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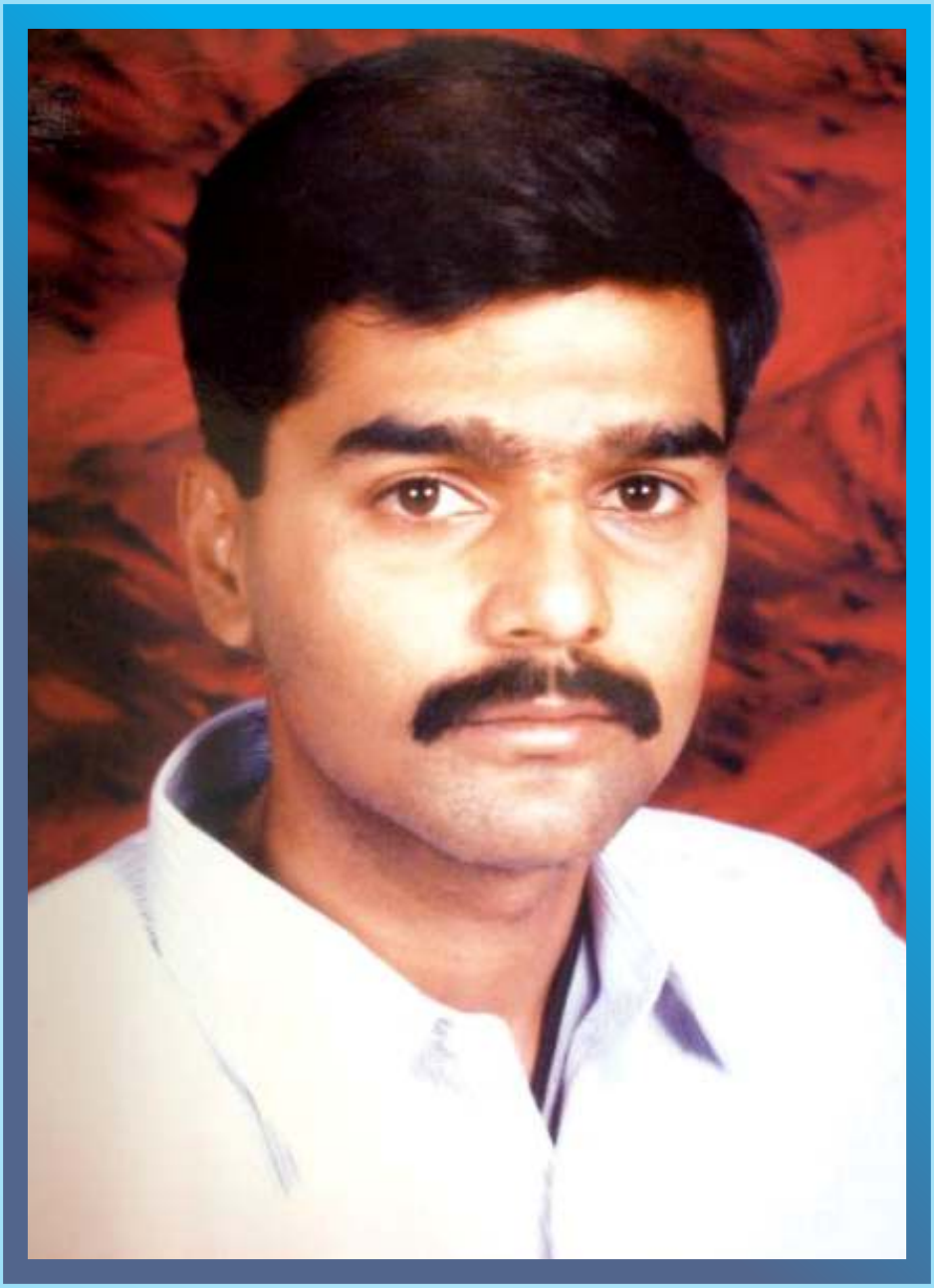

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C O N T E N T S

An Assessment of Customer Satisfaction and Net Banking Services in Select Banks with Special Reference to ATM Services

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Abstract

Present research is based on empirical evidences collected through the customers' survey regarding to the customers Satisfaction in internet banking services with special reference to ATMs services of some select banks. It is an effort to examine the relationship between the demographic variables and customers' satisfaction in internet banking. Present research shows that, demographics of the customers' are one of the most important factors which influence the use of internet banking services. Overall results show that percentage of Males, Urban people, younger persons, Salaried people are more satisfied with Availability of Proper Assistance at ATMs, for using the ATMs, more secured using ATMs' for making transactions and towards Balance check than other income groups. As women folks are not outgoing, there should be educational programs for all age group and all income group females, so that they become more prone to internet banking services. The banks should proactively monitor customers' preferences with regard to use of this delivery channel for effective response. Bank should focus on important aspects of security and privacy as well as efficient operation of ATMs. Banks should also augment and diversify their offerings through ATM and use this medium to build a strong and sustained relationship with customers. Therefore, banks should concentrate their efforts on these dimensions for cater better ATM service to satisfy their customers.

Key Words: Net Banking, Automated Teller Machine, Customer Satisfaction.

1. Introduction

The recent development of information technology has led to major changes in the way services are delivered to the customers. Nowadays, customers are using more and more self-service options, which are more convenient and fast. In addition, the advent and use of the Internet has changed considerably the daily activities of most people, such as shopping and banking. The popularity of banking services delivered over the Internet (online banking services) is increasing in recent years (Fredriksson, 2003)

As far as banks in particular are concerned, during the second half of 1990s, the way of operating in the banking industry has undergone a fundamental change because of the advent of the Internet (Gunasekaran & Love, 1999). Taking into consideration the huge investments banks make in Internet infrastructure, customer satisfaction and retention are turning into the crucial factors for success in online banking meaning that the generation of positive customer value on the Internet requires the establishment of long-term customer relationships (Bauer, Hammerschmidt & Falk, 2005). Customer satisfaction is a critical issue in the success of any business system, traditional or online. In a turbulent e-commerce environment, in order to sustain the growth and market share Internet companies need to understand how to satisfy customers, since customer satisfaction is critical for establishing long term client relationships (Peterson et al 1997).Internet banking is both a process and product electronic innovation (Chang 2004). It enables customers to handle their banking transactions online, without physical visits to the bank. The increased use of online banking services has many advantages for both customers and banks. For customers, E-banking services allow them to have better overview of their banking business and help them to manage their banking transactions more conveniently and fast. The history of ATM can be traced back to the 1960s, when the first ATM machine was invented by John Shepherd- Barron. That machine used by Barclays Bank (Barclays Bank in Enfield Town in North London, United Kingdom) in 27 June 1967. An automated teller machine (ATM) or automatic banking machine (ABM) is a computerised telecommunications device. It provides the clients of a financial institution with access to financial transactions in a public space without the need for a cashier, human clerk or bank teller.

2. Literature Review

Khan, Muhammad Asif (2010) in his study **"An Empirical Study of Automated Teller Machine Service Quality and Customer Satisfaction in Pakistani Banks"** investigates significant dimensions of ATM (automated teller machine) service quality and its effect on customer satisfaction. **Mobarek, Asma (2009)** in her article **"E-Banking Practices and Customer Satisfaction - A Case Study in Botswana"** cleared that Banks' external environment, including globalization and deregulations, have made the banks highly competitive. Banks find it difficult to compete on price, and need to look at other ways to retain customers. **Sultan Singh, Ms. Komal (2009). Impact of ATM on Customer Satisfaction (A Comparative Study of SBI, ICICI & HDFC bank)** presents the impact of ATM on customer satisfaction. This is a comparative study of three major banks i.e. State Bank of India, ICICI bank and HDFC bank. **Dilijonas et al., (2009)** examined the essential aspects of ATM service quality in Baltic States.

Hamadi, Chakib (2010) in his article "The Impact of Quality of Online Banking on Customer Commitment" demonstrates the existence of a causal relationship between perceived quality, satisfaction and commitment in the context of online banking. The results show that the perceived quality heavily influences the commitment of customers and that this effect is direct and not mediated by satisfaction.

Dash, Manoj Kumar and Mahaptra, D.M. (2006) in their article **"Measuring Customer Satisfaction in the Banking Industry"** explained that the working of the customer's mind is a mystery which is difficult to solve and understanding the nuances of what customer satisfaction is, a challenging task. **Khaled, Al-Hashash and Bahzadi, Abdulrasoul Hussain (2008)** in their article **"Bank's Customer Satisfaction in Kuwait : An Exploratory Study"** explained that Customer satisfaction is a significant subject for most marketers. Their proposal project aimed to investigate customer satisfaction in the retail banking in state of Kuwait.

Hossain, Mohammed and Leo, Shirley(2009) in their article **"Customer perception on Service quality in retail banking in Middle East: the case of Qatar"** evaluate the service quality in retail banking in the Middle East in general, and Qatar in particular, based on different levels of customers' perception regarding service quality. He suggests that in order to achieve higher levels of quality service in retail banking, banks should deliver higher levels of service quality and in the present context customers' perceptions are highest in the level of infrastructure facilities of the bank, followed by timing of the bank, and return on deposit.

Nittala, Rajyalakshmi and Kameswari, Vijaya (2011) in their article **"Service Quality and Customer Satisfaction in State Bank of India"** have suggested that Several studies have been carried out by various researchers of India and abroad, to find out the various service quality factors that lead to customer satisfaction. One of the most often used measures is the SERVQUAL based on extensive research in generic determinants of perceived service quality **(Parasuraman, Berry et al. 1985; Parasuraman, Berry et al. 1988;** Zeithaml, Parasuraman et al. 1990; Parasuraman, Berry et al. 1991; Parasuraman, Berry et al. 1993; Parasuraman, Berry et al. 1994). Various models have been developed measuring service quality **(Stafford, 1996; Bahia and Nantel, 2000)**. The SERVQUAL model of **Parasuraman et al. (1988)** proposed a five dimensional construct of perceived service quality-tangibles; reliability, responsiveness, assurance and empathy- with items reflecting both expectation and perceived performance.

Bahia and Nantel (2000) developed a specific scale for measuring perceived service quality in retail banking. The bank service quality model (BSQ) is an extension of the original ten dimensions model of Parasuraman et al., (1985) where in courtesy and access were added as proposed by **Carman (1990)**.

Lai, Jung-Yu, and Lin, Ching-Tsung (2008) in their article **"What Factors drive Corporate Customer Satisfaction With E-Banking Services"** has given idea that due to the burgeoning development of electronic commerce (e-commerce), the broader applications of emerging service—Internet baking (e-banking) services have been introduced and provided by financial holding companies or banks at an accelerating rate in recent years since they can provide efficient, reliable, securable, and convenient financial services, such as online payment, deposit/loan, trading, and clearing/settlement, via electronic channels (e-channels, e.g., Internet and phone) for customers.

Gan, Christopher et al (2006) in their article **"A Survey of Customer Retention in The New Zealand Banking Industry"** have identified the benefits that

customer retention delivers to an organization **(Colgate et al., 1996; Reichheld and Sasser, 1990)**. **Rust and Zahorik (1993)** argue that the financial implications of attracting new customers may be five times as costly as keeping existing customers.

3. Research Methodology

3.1 Objectives of the Study

This paper focuses on exploring the major factors that influence the adoption of information technology in select banks of Madhya Pradesh. The researcher tried to examine and evaluate various net banking services influenced by various demographic variables. Following are the main objectives of the study:

- To examine the impact of net banking services in select banks of Madhya Pradesh with special reference to ATM services.
- To Asses the customers satisfaction on ATM services with various Demographic Variables.
- To study the customers satisfaction on ATM services with regard to various locations.
- To know the importance of availability of proper assistance at ATM locations.
- To study whether ATMs are secured for making transactions.
- To evaluate the usage of ATM for Balance check/Money withdrawal.
- To know the satisfaction level of customer towards the limit of amount withdrawal single time/ day.

3.2 Hypothesis

Hypothesis 1

Null Hypothesis H0: There is no significance between Demographic Variables and Availability of Proper Assistance at ATMs.

Alternate Hypothesis H1: There is significance between Demographic Variables and Availability of Proper Assistance at ATMs.

Hypothesis 2

Null Hypothesis H0: There is no significance between Demographic Variables and Easy Accessibility of ATM Locations.

Alternate Hypothesis H1: There is significance between Demographic Variables and Easy Accessibility of ATM Locations.

Hypothesis 3

Null Hypothesis H0: There is no significance between Demographic Variables and Always Use ATM for Balance Check.

Alternate Hypothesis H1: There is significance between Demographic Variables and Always Use ATM for Balance Check.

Hypothesis 4

Null Hypothesis H0: There is no significance between Demographic Variables and Limit of Total Amount Withdrawal Single Time.

Alternate Hypothesis H1: There is significance between Demographic Variables and Limit of Total Amount Withdrawal Single Time.

Hypothesis 5

Null Hypothesis H0: There is no significance between Demographic Variables and Limit of Total Amount Withdrawal Single Day.

Alternate Hypothesis H1: There is significance between Demographic Variables and Limit of Total Amount Withdrawal Single Day.

3.3 Sample and Tools for Data Analysis

The researcher finalized 300 samples for the study from urban & rural areas of three major cities of Madhya Pradesh as

INDORE: 100 Internet Banking Service Users.

UJJAIN: 100 Internet Banking Service Users.

DEWAS: 100 Internet Banking Service Users.

The researcher have taken the net banking users from following select banks and tried to distribute questionnaire to 50 Internet Banking Service Users from six select banks namely ICICI bank, IDBI bank, SBI bank, HDFC bank, Punjab National bank and State bank of Indore.

The questionnaire contains some personal questions to reach to some contextual sense of the answers collected such as Name, Area, Gender, Age, Profession, Income, etc. The questions in the questionnaire tried to study various Net banking services and an assessment of Customer satisfaction with special reference to ATM services.

A 5-point Likert-Scale (1= strongly agree and 5= strongly disagree) was used. Their agreement and disagreement with a series of statements that characterize the satisfaction level of customers on ATM services in the prescribed study of universe.

The data collected has been analysed and tables are formulated on Microsoft Excel and all the analysis of the collected data has been done with the help of SPSS 17th Version.

Chi-Square Test

Researcher tested the significance of variables with services by applying Chi-Square test. Chi-Square(X^2) is one of the popular method for testing hypothesis, in which the sampling distribution of the test statistic is a chi-squared distribution when the null hypothesis is true, or any in which this is *asymptotically* true, meaning that the sampling distribution (if the null hypothesis is true) can be made to approximate a chi-squared distribution as closely as desired by making the sample size large enough.

