Median	IQR
Bangalore	161.20	8.29	163.00	5.00
Belagavi	151.83	22.21	154.00	19.00
Gulbarga	154.50	23.33	154.50	16.50
Mysuru	164.67	14.57	158.00	12.50
Total	146.58	21.06	148.00	17.00
H-value	6.4530			
P-value	0.0920			

The results of the above table reveal that, the mean±SD and median ± IQR of functioning scores about curricular aspects of colleges of education in Karnataka are 146.58±21.06 and 148.00±17.00 respectively. In which, the mean of functioning scores about curricular aspects is higher in Mysuru division (164.67±14.57) as compared to lowest in Belagavi division (151.83±22.21) followed by Bangalore division (161.20±8.29) and Gulbarga division (154.50±23.33). The difference between four divisions is not found to be statistically significant (H=6.4530, p>0.05) at 5% level of significance. Therefore, the null hypothesis is accepted and alternative hypothesis is rejected. It means that, the mean of functioning scores about curricular aspects is similar in four divisions. The mean and SD scores are also presented in the following figure.

Figure: 02: Comparison of four regions (Bangalore, Belagavi, Gulbarga and Mysuru) with respect to functioning scores about curricular aspects of colleges of education in Karnataka



FINDINGS:

- The mean of institutional information scores about curricular aspects is higher in Mysuru division (153.670 ± 18.44) as compared to lowest in Belagavi division (140.33 ± 25.93) followed by Bangalore division (146.20 ± 16.072) and Gulbarga division (145.00 ± 36.77). The difference between four divisions is not found to be statistically significant
- The mean of functioning scores about curricular aspects is higher in Mysuru division (164.67 ± 14.57) as compared to lowest in Belagavi division (151.83 ± 22.21) followed by Bangalore division (161.20 ± 8.29) and Gulbarga division (154.50 ± 23.33). The difference between four divisions is not found to be statistically significant

EDUCATIONAL IMPLICATIONS:

- Curricular aspects and the best practices connected to curriculum design and development play a very significant dimension of the quality of teacher education since the curriculum has a decisive role in steering the other elements of quality.
- Designing of the curriculum to suit the clientele is important. Revising the curriculum should be a continuous process to provide an updated education to the students at large.
- Reviewing and updating of the curriculum is the essential ingredient of any vibrant academic system.
- While goals and trends of global knowledge has been given importance, the pride in the Indian heritage, values and India's unique contribution in this respect has been incorporated in the design of curriculum development.
- The institutions of higher education need to have a clear understanding of what they are seeking to achieve through their curricular offerings research and extension programmes.

- The quality of curriculum and the human infrastructure would make a quantum difference in the quality of graduates, which is the outcome of such inputs.
- To develop the curriculum with student focus.
- To promote academic excellence in the areas of student choice.
- To provide adequate flexibility in the choice of subjects to the students.
- To make the system more self-reliant by introducing at least partially the internal assessment process.

CONCLUSION:

Teacher Education provides a platform to student-teachers to acquire the required knowledge, skill and develop positive attitude, values and beliefs. This can be done with the help of the provided curriculum. And the quality of teacher produced in any institution invariably depends on the curriculum offered to them during their training period. After reviewing various researches on the curriculum and significant role of teachers' in framing the curriculum the process of curriculum development was decentralized. The process of curriculum framing and preparation of textbooks be decentralized so as to increase teachers' involvement in these tasks. Decentralization should mean greater autonomy within the state/district. As curriculum is the best mean of overall development of students. And teacher is mediator between curriculum and students. She/he knows various needs of students, educational institutions, industries, parents (stakeholders). The quality of teacher education is maintained by curriculum of Teacher Education.

BIBLIOGRAPHY:

- 📖 Aggarwal, J. C. (2002). *Educational Research an Introduction*, 5th Ed., New Delhi, Avichal Publishing Company p.no. 79-91.
- 📖 Best J.W. & Kahn, J.V.(2003) *Research in educational* (9th ed.), new Delhi prentice hall of India Pvt. Ltd p.no.1-23.
- 📖 Barnett, R., Parry, G., & Coate, K. (2001). Conceptualising curriculum change. *Teaching in Higher Education*, 6(4), 435-449
- 📖 Bhatawadekar, S.(2008) retrieved from <http://www.citehr.com/25619-quality-circles.html>
- 📖 National Curriculum Framework for Teacher Education (2009) New Delhi: National Council for Teacher Education

WEBLIOGRAPHY:

- 📖 www.aicte.ernet.in.
- 📖 www.ncte.org.
- 📖 www.naac.org.