Demographic Profile of the Respondents

Demographic Variables	Categories	Total Count
Gender	Male	207
	Female	93
Age	Below 20 Years	13
	20-30 Years	146
	30-40 Years	82
	Above 40 Years	59
Area	Rural	29
	Urban	271
Profession	Salaried	172
	Employed	64
	Self-Employed	19
	Unemployed	45
Monthly Income (Rs.)	50,000-100,000	78
	100,000-150,000	45
	150,00-200,000	69
	Above 200,000	108

4. Data Analysis and Interpretation

Data analysis is a process where researchers analyze the data using statistic methods and relevant software to run tests. Descriptive analysis has been adapted in this study. It is descriptive because descriptive data has been collected through detailed interviews and it is also explanatory since the researcher explained the relationship between the demographic variables and customer satisfaction and how these dimensions affect customer satisfaction. It is somewhat exploratory in nature since researcher explored the relationship between demographic variables and satisfaction based on the previous theory to develop a better understanding about the research area.

TABLE 1

Hypothesis 1: Satisfaction towards Availability of Proper Assistance at ATMs

Demographic Variables	Level of Significance	No. of Rows	No. of Columns	Degrees of Freedom	p-Value	Calculated value	Result
Gender	0.05	2	5	4	0.011	13.093	Reject H_0
Age	0.05	4	5	12	0.001	34.718	Reject H_0
Area	0.05	2	5	4	0.045	9.755	Reject H_0
Profession	0.05	4	5	12	0.024	23.466	Reject H_0
Income	0.05	4	5	12	0.005	28.479	Reject H_0

Table 1 reveals that at 5 % level, the p-Value of Chi-Square (X^2) is less than .05 for all demographic variables such as Gender, Age, Area, Profession and Income. While studying the above tables, it is clear that Mostly the Males who fall in the age group of 20-30 years situated in Urban area and those who are employed and comes in the Income group of 150,000-200,000 are agree towards the availability of proper assistance at ATMs. Hence, the researcher rejects the Null Hypothesis H_0 i.e." There is no significance between Demographic Variables and Availability of Proper Assistance at ATMs" and accept H_1 i.e. "There is significance between Demographic Variables and Availability of Proper Assistance at ATMs".

TABLE 2

Hypothesis 2: Satisfaction towards Easy Accessibility of ATM Locations

Demographic Variables	Level of Significance	No. of Rows	No. of Columns	Degrees of Freedom	p-Value	Calculated value	Result
Gender	0.05	2	5	4	0.031	4.653	Reject H_0
Age	0.05	4	5	12	0.013	25.396	Reject H_0
Area	0.05	2	5	4	0.043	9.846	Reject H_0
Profession	0.05	4	5	12	0.019	24.176	Reject H_0
Income	0.05	4	5	12	0.005	28.479	Reject H_0

Table 2 states that at 5 % level, the p-Value of Chi-Square (X^2) is less than .05 for all demographic variables such as Gender, Age, Area, Profession and Income. While Studying the above table, it clearly states that the percentage of Urban people for using the ATMs is more and they find the ATM at very close locations in their places so, the location of ATMs in urban areas is comparatively close than the rural areas. Also the Males who fall in the age group of Above 40 years and which are salaried and fall in the income group of Above 200,000 are agree towards the above said fact. Hence, the researcher rejects the Null Hypothesis H_0 i.e." There is no significance between Demographic Variables and The Easy Accessibility of ATM Locations" and accept H_1 i.e. "There is significance between Area and The Easy Accessibility of ATM Locations".

TABLE 3

Hypothesis 3: Satisfaction Towards Always Use ATM for Balance Check

Demographic Variables	Level of Significance	No. of Rows	No. of Columns	Degrees of Freedom	p-Value	Calculated value	Result
Gender	0.05	2	5	4	0.001	17.992	Reject H_0
Age	0.05	4	5	12	0.000	14.389	Reject H_0
Area	0.05	2	5	4	0.027	8.438	Reject H_0
Profession	0.05	4	5	12	0.001	34.506	Reject H_0
Income	0.05	4	5	12	0.025	23.381	Reject H_0

Table 3 clearly shows that at 5 % level, the p-Value of Chi-Square (X^2) is less than .05 for all demographic variables such as Gender, Age, Area, Profession and Income. The above table shows that the percentage of Salaried persons for using the ATMs is more, their usage of ATMs' towards Balance check is also comparatively more than other professional groups. While Studying the above table, the people belong to Rural areas use the ATMs more for the balance check also people who fall in the Age group of Below 20 years and unemployed use this service more frequently than others. Gender does not have much impact towards the fact. Hence, the researcher rejects the Null Hypothesis H_0 i.e." There is no significance between Demographic Variables and Always Use ATM for Balance Check" and accept H_1 i.e. "There is significance between Demographic Variables and Always Use ATM for Balance Check".

TABLE 4

Hypothesis 4: Satisfaction towards Limit of Total Amount Withdrawal Single Time

Demographic Variables	Level of Significance	No. of Rows	No. of Columns	Degrees of Freedom	p-Value	Calculated value	Result
Gender	0.05	2	5	4	0.001	18.163	Reject H_0
Age	0.05	4	5	12	0.000	34.907	Reject H_0
Area	0.05	2	5	4	.015	17.537	Reject H_0
Profession	0.05	4	5	12	.000	41.230	Reject H_0
Income	0.05	4	5	12	.019	24.289	Reject H_0

Table 4 shows that at 5 % level, the p-Value of Chi-Square (X^2) is less than .05 for all demographic variables such as Gender, Age, Area, Profession and Income. The above clearly states that the percentage of Self-Employed respondents from the Income group above 200,000 for using the ATMs is more, they are also satisfied with the limit of total amount withdrawal in single time from ATMs' than other income groups. The particular service does not get much influence with the Area but the respondents of Age group 30-40 years and mostly Males use this service more as compared to others. Hence, the researcher rejects the Null Hypothesis

H_0 i.e." There is no significance between Demographic Variables and Limit of Total Amount Withdrawal Single Time" and accept H_1 i.e. "There is significance between Demographic Variables and Limit of Total Amount Withdrawal Single Time".

TABLE 5

Hypothesis 5 : Satisfaction towards Limit of Total Amount Withdrawal Single Day

Demographic Variables	Level of Significance	No. of Rows	No. of Columns	Degrees of Freedom	p-Value	Calculated value	Result
Gender	0.05	2	5	4	.011	18.163	Reject H_0
Age	0.05	4	5	12	.012	25.572	Reject H_0
Area	0.05	2	5	4	.045	9.755	Reject H_0
Profession	0.05	4	5	12	.024	23.466	Reject H_0
Income	0.05	4	5	12	.007	27.239	Reject H_0

Table 5 shows that at 5 % level, the p-Value of Chi-Square (X^2) is less than .05 for all demographic variables such as Gender, Age, Area, Profession and Income. The above clearly states that the percentage of respondents from the Income group above 200,000 for using the ATMs is more, they are also satisfied with the limit of total amount withdrawal in single day from ATMs' than other income groups. Age and profession does not affect this service much but it is also gender biased as more Males who belong to urban areas use it much. Hence, the researcher rejects the Null Hypothesis H_0 i.e." There is no significance between Demographic Variables and Limit of Total Amount Withdrawal Single Day" and accept H_1 i.e. "There is significance between Demographic Variables and Limit of Total Amount Withdrawal Single Day".

5. Testing of Hypotheses

ANOVA- In statistics, **One-Way Analysis of Variance** (abbreviated **one-way ANOVA**) is a technique used to compare means of two or more samples (using the F distribution). This technique can be used only for numerical data. The ANOVA tests the null hypothesis that samples in two or more groups are drawn from populations with the same mean values.

DEMOGRAPHIC VARIABLES	Descriptive								
	Total Count	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
GENDER	Male	207	41.005	2.89375	0.201	40.608	41.401	33	45
	Female	93	26.387	5.7767	0.599	25.197	27.577	13	42
	Total	300	36.473	7.86738	0.454	35.58	37.367	13	45
AREA	Rural	29	40.000	4.38341	0.814	38.333	41.667	31	45
	Urban	271	37.827	5.142	0.312	37.212	38.442	26	45
	Total	300	38.037	5.10773	0.295	37.456	38.617	26	45

AGE	Below 20 Years	13	41.462	2.66506	0.739	39.851	43.072	38	45
	20-30 Years	146	38.452	5.3538	0.443	37.576	39.328	26	45
	30-40 Years	82	38.012	5.02707	0.555	36.908	39.117	28	45
	Above 40 Years	59	36.288	4.46075	0.581	35.126	37.451	29	45
	Total	300	38.037	5.10773	0.295	37.456	38.617	26	45
PROFESSION	Salaried	172	38.576	4.7769	0.364	37.857	39.295	28	45
	Employed	64	36.125	5.32291	0.665	34.795	37.455	28	45
	Self-Employed	19	37.684	4.33401	0.994	35.595	39.773	30	44
	Unemployed	45	38.844	5.76019	0.859	37.114	40.575	26	45
	Total	300	38.037	5.10773	0.295	37.456	38.617	26	45
INCOME	50,000-100,000	78	36.205	5.01778	0.568	35.074	37.337	25	45
	100,000-150,000	45	40.756	2.94769	0.439	39.87	41.641	35	45
	150,000-200,000	69	40.928	3.71531	0.447	40.035	41.82	30	45
	Above 200,000	108	24.065	10.4866	1.009	22.065	26.065	10	44
	Total	300	33.603	10.2451	0.592	32.439	34.767	10	45

ANOVA

VARIABLES		Sum of Squares	df	Mean Square	F	Sig.
GENDER	Between Groups	13711.73	1	13712	852.15	0
	Within Groups	4795.06	298	16.091		
AREA	Between Groups	123.748	1	123.748	4.804	0.029
	Within Groups	7676.849	298	25.761		
AGE	Between Groups	358.112	3	119.371	4.748	0.003
	Within Groups	7442.485	296	25.144		
PROFESSION	Between Groups	315.563	3	105.188	4.16	0.007
	Within Groups	7485.034	296	25.287		
INCOME	Between Groups	16357.6	3	5452.53	107.409	0
	Within Groups	15026.2	296	50.764		

The hypothesis test for analysis of variance for 300 populations:

$H_0 : \mu_1 = \mu_2 = ... = \mu 300$

H_a: not all μ_i (i = 1, ... 300) are equal

A one-way ANOVA between Demographic Variables and ATM Services was conducted to examine the effect of Gender, Age, Area, Profession and Income on the usage of Internet Banking Services with reference to ATM.

The test statistic is seen to be = 852.15 for Gender, 4.804 for Area, 4.748 for Age, 4.16 for Profession and 107.409 for Income with the p-value < .05 for all the variables.

The above table shows the Sig. Value for all the demographic variables viz. Gender is 0.000, for Area .029, for Age .003, for Profession .007 and for Income 0.000 which states that since the value is less than the .05, thus researcher can conclude with the significance of Demographic Variables with various ATM services.

Hence, the researcher rejects the Null Hypothesis H_0 i.e." There is no significance between Demographic Variables and Various ATM services" and accept H_1 i.e. "There is significance between Demographic Variables and Various ATM services".

6. Conclusion

A result of data analysis and hypothesis tests indicates that all dimensions are same in select banks. Overall results show that ATM services are core service and it significantly affecting on overall customer satisfaction. The rapid diffusion of Information and communication Technology banking sector provides a platform to use innovative technologies to enhance operational efficiency and quality of service to attain and retain customers. The rapid growth in use of ATMs offers opportunities to banks to use customers' passion for this innovative service for strategic advantage. The banks should proactively monitor customers' preferences with regard to use of this delivery channel for effective response. Bank should focus on important aspects of security and privacy as well as efficient operation of ATMs. Banks should also augment and diversify their offerings through ATM and use this medium to build a strong and sustained relationship with customers. Therefore, banks should concentrate their efforts on these dimensions for cater better ATM service to satisfy their customers.

References

1. Anderson et al. (1994). Customer satisfaction, market share and profitability: finding from Sweden. *Journal of Marketing*, 58, 53-66.
2. Awad, E.M. (2000). The structure of E-Commerce in the Banking Industry: An empirical Investigation. SIGCPR. Evanston Illinois, USA.
3. Bahia, Kamilia and Jacques, Nantel (2000). A Reliable and Valid Measurement Scale for the Perceived Service Quality of Banks. *The International Journal of Bank Marketing,* 18 (2), 84-91.
4. Bauer, H., Hammerschmidt, M & Falk, T. (2005). Measuring the quality of E-banking portals. *International Journal of Bank Marketing*, 23(2), 153-175.
5. Carman, J.M. (1990). Consumer perceptions of service quality: an assessment of the SERVQUAL dimensions. *Journal of Retailing*, 66, 33-55.
6. Centeno, C. (2003). Adoption of Internet Services in the Enlarged European Union: Lessons from the Internet Banking case. European Commission Joint Research Centre, Report EUR 20822 EN, June.
7. Chang, Y.T. (2004). Dynamics of Banking Technology Adoption: An Application to Internet Banking Retrieved from http://www.uea.ac.uk/~j106/IB.pdf
8. Colgate, M., Stewart, K. and Kinsella, R. Customer Defection: A Study of the Student Market in Ireland. *The International Journal of Bank Marketing*, 14(3), 23-29.
9. Cooper, D.R. and Schindler, P.S. (2003). Business Research Methods. 8th ed. McGraw-Hill Companies, Inc.
10. Creswell, J.W. (2003). Research design: Qualitative, Quantitative and Mixed Approach. 2nd ed., Sage Publication, Inc.
11. Dash, Manoj Kumar and Mahaptra, D.M. (2006). Measuring Customer Satisfaction in the Banking Industry. Retrieved from www.indianmba.com/Faculty_Column/FC328/fc328.html- Cached - Similar
12. Dilijonas, D.et al (2009). Sustainability Based Service Quality Approach for Automated Teller Machine Network. Retrieved from http://www.vgtu.lt/leidiniai/leidykla/KORSD_2009/PDF/241-246-p100-Dilijonas-47.pdf.
13. Fredriksson, O. (2003). Internet-based self-services: Relational Aspects of E-Banking- a private client survey analysis. IMIT working paper series, 136.
14. Ferguson, George A. (1959). Statistical Analysis in Psychology and Education. 4th ed. New York: McGraw- Hill Book Co., Inc.

15. Festinger, Leon and Katz, Daniel, eds. (1976). Research Methods in the Behavioral Sciences. 4th Indian Reprint New Delhi: Amerind Publishing Co. Pvt. Ltd.
16. Gan, Christopher et al (2006). A Survey of Customer Retention in the New Zealand Banking Industry. *Banks and Bank Systems,* 1(4), 83-93.
17. Gauch, Jr., H.G. (2003). Scientific method in practice. Cambridge, UK: Cambridge University Press, 3.ISBN 0-521-81689-0
18. Gunasekaran,A. & Love, P. (1999). Current and future directions of multimedia technology in business. International Journal of Information Management, 19 (2), 105-120.
19. Hamadi, Chakib (2010). The Impact of Quality of Online Banking on Customer Commitment. *Communications of the IBIMA* Retrieved from www.highperformancesurveys.com/surveys/.../ survey.html- Cached - Similar
20. Hossain, Mohammed and Leo, Shirley (2009). Customer perception on Service quality in retail banking in Middle East: the case of Qatar. *International Journal of Islamic and Middle Eastern Finance and Management*, 2(4) , 338-350 : Emerald Group Publishing Limited Retrieved from www.emeraldinsight.com/1753-8394.htm
21. Khaled, Al-hashash and Bahzadi, Abdulrasoul Hussain (2008). Bank's Customer Satisfaction in Kuwait: An Exploratory Study. Open University Malaysia, Project paper (for MBA).
22. Khan, Muhammad Asif (2010). An Empirical Study of Automated Teller Machine Service Quality and Customer Satisfaction in Pakistani Banks. European Journal of Social Sciences, 13, (3), 333-345.
23. Lai, Jung-Yu, and Lin, Ching-Tsung. (2008). What Factors drive Corporate Customer Satisfaction With E-Banking Services?. PACIS, AISeL, 84. \
24. Mobarek, Asma (2009). E-Banking Practices and Customer Satisfaction: A Case Study in Botswana. International Journal of Islamic and Middle Eastern Finance and Management, 2 (4), 338-350: Emerald Group Publishing Limited.
25. Nittala, Rajyalakshmi and Kameswari, Vijaya (2011). Service Quality and Customer Satisfaction in State Bank of India. Eighth AIMS International Conference on Management January 1-4, 2011, 8-17.
26. Parasuraman, A., Zeithamal, V.A., and Berry, L.L., (1988). SERVQUAL: A Multiple- Item Scale for Measuring Consumer Perceptions of Service quality. *Journal of retailing*, 64 (1), spring.
27. Parasuraman, A., Zeithaml, V.A., and Berry, L.L, (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49, fall.
28. Peterson, R. A., BalaSubramanian, S. & Bronnenberg, B.J.(1997). Exploring the implications of the Internet for Consumer marketing. Journal of the Academy of Marketing Science, 25(4), 329-346.
29. Reichheld, F.F. and W.E. Sasser (1990). Zero Defections: Quality comes to Services. *Harvard Business Review*, 105-111.
30. Rust, R. and Zahorik, A.(1993). Customer Satisfaction, Customer Retention and Market Share. *Journal of Retailing*, 69(2), 193-215.
31. Stafford, Maria Royne (1996). Demographic Discriminators of Service Quality in the Banking Industry. *The Journal of Services Marketing*, 10 (4), 6-22.
32. Sultan Singh and Ms. Komal (2009). Impact of ATM on Customer Satisfaction (A Comparative Study of SBI, ICICI & HDFC bank). Business Intelligence Journal, 2 (2), 276-287.

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Engaging Patients through New Media, Creating Good Patient –Doctor Relationship Management

Is healthcare ready for make powerful and digitally demanding patients?

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Abstract

*Recent years have witnessed the rise of new media such as **Social Networks** ,**Bookmarking Sites**, **Social News** , **Media Sharing** , **Micro blogging** , **Blog Comments and Forums** , which enable doctors and patients to take a more active role in terms of take the knowledge about different disease and the treatment for the same almost everyone anywhere and anytime.. This paper introduces a new ''pinball'' framework of new media's impact on relationships with patients and identifies key new media phenomena which Pharma companies should take into account when managing their relationships with customers in the new media universe, The use of new media to successfully manage engagement of doctor patient relationship.*

Keywords

New media, Doctor Patient Relationships, Pharma, HCPs (Healthcare Professionals) Healthcare Sector,

Introduction

Social Networks ,**Bookmarking Sites**, **Social News** , **Media Sharing** , **Micro blogging** , **Blog Comments and Forums** .India has 125 million Internet users, on an average, Indian web users spend 26 minutes online each day, 87.1 million users experience Internet on their smart phones and this number is expected to grow to 165 million by 2015, Top social media networking sites are Facebook, Linkedin, Twitter, Orkut, BharatStudent.com, Zedge.net, Ibibo.com, hi5.com, Shtyle.fm, Indyarocks, Fropper.com and Myspace.com. Facebook has 82 million, twitter has 15 million and Linkedin has 45 million users in India, India is predicted to be the top Facebook user by 2015 Face book is not the only social media site being used by user. Linkedin now has over 100 million users worldwide. YouTube has exceeded 2 billion views per day, and more videos are posted on YouTube in 60 days than were created by the three major television networks in the last 60 years. Twitter now has over 190 million users, and 600 million–plus searches are done every day on Twitter. The need for customer relationship management arose when organizations realized that it was cheaper to retain existing customers than acquire new ones.CRM has its roots in relationship marketing; organizations use a combination of marketing, communication and service approaches to identify individual customers and create relationships between the customers and the company. In healthcare, where patients may be seen as hospitals' key customers,the term patient relationship management (PRM) is used With PRM, healthcare organizations' focus is set on determining and meeting patients' needs.Today the consumers /Patients / doctors communicate of the same disease with each other have been Changing dramatically, how consumers Patients and doctors gather and exchange information about different Diseases and their treatment and products and how they obtain and consume them.

The transformation of information gathering and the coming out of the engaged patient has verified the increased importance of social media in the broader healthcare context. A patient's need to getting information relating to healthcare / related disease /why such disease occur what it is reason behind that can be observed throughout the treatment pathway hence, ensuring that patients have access to reliable, up-to-date, and understandable information remains a significant challenge. Due to patient trust in clinicians and the broad reach of social media, healthcare professionals (HCPs) are in a prime position to drive better healthcare outcomes through social media.

For the healthcare industry, it is becoming increasingly important to be able to react quickly and decisively to events on social media. Additionally, companies are increasingly utilizing social media as a tool to build relationships with patients and the general

public. Mid-sized,specialized and consumer care companies are leading the change from uni-directional broadcasting of information to an engaging and relationship-orientated online conversation.

What is New Media?

New media are websites and other digital communication and information channels in which active consumers engage in behaviors that can be consumed by others both in real time and long afterwards regardless of their spatial location. We now discuss the defining characteristics of new media.

Digital

The digital character of new media implies that there are virtually no marginal costs for producing extra copies of digital products and that individuals can easily distribute their creations to a global audience without having to pass through traditional ‘‘gate keepers’’ such as publishers. Anybody with an internet connection can blog, write reviews, report on news events both big and small, or share a song, video or even novel with the world.

Pro-active

Consumers use new media to contribute to all parts of the value chain, ranging from superficial articulation (reviews on retail or fan sites) to extensive co-creation (testing new ‘‘beta version’’ products and reporting flaws to the company, or even collectively developing open-source products such as the Firefox browser; Hoyer et al. 2010; Krishnamurthy 2009).

Visible

Consumers’ new media activities can be seen by others. Entries made by a consumer in forums, blogs, and social communities can be tracked by other consumers as well as companies. Mobile services use information on consumers’ spatial position as reported by GPS, 3G, and IP addresses for generating location-sensitive messages, offers, and market differentiation (e.g., different offers and prices for film downloads).

Real-time and memory

New media can be accessed by consumers at the time they are produced, allowing consumers to share experiences in real time with Twitter, chats, and blogs. Such comments and reviews are often also available indefinitely, so that potential customers may be reading about negative (and positive) customer experiences for years into the future (e.g., the 2001Houston Doubletree incident; Snopes 2006). Memory is also crucial for personalizing future interactions.

Everywhere

New media allow consumers to reach (and be reached by) other consumers and companies almost anywhere at any time through their mobile devices. They can read reviews of a product when shopping in a retail store, and can post reviews of a new movie when the credits are still rolling in the movie theater on opening night.

Networks

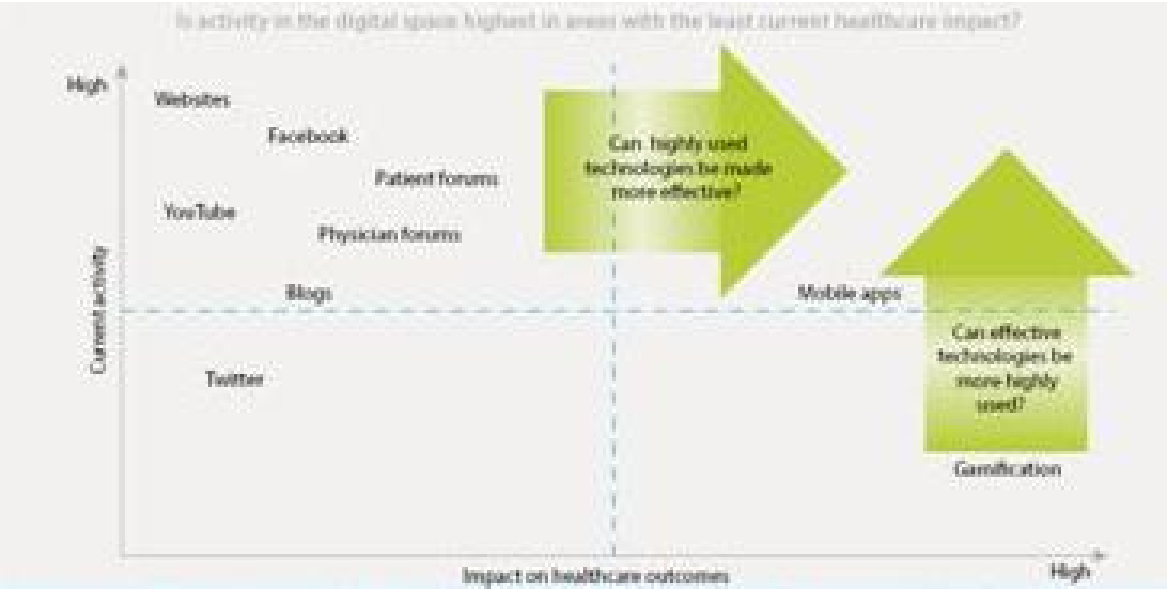
Consumers use new media to participate in social networks,which enable them to create and share content, communicate with one another, and build relationships with other consumers(Gordon 2010; Libai et al. 2010). While Facebook and Myspace are most prominent, communities are allotropic and include massively multiplay online games (MMOGs) such as World of Warcraft and sites for exchanging everything from knitting techniques (e.g., ravelry.com) to statistical advice (e.g., s-news).

New Media Information and Services

New multimedia services. Consumers today dedicate substantial time producing and consuming new multimedia content, which includes video sharing platforms such as YouTube, music streaming services such as Pandora, online video games and MMOGs, and ‘‘virtual worlds’’ such as Second Life. A lot of what is going on in these services has to do with brands and companies; consumers upload advertisements and their own so-called spoofs and mash-ups (see the Dove example above – a particularly successful video was titled ‘‘Slob Evolution’’

New digital healthcare

The usage and presence of social media channels is rising, though still lags among the population segment that utilizes healthcare services the most: Patients over 65 years of age, and those with multiple chronic conditions. Digital activities are currently highest in areas with the least healthcare impact. Social media channels are diverse, provide different user experiences, and are subject to rapid shifts in use. The role of social networks in healthcare is critical throughout a patient’s journey, and demand by patients for support is high, with social media expanding on the habit of discussing healthcare with family and friends.



Source (IMS Institute for health care Informatics)

The Importance of Age And Trust In Healthcare

Healthcare has historically been dominated by trust in the competence and independence of information obtained by the patient from various sources, primarily HCPs. The internet is increasingly becoming the first source for general and specific health information. Wikipedia is a prominent source of online health information compared to the other online health information providers Healthcare is generally utilized the most by patients over the age of 65 where chronic diseases (Like Heart Patient, Diabetics, BP etc).are more common and are often accompanied by other conditions. However, social media is still generally utilized more by younger age buddies, in contrast to web-based information sources and more familiar communication tools such as email. Now in India youth is using use social media as compare to 65+ Age is one of the few differentiating factors for the usage of social networking sites, where usage is less dependent on gender, education, income or other forms of social advantage.

The difference of utilization by age groups will diminish over the next years and decades as digital natives increase their involvement and influence professionally and privately within their networks.

The healthcare information that patients look for on social media and the internet varies. The most searched for terms relate to specific diseases, usually affecting the person in question or a relative.

Regulators and Social Media in the Healthcare Sector

Regulators are increasingly involved in social media both reactively and prospectively, creating guidance on the way in which pharmaceutical and healthcare companies can legally interact with patients and clinicians via social channels. Currently, the key challenge is a lack of obvious guidance from the leading regulatory agencies, the Food and Drug Administration (FDA) the internet challenges geographical and linguistic borders, bringing patients closer together and allowing information to be shared across differently regulated regions. This clearly poses questions and problems for regulators and companies alike.

Pharmaceutical Companies: Slow To Compress Social Media

Pharmaceutical companies have higher hurdles to use social media in part because of regulatory requirements and constraints outside of the U.S. to reach patients directly. Early movers are testing the waters with an educated trial and error approach. Establishing the means to respond to online interactions and manage the large volume of social media data are essential first steps. Assessment of social media ROI is best done in context of the overall marketing and communication strategy in 2012. Even with the recent large increases in spending on digital marketing by pharmaceutical companies, this industry is probably best described as a laggard in terms of its

speed in adoption of digital technologies. Almost two-thirds of respondents in the DHC/Google Executive Landscape 2013 survey agreed that the pharma/ device industry is very far behind other industries with respect to the use of social media. This reluctance or slowness to adopt digital media can in part be explained by the heavily regulated environment and partly by insecurity with new technologies and direct-to-patient interaction, aside from historic incidents, such as warning letters from regulators, there are other good reasons why companies are reluctant to leap into this area, and these broadly speaking can be split into legal, technical and internal issues. Key issues within these brackets include regulatory compliance, loss of content control, privacy concerns, lack of familiarity with social media and proving ROI for social media.

Technical considerations

Companies have to navigate a number of technical challenges to enact an effective social media strategy, including the use of the resulting "big data" generated from social interactions, integrating social media fully into the communications and marketing system, the manual demands of replying to online interactions, and whether or not to outsource the management of an online presence.

Healthcare Professionals and the Use Of Social Media

Patient trust in clinicians and the broad reach of social media puts healthcare professionals in a prime position to drive healthcare related topics on the web. HCPs are not as strictly regulated for online social engagement and have the trust of patients to deliver independent and reliable information. But much like the pharmaceutical industry, healthcare professionals are usually perceived as laggard adopters of new technologies. Increased budgetary, administrative and demographic pressures limit the amount of time that physicians have to spend with patients. Social media is a good opportunity for clinicians to provide some of the "pastoral support" associated with the profession, and answer questions for a large number of people online. It is important to differentiate between what is possible for individual doctors - for whom time will remain a limiting factor - to contribute versus a hospital or network of HCPs (Health Care Professionals). Not all clinicians will like the idea of working with new technologies and engaging with patients through social media is not for everyone. However, there are significant benefits for the HCPs (Health Care Professionals). that do, such as a greater understanding of day-to-day patient issues and unmet needs, and better outcomes for patients. While the majority of physicians recognize the important role that the internet has played in empowering patients to make informed decisions, they also warn that a little knowledge can be a mixed blessing when dealing with worried patients. Hospitals and provider organizations are an important online stakeholder, with a more structured, better resourced and commercial approach to social media. For example, the Mayo Clinic Center for Social Media is a leading contributor and advocate of social media in healthcare with a presence on YouTube, Facebook, Twitter and various blogs. In investing in these channels the group is benefiting patients while growing its brand and better understanding the needs of its clients. Patients want to communicate and be taken seriously when they approach individual providers or organizations. One of the key areas of patient dissatisfaction is a lack of any sort of acknowledgement when they share an experience or their needs with a healthcare organization or professional. A well-established social media presence not only provides a forum for patient engagement, but also allows for crowd-sourcing ideas and feedback to stimulate debate around new approaches or changes within the organization.

Conclusion

Increase in availability of information, changes in the way people communicate and a general increase in personal responsibility for healthcare, new technologies are changing how healthcare is operating on a global level. In order to realize its full potential, all stakeholders need to come together to reflect the structure of social media and be willing to contribute, in order for the new system to achieve its potential. With movement in the right direction being observed already (e.g. FDA and EMA) increasing their utilization of social media who will be a major contributor to the overall healthcare discussion in the future still remains to be seen, but currently more information consortia of dedicated creators are taking increasing responsibility and hence influence. With patients needing and accessing information throughout

their patient journey, the relevance and quality of information needs to be ensured. Quality of information is becoming a greater concern, which also serves as a driver of positive change for online information sources and calls to action from individuals who are eager to share their information and knowledge. But the newly rising groups of healthcare professionals and patients need support to realize their full potential since they often lack resources, technical capabilities or dedicated management structures required to increase.

References

1. Accenture. Life in the New Normal — The Customer Engagement Revolution. 2013.
2. Benanti JF. The physician as a customer. Health Prog. 1988;69(3): 62-65
3. Dawson J. Doctors join patients in going online for health information. New Media Age. 2010
4. Fox S, Duggan M. Health Online 2013. Health. 2013; Available from: http://pewinternet.org/Reports/2013/Health-online.aspx.
5. First Consulting Group. When I'm 64; How Boomers Will Change
6. Google. The Digital Journey to Wellness. 2012.
7. Google. DHC/Google Executive Landscape 2013 Summary Deck. [Online] Available from: http://www.slideshare.net/digitalhealthco/Dhcgoo
8. Creation Healthcare. Social Media in the Japanese PharmaceuticalIndustry. 2011.
9. Gartner. U.S. Digital Marketing Spending Survey, 2013.
10. Google. DHC/Google Executive Landscape 2013 Summary Deck. http://www.slideshare.net/digitalhealthco/
11. Healthcare. American Hospital Association. 2007.
12. http://getreferralmd.com/2013/09/doctors-social-media-uses/
13. http://www.thehindu.com/todays-paper/tp-in-school/india-made-an-average-18-user-data-requests-daily-to-facebook/article5069139.ece
14. http://www.kevinmd.com/blog/2013/02/3-reasons-patients-social-media.html
15. http://simplify360.com/blog/23-interesting-social-media-statistics-and-facts-about-india/
16. http://outthinkgroup.com/tips/the-6-types-of-social-media
17. IMS Institute for health care Informatics 2014.
18. Siau K. Healthcare informatics. Inform Tech Biomed. 2003;7(1):1-7
19. The Social Media Guys. The Complete Guide to Social Media. 2010.
20. www.theimsinstitute.org

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E-Waste Management in India: Major Challenges and Coping Mechanism

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Abstract

Introduction: *Electronic waste is relatively a new addition to the ever-growing hazardous waste stream that includes discarded electronic and electrical equipment. It is growing at a rate of 3-5% per annum – about three times faster than any other individual waste streams in the solid waste sector.*

Methodology: *The study is conducted using the framework of "Waste and Risk" (Loon, 2002). Loon has proposed two explanations with regards to waste – one, out of sight out of mind and the second, cause effect relationship. An effort has been made to identify challenges to deal with e-waste management and to come out with some probable solutions based on the analysis of available information.*

Outcome: *The analysis helped bring out certain challenges pertaining to e-waste management in India. The analysis of information using the cause and effect relationship revealed certain curative measures which have been presented as suggestions towards the end of the paper. The outcome of the research may be useful to the agencies that deal with e-waste management and to the policymakers in creating an effective legislation for e-waste management in India.*

Key Words: *E-waste, Management of E-waste, Hazardous Waste*

1 Introduction

The management of different kinds of wastes is one of the major challenges confronted by virtually all countries around the world. Electronic waste or E-waste is relatively a new addition to the ever-growing hazardous waste stream. It includes discarded electronic and electrical equipment. The manufacturing of electrical and electronic equipment is one of the emerging global activities. Although reliable data with respect to the amount of waste being generated worldwide is costly and time-consuming to obtain, it is estimated that 20 to 50 million metric tonnes of electronic waste is generated worldwide every year (UNEP, 2009). According to the studies conducted in the European Union, e-waste is growing at a rate of 3-5% per annum or approximately three times faster than any other individual waste streams in the solid waste sector (Schwarzer *et al.*, 2005).

Rapid development of information technology around the world coupled with the invention of new technology at regular intervals is causing the early obsolescence of many electronic and electrical equipments. With the increase in population, urbanisation, capacity, economic growth, and lifestyle orientations, it is anticipated that developing countries will triple their electronic waste production over the next few years. (UNEP 2010). The following table shows the estimated life span of some commonly used electronic items.

Table 1: Estimated lifespan and weight of electrical and electronic equipment (EEE)

Equipment	Life span in years	Mean Weight (kg)
Personal computer & Monitor	5-8	25
Laptop	5-8	5
Printer	5	8
Mobile Phone	4	0.1
Television	8	30
Refrigerator	10	45

Source: UNEP and UNU (2009)

Developing countries like India are facing enormous challenges related to the generation and management of E-waste, which is either internally generated or imported illegally, causing serious harm to human health and environment. The electronics industry in India has emerged as the fastest growing segment of Indian industry both in terms of production and exports. The Information Technology Revolution of the early 1990s intensified the problem of E-waste in India. The Indian Information Technology (IT) sector is one of the major contributors to the global economy. At the same time, it is responsible for the generation of the bulk of E-waste or Waste Electrical and Electronic Equipment (WEEE) in India.

Sixty-five cities in India generate more than 60% of the total E-waste generated in India. Ten states generate 70% of the total E-waste generated in India. Maharashtra ranks first followed by Tamil Nadu, Andhra Pradesh, Uttar Pradesh, West Bengal, Delhi, Karnataka, Gujarat, Madhya Pradesh and Punjab in the list of E-waste generating states in India. Among the top ten cities generating E-waste, Mumbai ranks first followed by Delhi, Bangalore, Chennai, Kolkata, Ahmedabad, Hyderabad, Pune, Surat and Nagpur (Guidelines for Environmentally Sound Management of E-waste, 2008).

However, the existing management practices related to E-waste in India are reasonably poor and could have irreversibly adverse effects on both human health and the environment. As a result, the objective of the paper is to address the issues regarding e-waste management in India. The rest of the paper is organized as follows. Section 2 describes the methodology used in the paper. Section 3 looks at the main issues related to e-waste management in India followed by some suggestions and recommendations in section 4. Section 5 provides the final conclusion.

2. Methodology

The objective of this paper is to identify the challenges pertaining to the management of e-waste in India. Hence, various sources of information were scanned and the data and information so available were analysed. This is an exploratory research study purely based on secondary sources of information.

The study uses the framework of "Waste and Risk" as proposed in the book "Risk and Technological Culture: Towards a sociology of virulence" by Loon (2002). This methodology was previously used by Borthakur and Singh (2012). Loon has proposed two explanations with regards to waste and how the implied ecological risks are inherent to all kinds of wastes. These explanations are called "out of sight out of mind" and "cause effect relationship."

2.1 Once e-waste is out of sight, it's of our minds

The principle of "out of sight, out of mind" has been used to keep the negative side-effects of industrialization under wraps or out of sight for a long period of time (Loon, 2002). During the process of industrialization, toxic materials were allowed to be dumped in the soil, in the air and in the water. Once these toxic materials became out of sight they were also out of mind, which means they were forgotten about. Only after a long time, the horrifying consequences of these toxins were manifested in terms of epidemiological anomalies of chronic illnesses, cancers and other illnesses. Unlike the spectacular examples of accidents and catastrophes, these horrific manifestations largely escaped the news media (Loon, 2002).

This principle is apt for explaining the challenges related to e-waste in India. Most of the people in India are not aware about the proper methods of disposing e-waste. They don't discard the electronic and electrical equipments by giving them back to the producer of those equipments. Instead this e-waste lies unattended in Indian households and offices. Most of the times e-waste is sold to scrap vendors in exchange for money. Some e-waste is simply discarded with the regular municipal waste. Once this e-waste is out of the consumers' sight, it is also out of their minds. Consumers fail to think about the long term hazardous consequences of improperly discarded e-waste.

2.2 The causes of e-waste are many but the effects take a long time to unravel

The rapid economic growth, urbanization, increased consumerism and industrialization are the main reasons behind the rapid generation of e-waste and the rapid obsolescence of technology. It can be said that these factors are the causes of rapid e-waste generation. The effects of this e-waste generation are

rapid degeneration of environment and human health. These effects of improper disposal of e-waste are manifested after a considerable period of time. This makes wastes such as the e-waste even more challenging to tackle.

3. Challenges of e-waste management in India

The following three factors succinctly describe the challenges associated with e-waste management in India.

3.1 Illegal dumping of e-waste in India

Due to the strict norms for the disposal of hazardous waste in developed countries, the cost of hazardous waste disposal has gone up (Mudur, 2004). As a result, such nations are compelled to search for more economically viable ways of disposing e-waste abroad. One of the main reasons for such illegal exports of e-waste in India is cheap labour and lack of strict environmental laws. Therefore the incentive to indulge in illegal trafficking of e-waste continues to grow. The option of exporting e-waste to developing countries is more lucrative for the exporter country than disposing it within the country. India is one of the biggest destinations for developed nations like the US and Europe to dump their e-waste, many times in the name of charity. This is a major concern for India as toxic wastes of developed nations illegally flood towards India.

3.2 The presence of a large unorganized sector

The recycling of the majority of waste in India is done through the unorganized sector. It was found that 95% of the actual e-waste recycling is done in the informal sector using primitive and highly polluting backyard operations with low or non-existent risk awareness polluting ambient air, water and soil and affecting the health of workers (GTZ-MAIT Assessment Study 2007). The informal sector focuses on cherry picking of the precious components for metal recovery and the non-recoverable parts are disposed off in landfills. The unorganized sector mainly consists of the urban slums of the metros and mini-metros. The recycling operations are carried out by the unskilled employees by using the most unsophisticated and obsolete methods to reduce cost. The unorganised sector mainly includes an assortment of small and informal businesses not governed by any stringent health and environmental regulations. Workers face dangerous working conditions as they work without protection like gloves or masks. Released gases, acid solutions, toxic smoke and contaminated ashes released from the e-waste pose some of the most dangerous threats to the workers and for the local environment. The presence of a large unorganised sector which has not yet found a legal status poses one of the major challenges in managing e-waste properly.

3.3 Loopholes in e-waste legislation

The E-waste (Management and Handling) Rules, 2011 came into effect from May 1, 2012. According to the rule draft, 'electrical and electronic equipment' means equipment which is dependent on electric currents or electro-magnetic fields to be fully functional and 'e-waste' means waste electrical and electronic equipment, whole or in part or rejected from their manufacturing and repair process, which are intended to be discarded. These rules will be applied to every producer, consumer or bulk consumer involved in manufacturing, sale purchase and processing of electrical and electronic equipment, collection centres, dismantlers and recyclers of e-waste. Responsibilities of producers, collection centres, consumers, dismantlers, recyclers etc. are defined and incorporated in these rules.

However, there are some major loopholes associated with the implementation of this law. Lack of seriousness by the stake holders, the market for second hand goods, too much responsibility on the producers, no provision regarding the huge unorganized sector, no provision regarding illegal export of e-waste to India are just some of the loopholes of this legislation which make its implementation ineffective. (Sidhpuria and Bhatt, 2013) This is a major challenge in managing e-waste properly.

4. Proposed Solutions

So far we have seen the major challenges of managing e-waste in India. In this section, we propose the following solutions which can be used to alleviate the problems of e-waste management in India.

- There is an urgent need to integrate the activities of the informal sector with those of the formal recycling units to achieve socially acceptable, economically feasible and environmentally responsible solutions for e-waste management in India. The damage caused by informal e-waste recycling activities in India is immense. Informal e-waste recycling dominates the

industry, accounting for 90 to 95 per cent of all recycling. Future increases in metal prices are unlikely to erode the advantages that have ensured the informal sector's dominance, and the problems related to informal recycling will only increase as domestic production of WEEE grows. As a result, including the informal sector is key to achieving a successful transformation of the current e-waste handling and recycling processes. Unfortunately, the draft rules do not address this problem adequately. The formalisation of collectors and dismantlers may be effective, but as long as informal recyclers are able to pay more for e-waste, an incentive exists for market participants to shirk compliance and illegally sell toxic material to informal recyclers. The regulation's effectiveness at reducing the role of informal recyclers will thus depend on the ability of the respective bodies to present a credible threat of enforcement.

- The loopholes in e-waste legislation, as discussed in the previous section, need to be rectified. In order for developing countries to move forward on EPR regulations, (Akenji *et al.*, 2011) have proposed that developing countries should move gradually towards EPR in phases. Many western countries such as the US and the EU export their obsolete electronic and electrical equipment to developing countries like India in the name of charity. The new rule draft does not address this issue properly. As mentioned earlier, the e-waste exported to India is more than what India generates domestically. Unless, this issue is properly addressed, India will continue to be plagued by this illegally dumped e-waste.
- The lack of public awareness about the proper methods of getting rid of e-waste and the harms of improperly deposed e-waste are escalating the menace of e-waste in India. The government of India should conduct public awareness programmes to inform people about this issue. Various other stakeholders such as NGOs and Educational institutions can also significantly contribute in raising public awareness about e-waste.
- It is our tendency to consider only the harmful effects of e-waste. It is easy to overlook the opportunities presented by e-waste, especially at a time when resources are depleting globally. The table below shows certain valuable metals used in the WEEE manufacture.

Table 2: Metals used for electric and electronic equipment (EEE) manufacture

Metal	Annual Production Tonnes (2006)	Demand for EEE Tonnes/y	Demand/Production %
Silver	20,000	6,000	30
Gold	2.500	300	12
Palladium	230	33	14
Platinum	210	13	6
Ruthenium	32	27	84
Copper	15,000,000	4,500,000	30
Tin	275,000	90,000	33
Antimony	130,000	65,000	50
Cobalt	58,000	11,000	19
Bismuth	5,600	900	16
Selenium	1,400	240	17
Indium	480	380	79

Source: UNEP and UNU (2009).

Thus entrepreneurial activities should be encouraged and new and effective methods of extracting these precious metals should be developed.

5. Conclusion

It has been observed that e-waste management in India is very poor which is largely attributed to the prevailing legislation that deals with e-waste management. The generation of e-waste may be considered as the by-product of the industrial development. However, a large chunk of e-waste and toxic waste is imported to India for the so-called cost savings. For the want of adequate legal framework, it becomes difficult to impose a ban on it. Hence, there is an urgent need for a holistic and effective legal framework that can regulate the generation and

management of e-waste and can mitigate the environmental impact of e-waste.

As far as recycling of e-waste is concerned, it is high time for the policymakers to come out with a policy that can integrate informal sector with the organized dismantlers and recyclers. This will not only bring to surface the real quantum of e-waste being generated in India, but will also help in dealing with e-waste in a holistic manner.

The long but sure way to deal with the issue of e-waste management is to create awareness about the effect of e-waste and toxic waste on public health and overall quality of life. Consumers must be educated about the safe disposal of electrical and electronic products. The role of manufacturers is no less in this matter. In fact, corporates can take up this as their social responsibility (CSR) which may extend not only to educate customers about the safe disposal of the product after its useful life is over, but also to facilitate them by providing a reverse logistic channel and motivate customers to use this channel for an effective disposal of e-waste.

Thus, considering the present context, a combination of multiple approaches could lead to an effective management of e-waste in India.

References

Akenji, L., Hotta, Y., Bengtsson, M., & Hayasi, S. (2011). EPR policies for electronics in developing Asia : Ad adapted phase-in aproach. *Waste Managment & Research , 29*, 919-930.

Borthakur, A., & Singh, P. (2012). Electronic Waste in India: Problems and Policies. *International Journal of Environmental Sciences , 3* (1), 353-362.

(2007). *E-waste Inventorisation in India.* MAIT-GTZ study.

Loon, J. V. (2002). *Risk and Technological Culture: Towards a sociology of virulence.* Routledge.

Mudur, G. (2004, March 24). Rest in pieces. *The Telegraph* .

Recycling – From E-Waste to Resources. (2009). Nairobi: United Nations Environment Programme (UNEP).

Schwarzer, S., Bono, A., Peduzzi, P., Giuliani, G., & Kluser, S. (2005). E-waste, the hidden side of IT equipment's manufacturing and use. UNEP Early Warning on Emerging Environmental Threats No. 5.

Sidhpuria, M., & Bhatt, K. (2013). Management of E-waste in India : Issues and challenges. *National Conference on Law and Justice.* Auro University.

Sustainable innovation and technology transfer industrial sector studies: Recycling - From e-waste to resources. (2009). *United Nations Environment Programme.* Paris: UNEP & UNU.

Waste and Climate Change: Global Trends and Strategy Framework. (2010). *14.* Osaka: United Nations Environment Programme (UNEP).

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Financial Performance of SBI

Dr. R. R. Yelikar[1]

Introduction:

Last few years were challenging years for the Indian economy, with persistent inflation, high interest rates and significant volatility in global and domestic financial markets. India continued to have strong drivers for growth due to opportunities in improving infrastructure, demographic advantage and availability of skilled manpower. An attempt has been made in the present research paper to study and assess the financial performance of State Bank of India for the period of 2003 to 2012. The financial performance evaluation is analyzed with the help of selected parameters by using index numbers, ratio anlaysis, and percentage change to previous years, mean and growth as statistical tools and techniques.

Assuming that the higher value or ratio better the performance to understand and evaluate financial performance of SBI.

1) **Trend and Progress of Deposits:**

Acceptance of Deposit is the primary function of any bank. The higher interest rates offered by cooperative banks compared to nationalized banks are big challenge. It is interesting to study the trend and progress of deposits of State Bank of India for the period 2002-03 to 2011-12.

Table 1 : Trend and progress of Deposits of SBI :2003 to 2012

Year	Deposits	Index No.	Increase / Decrease over previous year (Rs.In crore)	% change over previous year
2003	29612328	100.00	- -	--
2004	31861867	123.95	2249539	23.95
2005	36704753	123.95	4842886	15.19
2006	38004605	128.34	1299852	3.54
2007	43552109	147.07	5547504	14.59
2008	53740395	181.48	10188286	23.39
2009	74207312	250.59	20466917	38.08
2010	80411623	271.54	6204311	8.36
2011	93393281	315.38	12981658	16.14
2012	104364740	352.43	10971459	11.74
	Average 2001-2007 =58585301.3	Growth in the year 2012 over 2003 =352.43%	Increase during the 2003 - 2012 =74752412	All 10 years positive change

From the above table, it is revealed that the deposits of State Bank of India has increased from Rs.29612328 crore in 2003 to Rs.104364740 crore in 2012. The average of deposits has increased during the period Rs..58585301.3 crore. It means there is steady increase in deposits of SBI. The year 2012 has reported highest number of deposits whereas the lowest deposits in 2003. The increase in deposits during 2003 to 2012 to the extent of Rs.556240685 crore. Thus, trend and progress of deposits of SBI during this period is moved from upward direction as deposit of Rs.29612328 crore in 2003 increased to Rs. 104364740 crore 2012.

Table No.1 shows that the index number of deposits of SBI has increased to the extent of 123.95% in the 2004 from 100% in 2003 to 352.43% in 2012. The table indicate the up wards trend and progress of deposits of SBI The overall growth of deposits to the extent of 352.43% in the year 2012 over 2003.

The year to year percent change over previous year analysis shows variation in up and down but the percentage wise there is not a single year indicating a negative change during 2003-2012 and it means it has all 10 years positive change. The highest previous year percentage change was in the year 2009 to the extent of 38.08% in comparison lowest to 3.54% in the year 2006.

2 Trend and Progress of Advances:

Table 2:Trend and progress of Advances of SBI :2003 to 2012

Year	Advances	Index No.	Increase / Decrease over previous year (Rs.In crore)	% change over previous year
2003	13775846	100.00		
2004	15793354	114.64	2017508	14.64
2005	20237446	146.90	4444092	28.13
2006	26164154	189.92	5926708	29.28
2007	33733649	244.87	7569495	28.93
2008	41676820	302.53	7943171	23.54
2009	54250320	393.80	12843500	30.81
2010	63191415	458.71	8941095	16.48
2011	75671945	549.30	12480530	19.75
2012	86757890	629.78	11085945	14.65
	Average 2003 to 2012 =43125283.9	Growth in the year 2012 over 2003 = 629.78%	Increase during the year 2001 to 2012 =72982044	All 10 years positive change

From the above table , it is revealed that the advances of SBI has increased from Rs.13775846 crore in 2003 to Rs.86757890 crore in 2012. It means there is steady increase in advances of SBI. The average of advances has increased during this period Rs.4312583.9 crore. In absolute number, advances have increased to the extent of Rs.72982044 crore during the period of 2003 to 2012. The year 2009 has reported highest number of advances whereas the lowest advances in 2004 to the extent of Rs.12843500 crore and Rs.2017508 crore respectively. Thus, trend and progress of advances of SBI during the period is moved in upward direction.

The index number of advances of SBI has increased to the extent of 114.64% in 2004 from 100% in 2003 to 629.78% in 2012. The percentage change in previous year shows that there is not a single year with a negative change during 2003-2012 and it means all 10 years positive change. The highest previous year percentage change was in the year 2009 to the extent of 30.16% and lowest to 14.64% in 2004. The table indicates that percentage change over previous year has increased from 14.64% in 2004 to 29.28% in 2006 and 2007 onwards it started decreasing to the extent of 28.93% to 14.65% in 2012 except in the year 2009 which shows highest increase in all ten years.

3) Trend and progress of Total Interest :

From the table 3, it is revealed that the total interest of SBI has increased from Rs.3108702 crore in 2003 to Rs.10652150 crore in 2012 except in the year 2004 which shows the decreased total interest up to Rs.3046049 crore. It means there is steady increase of total interest. Thus, trend and progress of total interest of SBI during this period is moved in upwards directions. Table 3 shows that the index number of total interest of SBI has increased from 97.98% in 2004 to 342% in 2012. It means the continuous growth and progress of total interest during the period of 2003 – 2012. Thus, the overall growth of total interest of SBI to the extent of 342.65% in the year 2012 over the year 2003.

Table 3 : Trend and progress of Total Interest of SBI :2003 to 2012

Year	Total Interest	Index No.	Increase / Decrease over previous year (Rs.In crore)	% change over previous year
2003	3108702	100.00	--	--
2004	3046049	97.98	62653	2.01
2005	3242801	104.31	196752	6.45
2006	3579493	115.14	336692	10.38
2007	3724233	119.80	144740	4.04
2008	4895030	157.46	1170797	31.43
2009	6378844	205.19	1483814	30.31
2010	7099392	228.37	720548	11.29
2011	8139440	261.82	1040048	14.64
2012	10652150	342.65	2512710	23.58
	Average 2003 to 2012 = 5386613.4	Growth in the year 2012 over 2003 =342.65%	Increase during 2001 – 2012 = 7668754	All 10 years positive change

The highest previous year percentage change was in the year 2008 to the extent 31.43% and lowest to the extent of 2.01% in 2004. Thus, the table show the up and down variation of trend and progress of total interest of SBI during the period of 2003 to 2012 but all 10 years show the positive change over previous year.

4 Trend and progress of Net Profit:

Table 4 : Trend and progress of Net Profit of SBI :2003 to 2012

Year	Net Profit	Index No.	Increase / Decrease over previous year (Rs.In crore)	% change over previous year
2003	310500	100.00	--	--
2004	368098	118.55	57598	18.55
2005	430453	138.63	62355	16.93
2006	440667	141.92	10214	2.37
2007	454130	146.25	13463	3.05
2008	672911	216.71	218781	0.48
2009	912123	293.75	239212	35.54
2010	916605	295.20	4482	0.49
2011	826450	266.16	-90155	-0.09
2012	1170730	377.04	344280	41.65
	Average 2003 - 2012 =650266.7	Growth in the year 2012 over 2003 =377.04%	Increase during 2003-2012 =860230	* 9 years positive change * 1 year negative change

From the above table, it is revealed that net profit during the period of 2003 to 2012 has increased from Rs.310500 crore to Rs.1170730 crore except in the year 2011 where the net profit was decreased to the extent of Rs.826450 crore.

The average of net profit during 2003 to 2012 is Rs.650266.7 crore and increase over previous year to the extent of Rs.860230 crore.

Analyzing the index number of net profit indicating the trend and progress has increased to the extent of 118.55% in 2004 from 100 percent in 2003 to 377.04 % in the year 2012 except in the year 2011. Thus, the overall growth in net profit to the extent of 377.04% for the period 2003 to 2012 .

The table also reported the highest change over previous year is in the year 2012 where as the lowest is in the year 2008 to the extent of 41.65% and 0.48% respectively. Thus, the trend and progress of net profit of SBI has variation in change over previous year between the period 2003 and 2012. 8 years showed positive change and 1 year showed negative change in the year 2011.

5 Trend and progress of capital adequacy ratio:

Table 5 : Trend and progress of CAR of SBI :2003 to 2012

Year	CAR	Index No.	Increase / Decrease over previous year (Rs.In crore)	% change over previous year
2003	13.5	100.00	--	--
2004	13.53	100.22	0.03	0.22
2005	12.45	92.22	-1.08	-7.98
2006	11.88	87.99	-0.57	-4.57
2007	12.34	91.40	0.46	3.87
2008	13.54	100.29	1.2	9.72
2009	12.97	96.07	-0.57	4.2
2010	13.39	91.77	0.42	3.23
2011	11.98	88.74	-1.41	10.53
2012	13.86	102.67	1.88	15.69
	Average 2003-2012 =12.944	Growth in the year 2012 over 2001 = 102.67%	Increase during 2003 to 2012 =0.36%	* 7 years positive change * 2 years negative change

It is revealed that the trend and progress of capital adequacy ratio of SBI has shown the variation. The CAR has slowly increased by comparing 2003 with 2012 that is 13.50% to 13.85% respectively. The table reported the highest CAR in the year 2012 where as the lowest in the year 2006 to the extent of 13.86% and 11.88% respectively. The average of CAR is 12.94% and increase during 2003 to 2012 to the extent of 0.36%. Thus, this analysis shows the variation trend and progress of CAR during the period of 2003 to 2012.

The index number shows the variation in trend and progress of CAR. The table shows that there is no continuous link for progress. One year it increased and next year it decreased. The trend and progress of CAR is not in constant level. The table reported the highest index number in the year 2012 whereas the lowest is in the year 2006 that is 102.67% and 87.99% respectively. Thus, the overall growth in the year 2012 over 2003 to the extent of 102.67%.

Thus, the trend and progress of CAR has showed the variation change during the 2003 to 2012. All 7 years show positive change and 2 years show negative change.

References

Annual Reports of SBI – (2002-03 to 2011-12)

1.Dr. R. R. Yelikar (Research Guide- Solapur Uni.)

Higher Education: Current Situation and Future

Dr. Amardeep D. Jadhav[1]

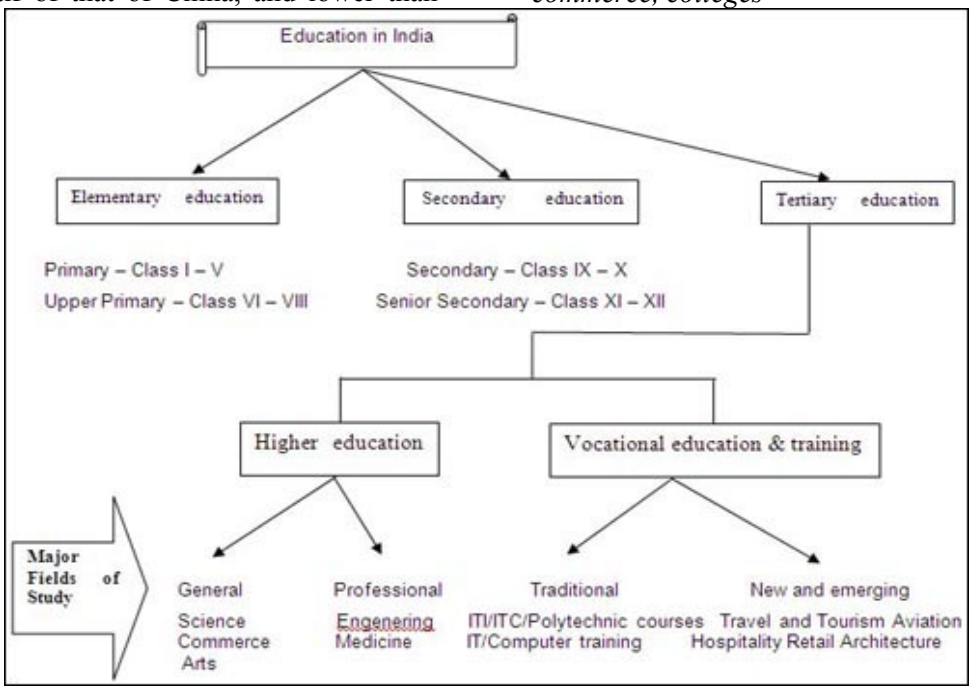
Abstract:

Education should be a three-fold process of imparting knowledge, developing skills inculcating proper attitudes and values towards life and society in general. It must enable the individual to develop the activity skill. To earn and carry on reasonable standard of living, it must also enable him to develop his creative faculties to the utmost so that intellectually, morally, physically and spiritually he is in a position to enrich his personality. Although commerce education started in India almost a century ago, it has witnessed many changes due to change in industrial and economic situation. The Indian higher education system has witnessed significant expansion in recent years, both in terms of the number of institutions as well as the student enrollment. India has more than 400 universities and over 20,000 colleges, of which almost half were set up in the last decade. Student enrollment has crossed 15.9 million in 2012-13, clocking a compounded annual growth rate of 6.2% since 1985-86. The private sector has enthusiastically participated in the growth of the higher education system with about 63% of the total higher education institutions being private unaided institutions.Webster defines Education as the process of educating or teaching. Educate is further defined as to develop the knowledge, skill, or character of students. The principle purpose of education is to educate all students and give everyone equal opportunity as a means to succeed in life. The important factors of education includes providing the necessary knowledge and skill.

According to Eric Hoffer, "The central task of education is to implant a will and facility for learning; it should produce not learned but learning people. The truly human society is a learning society, where grandparents, parents and children are students together"

Though these are clearly positive trends, the Indian higher education system continues to demonstrate many structural shortcomings which in turn create challenges in meeting future expectations. Despite having more higher education institutions than any other country in the world, hardly any feature in the leading institutions in the world. At about 12%, our GER is almost half of that of China, and lower than many developing countries. Inequity is also pervasive in the system, with the GERs of women and backward castes being much lower than the national average. Tertiary education in India is characterized by a well established higher education system and an evolving vocational education & training segment.

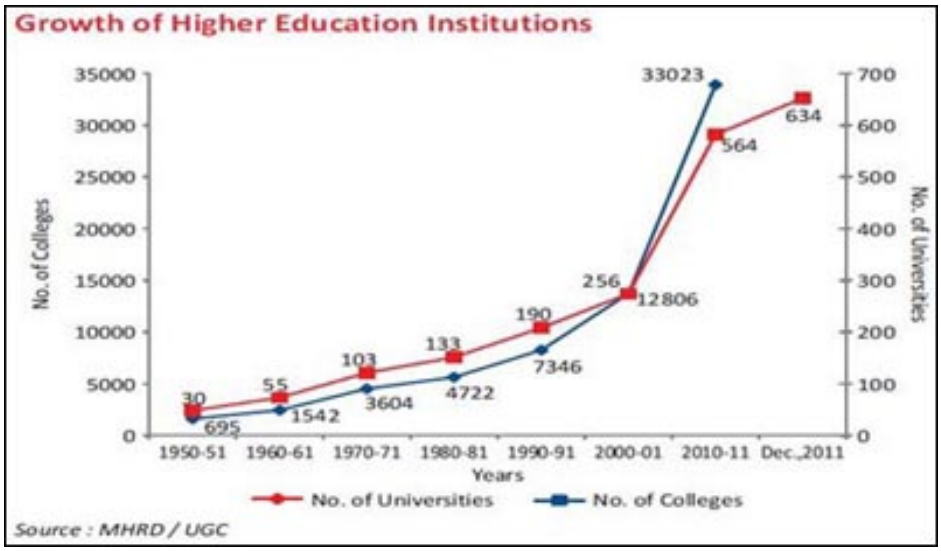
Key Words: *UGC, Higher education, students, commerce, colleges*



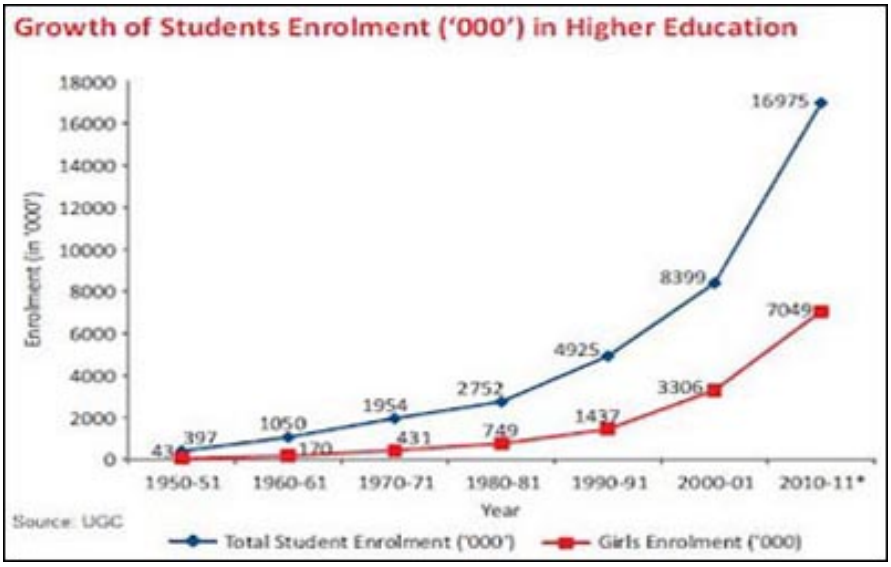
The first Commerce school was established in Chennai in 1886 by Trustees of Pachiyappa"s Charities. Commerce classes started in the Presidency College, Kolkata in 1903.The Sydenham College of Commerce and Economics was established in 1913 as the first institution for higher education in Commerce. In post-Independence period, Commerce education has emerged as one of the most potential pursuits in the wake of industrialization, economic development and techno-managerial revolution. Commerce has grown from a subject to a full-fledged faculty in most of the universities and had acquired a pride of place amongst different academic disciplines.

COMMERCE EDUCATION – MEANING: As a branch of knowledge, Commerce imparts experience of business world at large in all its manifestations. It prepares its learners for personally fruitful and socially desirable careers in the field of business. Chessman defined Commerce Education As - "Commerce education is that form of instruction which both directly and indirectly prepare the business man for his calling." Fredrik G. Nichols defined as "Commerce education is a type of training which, while playing its part in the higher education. University Grant Commission (UGC) released a report," Higher Education in India at a glance" summarizing key data points of relevance for policy makers and administrators. Here are three charts from the report:

1. Massive expansion in supply of colleges:
India added nearly 20,000 colleges in decades (increased from 12,806 in 2000-01 to 33,023 in 2011-12) which translate into growth of more than 150%. Number of degree granting universities more than doubled from 256 to 564. India has a complex affiliation system where a universities can have hundreds of public and private teaching colleges affiliated to it.

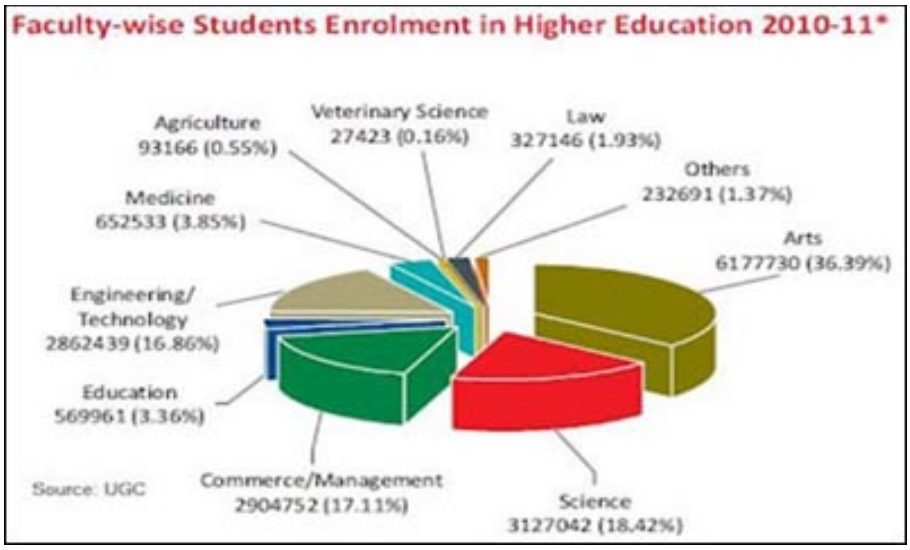


2. Lesser growth in student enrolment:
Although number of students enrolled in higher education doubled from nearly 8.4 million to 17 million in a decades, it grew a slower pace than number of colleges which grew 2.5 timed in the same period, creating paradoxical situation of excess capacity in a country where gross enrolment ration is less than 20%.

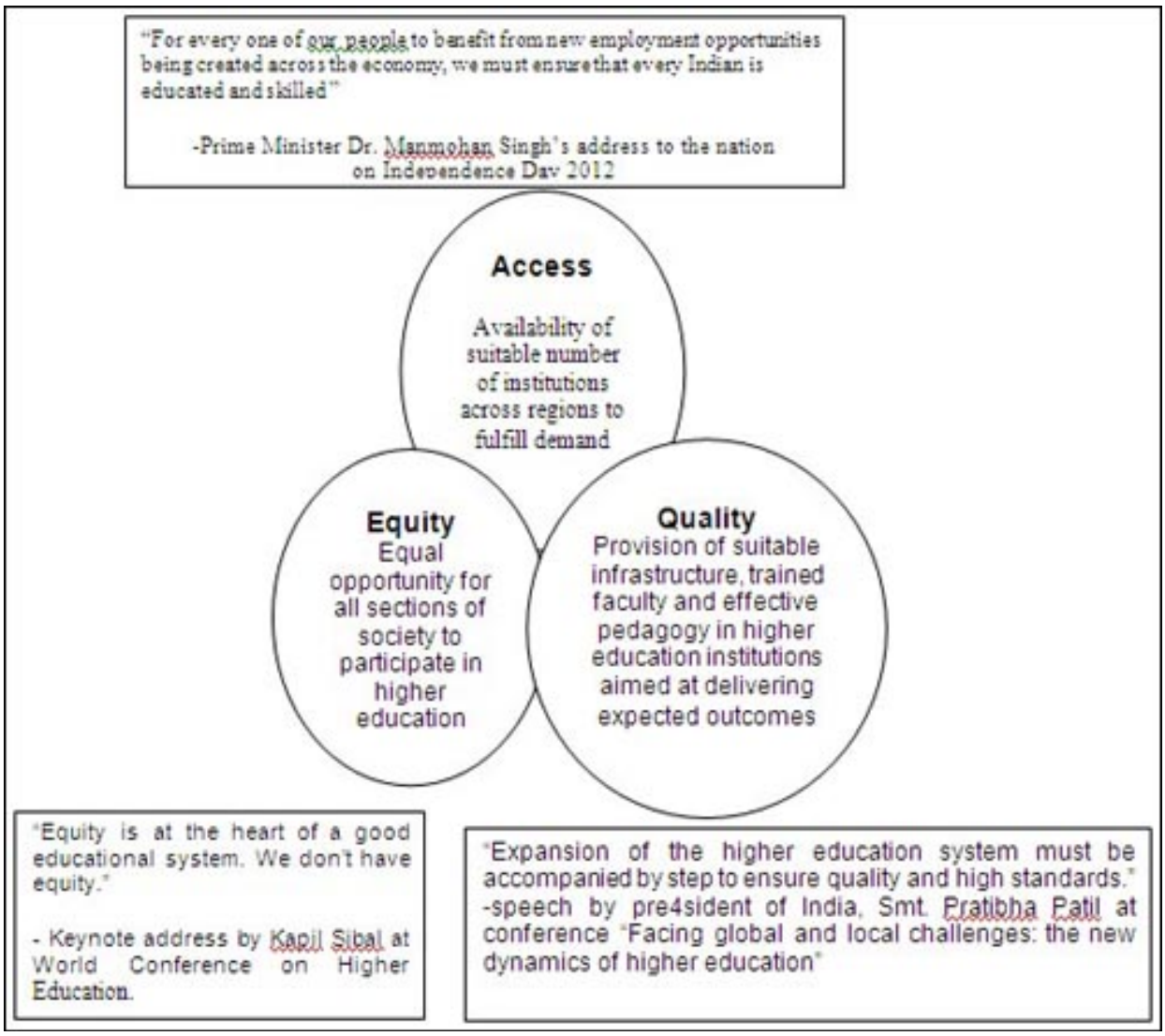


3. Three-year degree and engineering:

Students continue to be sorted into two tiers- engineering and three-year degrees of Arts, science and commerce. Every sixth student in India is enrolled in engineering/technology program and more than 2/3 of Indian students are enrolled in three-year undergraduate degrees.



However, India's education system is bogged down by the fundamental challenges of access, equity and quality.



The growing phenomenon of globalization, liberalization and privatization has been influencing the Commerce education. The technological revolution has further provided new dimensions' E-banking, E-marketing, E-commerce, E-finance, E-investment paper less trading and governance has been gaining importance of all over the world. At the same time, the outsourcing business, call Centre, small business operation, IT based services etc. are expanding very fast. These developments demands paradigm shift in teaching and learning process. The new skills and training are required to cope up with these changes. The technological advances must be integrated into the basic fabric of Commerce education.

Commerce: Commerce is the exchange of items of value between Persons or Companies. Any exchange of money for a product, service or information is considered a deal of Commerce. The Internet and an efficient postal system have made International Commerce convenient for Business as well as individuals.

Education: Education is developing inherent abilities and power of students. It is the process by which society deliberately transmits its accumulated knowledge, skill and values from one generation to another. Education in the largest sense is any act or experience that has a formative effect on the mind, character or physical ability of an individual.

E-Commerce: E-Commerce involves conducting business using modern communication instrument like Internet,Fax,Telephone,E-data interchange,E-payment, Money transfer system.E-Commerce provides multiple benefits to the consumers in the form of availability of goods at lower cost, wider choice and save times. People or Consumer can buy goods with a click of mouse button without moving out of their house or

offices. Similarly, online services such as Internet Banking, Tickets includes Airlines, Railway, Bus Bill Payment, Hotel Booking etc. Have been tremendous benefit for the customers. E-Commerce education has been phenomenal in making a deep impact on higher education. Growth in the Internet over the last few decades has led to great impact on communication and research in the institutes.

E-Commerce education has opened new avenues for Cyber law studies. It need not be stated that the importance of Cyber laws has increased by leaps and bounds in the recent years. With hundreds of Cybercrime cases every day, awareness and knowledge about Internet has become more important-Commerce education not only equips students about latest career development advancements, it also opens door for access to information and knowledge.

Online Education: It has become an important mode of education. Since the regular courses in India are getting very expensive and highly competitive, distance and online education is fast developing as an amazing option for the students E-learning opportunities are immense in India. Even the distance education programs are serving wonderfully. Distance learning can be availed through various types such as interactive CD-ROM programs, Mobile learning programs, Telecourses or Broadcast course via Television or Radio, Postal correspondence programs and many more.

1. **Objectives:**

1.To understand the problems of contemporary business education.
2.To examine new aspects and trends in relation to business.
3.To propose a new approach to business education.
4. The education system is developing very fast both qualitively and quantitatively.
5. Imparting knowledge in the field of Commerce and Industry.
6. Developing skills in commercial operations and inculcating proper vocational interest, attitudes and values.

Discussion:

1. Problems of contemporary and present day business education: The present day business education is characterized with following special features. Multiple core level subjects. It presents business education as a sum total of variety of courses combined together. It does not focus on one particular discipline or area of specialization. It is basically heterogeneous in nature.

a. It is basically covers multiple subject but without giving through and specialized knowledge.
b. Limited exposure to any particular subject: The concept of specialization is not yet adopted in business education to its fullest extent. Though at post graduate level there are certain specializations, however the course content and proportion of specialization doesn't match with the overall syllabus and total course structure.
c. Lack of practical pedagogical method: The pedagogy and teaching method presently used emphasis more on lectures and one to many dialogue. There is absence of practical base and creative teaching methods. This affects relevance and utility of the knowledge offered to the students.
d. Lack of training and hands of exposures.The present day business education emphasizes more on conceptual knowledge without offering insights as to how phenomenon or activity actually functions. This becomes hurdle in developing a required popularity and acceptance of commerce education.
e. The present commerce education is not covered in the professional educational domain: Management education as a new branch of learning is highly appreciated and acknowledge as professional education with higher industrial and business relevance. Unless and until commerce education is brought in professional educational domain, it can not have a right positioning and acceptance in industrial and business sector.

2. New aspects and trends in relation to commerce Education.

Major developments in higher education today:

The following global developments can be identified in the activities by which universities are or should be responding to current societal transformation:

Expansion: The share of highly-qualified persons is increasing. This is a world-wide trend not limited to economically advanced societies. Changing

employment structures, increasing expectations of educational participation by the citizenry at large, and the academization of a growing number of professions, promote the expansion of higher education. Participation rates of over 50% for each age cohort in the tertiary sector, which are commonly recorded as the OECD average, are becoming a benchmark for all European countries.

Differentiation: Apart from providing scientific training in a given subject, study programmers must meet differentiated social requirements and convey technical skills which higher education has not offered so far. Concurrently, higher education institutions are to respond to the differentiating demand for higher education by offering course programmers beyond the mainstream.

Greater flexibility: The disappearance of traditional professional patterns and growing in dividualisation call for a multiplication of study options. Individual combinations of studies should be allowed; students should acquire self-organization and self-upgrading skills.

Quality orientation: Expansion, differentiation, and greater flexibility presuppose and bring about novel approaches to quality assurance in higher education. The need to generate general social and political acceptance for higher education services, stakeholder expectations, supply-driven control of demand for higher education, the requirements of curricular development, as well as performance assessment of teaching-learning processes result in new forms of quality assurance, quality documentation, and evaluation being implemented.

Standardisation: The above developments are taking place in the context of the current. European wide introduction of modular and tiered study programmers that was prompted by the Bologna process.

Current study reforms are targeted at these global developments, relating specifically to the contents as well as to the organization of study programmed. In terms of contents, the emphasis lies increasingly on the transmission and acquisition of key competencies, or multi-functional skills. These skills comprise competencies to be acquired in addition to subject-matter know-how and are to enable students to cope with the requirements of different work settings and cultures, as well as with work-related crises. The following areas of higher education are concerned:

Employability is to ensure a stronger link between higher education and practice, since higher education which is purely based on technical contents is no longer considered adequate to meet the needs of professional practice.

Internationalisation strategies are designed to promote international mobility and convey intercultural skills.

Lifelong learning stands for further qualifications which employed persons acquire independently and for which universities offer demand-driven qualification programmers, a process which increasingly blurs the borders to traditional subject studies. The notion of lifelong learning is to enable and widen participation in higher education regardless of age, status, or gender.

An analysis of the current developments in higher education reveals the following *problems and challenges:*

The link between academic quality and employability still needs to be defined. It is therefore important to specify what employability, non-academic requirements and meta-technical competencies mean. Employability should not exhaust itself in adding portions of practice to a given course of study. Rather, it implies research-driven teaching, which at the same time heightens individual.

Transferability – either in the form of university-type teaching which thrives on the participation of teachers in the generation of the state of basic research, or as Fachhochschdle-type teaching as a manifestation of teaching and learning which appropriates the given state of research. *Multifunctional skills*(or key skills) are already being conveyed partly by higher education today. The transmission processes need to be made visible, enhanced by novel forms of teaching and learning, and the skills to be acquired need to be determined more specifically.

Differentiation versus harmonization of contents: If structural reform is geared to shortening the duration of studies, this may (but need not) lead to a standardization of contents, to regimentation in the sense of a canonized transmission of knowledge, if there is no scope for innovative programmes and individual combination.

It is a widely held belief that selection procedures should differentiate access to higher education and must accommodate a bipolar spectrum from inclusion

to excellence. At the same time, selection procedures should ensure that applicants and higher education institutions are better matched. Rejected candidates should be offered compensatory options.

Future trends in higher education:

Any assessment of future trends is fraught with prognostic uncertainties. There are two ways of ascertaining future trends in higher education: one, the *extrapolation of present trends into the future*, based on an assessment of the dynamics of the developments which can be empirically observed today. Two, there is reason to assume that higher education will accommodate certain, socially immensely relevant

concerns that are desirable as norms; not every desirable concern, however, will become an issue of higher education for a trend to consolidate. To illustrate the prognostic uncertainties, the *polarities* within which higher education needs to position itself in the future can be highlighted. Some are traditional, but gain a new significance, others are recent or even nascent:

The **traditional trade-offs** in higher education are those between theory and practice, research and teaching, between the research and teaching function of higher education institutions, between natural science and the humanities/social sciences, between education and training. These polarities will have to be balanced also in the future.

Trade-offs which are equally **traditional,** but subject to **extensive remodeling**, are those between academic freedom and social responsibility, or between stakeholder claims, tradition and innovation, autonomy and state monitoring, fundamental versus application orientation, offering an educational experience versus generating employability, mass versus elite education, specialization versus generalization.

This harbours or will harbour *further fields of conflict:* academic self-control – government (framework) control – market control, disciplinarily versus interdisciplinary; rationality versus internationality; research versus transfer orientation, vocational training – higher education – continuous education; differentiation of contents versus harmonization of study forms; fulltime versus part-time studies; delimited phases of education versus in-service learning; presence learning versus distance learning. Institutionally and procedurally, the challenge will lie in moving from "versus" to "and".

The following challenges are likely to become *characteristic trends* in higher education: shaping the knowledge society, generating employability, integrating the dimension of sustainability, internationality, quality orientation and competitiveness, development and use of new forms of teaching and learning. In concrete terms, this implies:

Shaping the knowledge society and generating employability: In a knowledge society, the principal mission of higher education graduates is that of players who must make consequential decisions in complex and risk-fraught action systems which in turn are embedded in complex and risk-fraught environments, and who should be able to boil down complexity in a way for which technical know-how alone would not suffice. Students of today will in all likelihood be under pressure to decide complex matters and will have to act dependably in such situations. Higher education must prepare students for these demands. Institutionally, high participation rates will continue to be a higher education trend, complemented by the mounting dynamics of lifelong learning.

Living internationality: Internationality is taught in the context of globalization, Europeanization and regionalization. The European dimension of internationalization is characterized by a move towards a European higher education area for which reforms in the structure of studies will be the decisive project for the immediate future. Materially, internationalization means developing inter culturality. In terms of the educational function of higher education, the target group is a three-fold one: students who wish to spend some time of their studies abroad need preparation and support for their Endeavour; students who lack the possibility or inclination to spend time abroad are in need of domestic programmed to learn inter culturality; and (prospective) students from abroad who need preparatory and support programmes for the duration of their stay.

Acting with a view to quality and competitiveness: Trends which are making themselves felt already today will be prolonged in a quest for quality and competitiveness. The challenges of tomorrow will consist in preventing a quality bureaucracy from emerging, without foregoing the explicated effects of quality development i.e. higher

acceptance and a competitive edge, and in ensuring the specific functional logics of science which is founded on competition for reputation rather than on an evaluation of market rates for the core delivery areas of higher education, i.e. research and teaching.

Challenges and Opportunities in Commerce Education:

Commerce is considered as one of the most popular career options in India. Commerce education is the backbone of the business and serial development of the nation. This education stresses on developing the people and making effective use of available resources.

Commerce education develops the relationship of people with one another. Commerce education covers wide area of business and society. Commerce education provides to the business and society that how to use it for the betterment of self and oneself. Commerce education gives to the people for democratic living, good citizenship and proper utilization of resources. It provides skill oriented education to students and society.

Challenges:

Challenges and Strategies for controlling inflation and promoting growth. Emerging issue in global Economy, Commerce and Management.Internationalization of Financial Market in the World.Role of Foreign Direct Investment and Foreign Institutional Investment.Reform in Indian and International Economic Sectors.Challenges and Strategies of IMF and WORLD BANK for International competition.

Challenges and Strategies merger and acquisition strategies for Trade, Commerce and Industry in World. Challenges and Strategies for commodities markets in the world and in currency market in International scenario. Challenges and Strategies for export and import of Trade, Commerce and Industries in global scenario.Challenges and Strategies for Stock Market and Investors for International competition.Challenges and Strategies in Currency Market in International scenario.

Opportunities:

At the undergraduate level, Bachelor of Commerce, a three year full time course. And Master of Commerce at the postgraduate level. After completing course in the field of Commerce, a student can join any private institute or government organization as a specialist in any of the Commerce stream and they can also pursue professional courses such as Company Secretary, Chartered Accountant, and ICWA. A graduate in Commerce can also opt careers in financial services as a Financial Consultants, Stock Brokers, Merchant Bankers, Budget Consultant, Financial Portfolio Manager, Project Formulation Manager, Tax Consultants. Careers in Management are also available in the field of Personnel Management, Production Management, Financial Management, Marketing Management, and Material Management, other areas of Management such as Hotel Management, Hospital Management, Tourism Management, Event Management, Office Management, Export and Import Management. In the Bank, call for Commerce graduates and post graduates with specialization of Banking. Insurance Companies can also call for Commerce graduates and post graduates with specialization of Insurance. Industrial segment are also call for Commerce graduates and post graduates with specialization of accounting skill including Computer Technology.

Key report findings include:

* Over 6.1 million students were taking at least one online course during the fall 2010 term, an increase of 560,000 students over the previous year.
* The 10% growth rate for online enrollments far exceeds the 2% growth in the overall higher education student population.
* Thirty-one percent of higher education students now take at least one course online.
* Reported year-to-year enrollment changes for fully online programs by discipline show most are growing.
* Academic leaders believe that the level of student satisfaction is equivalent for online and face-to-face courses.
* 65% of higher education institutions now say that online learning is a critical part of their long-term strategy.
* There continues to be a consistent minority of academic leaders concerned that the quality of online instruction is not equal to courses delivered face-to-face.

Previously underwritten by the Alfred P. Sloan Foundation, the report has been able to remain independent through the generous support of Pearson, Kaplan University, Inside Higher Ed and the Sloan

Consortium. As a result of the partnership with Pearson the free distribution of the report this year will for the first time include an option for an eBook version.

Conclusion:

With a growing emphasis on information, globaleconomy, Higher Education was viewed as increasingly essential for the world'spopulation. Information Technology and Mobile Technology is now forcing education sector to change according to the need of the time. The most emerging dimension of the Business and Commerce education in the 21st century is the need for Business School to use technology and make it integral part of course contents. Education now becomes an industry, there is explosion of technologies and knowledge in all sphere. The quality of Commerce Education has become a major marketing issue in the changing environment. As per specialization, a practical training should be provided to the students. By making relevant and practical oriented Commerce Education, we may impact global competitiveness to our students. As a part of the society the social awareness among Commerce students is the emerging need of present time.

REFERENCES:

1. Indian Higher Education, K.B.Powar, Concept Publishing House, New Delhi.2002
2. Business Education in India, V.Gupta and K.Gollakota, IBATJournals of Management.
3. Net Impact, Mission Statement, Electronic Document. Making the Grade- Online Education in the United States 2006, Allen, I.E. and Seaman.
5. Commerce Education, A.B.Ghosh, Sultan Chand and Company, New Delhi.1969
6. Emerging Trends in Commerce and Management, Santosh Gupta, Published in University News41 (05) 2003
7. Recent Trends in Commerce and Management Education, Dr.V.V.Khanzode, Strling Publishers Private Limited.1990
8.National Policy on Education1986 an Appraisal, DoabaHouse, New Delhi.1989
9. Commerce and Management Education in India,Ed.K.V.Sivayya,Ashish Publishing House, New Delhi.1990
10. Higher Education in India, MoonisRaza, Association of Indian University, New Delhi.

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Performance Evaluation of Banks- A Case Study of BDDCB of Belgaum District

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Abstract

The banking sector has been playing key role in the development of Indian economy. The co-operative banks in India have been financing rural and urban borrowers to invest in production activities from the day of their inception on the basis of co-operation principle. Further, the District Central Cooperative Bank in Belgaum District with wide net work of branches in rural and semi urban areas has been providing necessary banking services to the development of district since its inception. It has been also acting as mediatory for many government sponsored programmes relating to poverty alleviation and self employment. The present study is based on the secondary data collected from annual credit plan of the Lead District Bank. The study revealed that there have significant differences in the branches of rural, semi-urban and urban areas in deposit mobilization and credit deployment during study period.

Introduction

Banking sector in India comprises nationalized banks, private banks, co-operative banks and foreign banks. The Co-operative banks consist of Urban Co-op Banks, Primary Agricultural Credit Societies, District Central Co-op Banks, State Co-operative Banks and Land Development Banks. The Co-operative Banks in India are registered under the Co-operative Societies Act. The Co-operative Banks are also regulated by the RBI. They are governed by the Banking Regulations Act 1949 and Banking Laws (Co-operative Societies) Act, 1965. These banks provide most services such as savings and current accounts, safe deposit lockers, loans or mortgages to private and business customers.

The Co-operative Banks play an important role in meeting the credit requirements of both urban and rural India. Though in the bank dominated financial system, these co-operative banks account for a small share in total credit but they hold a significant position in credit delivery as they cater to different geographic locations and demographic categories. The wide network of co-operative banks in rural and urban India deepens the financial intermediation by bringing large number of depositors and borrowers under the formal banking network. Demographically, co-operative banks have enabled access to financial services to low and middle-income groups in both rural and urban areas. The role of co-operative banks has been commendable in enhancing the inclusiveness of the financial system. However, the financial performance of these institutions particularly rural co-operatives has been low due to operational and governance-related issues.

A number of committees have examined the reasons for their poor financial performance and have suggested remedial measures from time to time. Initiatives for revitalizing co-operatives have been ongoing.

The district central co-operative banks have been playing equally competitive role in the development of rural and urban area. They have been financing to various needs of rural and urban people. "There are 370 district central co-operative banks in India of which 322 are earning profit and rests are under loss. The recovery to demand ratio is 81.9 per cent and their NPA to loan ratio is 9.7 per cent. Similarly, there are 21 district central co-operative banks in Karnataka State of which 18 are earning profit and three are under loss. The recovery to demand ratio is 91.6 per cent and their NPA to loan ratio is 5.9 per cent"[1]. This indicates that the performances of district central co-operative banks of Karnataka State are far better as compared to the performances in other states of India. The district central co-operative bank in Belgaum district has wide network of branches in urban, semi urban and rural area consisting of 84 branches accounting for 17 per cent of total bank branches.

Objectives of the Study

- To ascertain the agency-wise position of bank branches.
- To examine the deposit mobilization and credit deployment.
- To evaluate the efficiency of bank in rendering services.
- To offer useful suggestions in the light of findings.

Hypothesis of the Study

Ho; Urban and rural branches have not equally competitive in deposit mobilization.

Ha; Urban and rural branches have equally competitive in deposit mobilization.

Ho; Urban and rural branches have not equally competitive in credit deployment.

Ha; Urban and rural branches have equally competitive in credit deployment.

Methodology

The present study is purely based on secondary data obtained from Annual Reports of District Lead Bank of Belgaum District. Further, researcher also had discussion and personal interview with the subject experts, practicing bankers, bank managers, and officials. The data are organized suitably in the light of objectives and classified and presented through Statistical tools such as simple percentage, arithmetic mean, standard deviation, compound annual growth rate, Levene's Test.

Taluk wise Status of Bank Branches

The overall development of the district depends on the banking performance of each taluk. The entire district consist 10 taluk with sufficient number of bank branches of different banking groups such as Nationalized Banks, SBI and its Associates, KVGB, Development Banks, Private Banks, KSCARD(PLD), BDCCB and Urban Co-operative Banks.

Table 1: Taluk wise Status of Bank Branches (In Numbers)

Taluks	SBI & Gr.	Nat. Banks	KVGB	Develop. Banks	Private Banks		KSCARD	DCC Banks	Urban Co-op Banks	Total
					Old	New				
Athani	03	11	13	00	06	03	01	09	04	**50(10)**
Bailhongal	01	09	12	00	00	01	01	07	04	**35(07)**
Belgaum	18	64	13	IDBI =2 KSFC=1	11	06	01	10	13	**139(28)**
Chikkodi	04	18	17	IDBI=1	04	05	01	11	06	**67(14)**
Gokak	02	15	11	00	03	03	01	11	05	**51(10)**
Hukkeri	02	12	08	00	01	00	01	12	03	**39(08)**
Khanapur	01	09	09	00	00	00	01	06	01	**27(06)**
Raibag	02	04	12	00	01	01	01	05	02	**28(06)**
Ramadurga	01	04	06	00	00	00	01	06	01	**19(04)**
Soudatti	01	10	11	00	00	01	01	07	02	**33(07)**
Total	**35 (07)**	**156 (32)**	**112 (23)**	**04 (01)**	**26 (05)**	**20 (04)**	**10 (02)**	**84 (17)**	**41 (09)**	**488 (100)**

Source: Annual Reports of Lead District Bank, 2008.
Figures in parenthesis indicate percentages to total.

It is clear from table 1 that Belgaum taluk has a strong net work (28 per cent) of bank branches, followed by Chikkodi taluk (with 14 per cent) as compared to total bank branches of all taluk in Belgaum District. Ramadurga taluk is having less number of bank branches that too without having a single branch of private bank. There has no single branch of Private Banks in three taluks (viz, Khanapur, Ramadurga and Soudatti). The Nationalized banks covered highest number of bank branches (32 per cent) in total. The KVGB also showed the progress through their widely spread network in far and flung areas of the district with 112 branches (23 per cent). The RRBs are basically set-up to fill up the gap in the area where commercial banks and co-operative banks have not reached. Each taluk of Belgaum district is having one branch of KSCARD Bank.

Agency wise Position of Bank Branches

The credit agencies in the district consists PSBs, PVSBs, KVGB, BDCCB, KSCARD Bank and Urban Co-op Banks. The KVGB relatively took recent entry into the field; widely spread their network in each and every corner of the district. To fulfill socio-

economic obligation, agency-wise branch expansion in urban, semi-urban and rural areas is must. Over the years, significant progress has been made by these banking groups in expanding the branch network.

Table 2: Agency-wise Position of Bank Branches (In Numbers)

Banks	Years					
	2005-06	**2006-07**	**2007-08**	**2008-09**	**2009-10**	**2010-11**
PSB	185 (38.78)	186 (38.83)	188 (39.00)	192 (38.95)	206 (41.45)	214 (42.38)
PVSB	44 (9.22)	45 (9.39)	46 (9.54)	51 (10.34)	47 (9.46)	48 (9.50)
KVGB	108 (22.64)	108 (22.55)	108 (22.41)	110 (22.31)	113 (22.74)	114 (22.57)
BDCC Bank	89 (18.66)	89 (18.58)	89 (18.46)	85 (17.24)	84 (16.90)	82 (16.24)
KSCARD Bank	10 (2.10)	10 (2.09)	10 (2.07)	10 (2.03)	10 (2.01)	10 (1.98)
Urban Co-op Banks	41 (8.60)	41 (8.56)	41 (8.51)	45 (9.13)	37 (7.44)	37 (7.33)
Total	**477 (100)**	**479 (100)**	**482 (100)**	**493 (100)**	**497 (100)**	**505 (100)**

Source: Annual Reports of Lead District Bank.
Figures in parenthesis indicate percentages to total.

Table 2 reveals that total branches have increased from 477 in 2005-06 to 505 in 2010-11, indicating the significant growth over the study period. There is a continuous growth every year in number of branches of PSBs and PVSBs. The position of KVGB for the first three years remains constant (108), but there after their branches have increased from 110 to 114 for remaining years. The position of BDCCB and Urban Co-op Banks remains constant for first three years and thereafter there is a slow growth in bank branches. The status of KSCARD bank remained constant for all the years.

Analysis of Bank Branches

Overall development of the district depends upon the extent at which bankers are reaching to the rural population by opening more number of bank branches. Rural development is pivotal to accelerate economic growth. In view of this, the bankers have to involve in the development of rural areas along with urban and semi urban areas.

Table 3: Area wise Position of Bank Branches (In Numbers)

Banks	Years and Areas (Urban and Rural)											
	2005-06		**2006-07**		**2007-08**		**2008-09**		**2009-10**		**2010-11**	
	Ur	**Rl**	**Ur**	**Rl**	**Ur**	**Rl**	**Ur**	**Rl**	**Ur**	**Rl**	**Ur**	**Rl**
PSB	72	113	72	114	72	116	72	120	81	125	85	129
PVSB	15	29	16	29	16	30	20	31	17	30	18	30
KVGB	06	102	06	102	06	102	06	104	09	104	09	105
BDCCB	09	80	09	80	09	80	09	76	09	75	09	73
KSCARD Bank	01	09	01	09	01	09	01	09	01	09	01	09
Urban Co-op Bank	13	28	13	28	13	28	13	32	11	26	11	26
Total	116 (24)	361 (76)	117 (24)	362 (76)	117 (24)	365 (76)	121 (25)	372 (75)	128 (26)	369 (74)	133 (26)	372 (74)
Grand Total	**477**		**479**		**482**		**493**		**497**		**505**	

Source: Annual Reports of Lead District Bank.
Figures in parenthesis indicate percentages to total.

It is obvious from table 3 that total bank branches in rural area are more and they are double as compared to the branches in urban area during study period. Nearly 75 per cent of bank branches have been situated in rural and semi-urban area and only 25 per cent are in urban area. This ratio stood same for all the years of study period.

Analysis of Deposits of Belgaum District Central Co-operative Bank (BDCCB)

The BDCCB has wide network of branches in Belgaum districts consisting of 84 branches which accounts for 17 per cent of total bank branches. Hukkeri taluk is having highest number of branches (12), followed by Chikkodi and Gokak taluks with 11 branches each. Belgaum taluk is having 10 branches of DCC banks.

Table 4: Deposits of BDCCB

Bank Branches	Year wise Deposits (In ` lakhs)						A.M.	SD.	CAGR (In %.)
	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11			
Urban	14797 (35.99)	13500 (32.09)	14086 (32.09)	11564 (23.73)	22062 (28.61)	42487 (37.77)	19749	11705	23.49
S.Ur./Rural	26313 (64.01)	28568 (67.91)	29810 (67.9)	37170 (76.27)	55059 (71.39)	69989 (62.23)	41152	17596	21.61
Total	41110 (100)	42068 (100)	43896 (100)	48734 (100)	77123 (100)	112476 (100)	60901	28659	22.3
No. of Branches	89	89	89	85	84	82	86	3	-1.62
Deposit Per Branch	462	473	493	573	918	1371	715	364	24.3

	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig	t	df	Sig (2-tailed)
Equal variances assumed	1.749	0.215	-2.481	10	0.033
Equal variances not assumed			-2.481	8.700	0.036

Source: Annual Reports of Lead District Bank.

Figures in parenthesis indicate percentages to total.

Table 4 exhibits that deposits of BDCCB have improved significantly from `41110 lakhs in 2005-06 to `112476 lakhs in 2010-11. The percentage of deposits in rural area stood in between 62.23 per cent to 76.27 per cent. On the contrary, in urban area, it ranges in between 23.73 per cent to 37.77 per cent during study period. Statistical analysis shows that average deposits and deviation from mean has been highest in rural and semi urban area as compared to urban area. The CAGR in deposits is highest in urban branches (23.49 per cent). But the CAGR regarding the number of branches showed negative trend (-1.62 per cent). The study reveals that DCC bank's performance is popular in rural/semi urban area as compared to urban area because AM of rural area is 41152 as compared to 19749 of urban areas.

These banks are making lot of efforts in mobilizing deposits from rural areas. Further, the study indicates that the p-value for Levene's Test for equality of variances is 0.215 which is greater than critical value (0.05) at 5 per cent level of significance. Hence, the assumption of equality of variance is accepted and testing is carried out with equal variances assumed. Further, the study indicates that the p-value (0.033) for the independent t-test is less than critical value (0.05); hence, null hypothesis is rejected and thus, it can be concluded that there has a significant difference between urban and rural/semi-urban branches of BDCCB in deposit mobilization. Further, from table 4 it is clear that performance of rural branches is better than urban branches in mobilizing deposits from the people.

Table 5: Credits of BDCCB

Bank Branches	Year wise Credits (In ` lakhs)						A.M.	S.D.	CAGR (In %.)
	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11			
Urban	5220 (10.98)	3653 (7.21)	3402 (7.21)	1642 (3.49)	9872 (12.41)	25911 (24.89)	8283.3	9077.63	37.77
S.Ur./ Rural	42306 (89.02)	46987 (92.79)	43772 (92.79)	45363 (96.51)	69707 (87.59)	78197 (75.11)	54388.67	15468.9	13.07
Total	47526 (100)	50640 (100)	47174 (100)	47005 (100)	79579 (100)	104108 (100)	62672.00	23927.4	16.98
No. of Branches	89	89	89	85	84	82	86.00	3.08	-1.62
Advance Per Branch	534.00	568.99	530.04	553	947.37	1269.6	733.84	308	18.90

	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig	t	df	Sig (2-tailed)
Equal variances assumed	3.867	0.078	-6.297	10	0.000
Equal variances not assumed			-6.297	8.08	0.000

Source: Annual Reports of Lead District Bank.

Figures in parenthesis indicate percentages to total.

It may be noted from table 5 that percentage of advances in rural/semi-urban area ranges in between 75.11 per cent to 96.51 per cent during study period. The study reveals that branches of DCC bank are aggressively marketing their credit services in rural areas. They have been granting more loans for agriculture than others such as education, housing and industrial, etc. The growths in advances have increased tremendously from `47,526 lakhs during 2005-06 to `1,04,108 lakhs, during 2010-11, near about 2.5 times more than that of beginning. The advances per branch also have shown significant progress and it roses from `534 lakhs 2005-06 to `1,269 lakhs during 2010-11. This shows that performance of BDCCB in credit system is becoming much popular, especially in rural areas. Average advances of rural area is twice that of urban area but the CAGR of urban area is highest (37.77 per cent), which is three times more than the rural areas'. Further, the study indicates that the p-value for Levene's Test for equality of variances is 0.078 which is greater than critical value (0.05) at 5 per cent level of significance. Hence, the assumption of equality of variance is accepted and testing is carried out with equal variances assumed. Further, study shows that the p-value (0.000) for the independent t-test is less than critical value (0.05). Hence, null hypothesis is rejected and it can be inferred that there has a significant difference between the branches (urban and rural/semi-urban) of BDCC Banks in loans and advances. The performances of rural bank branches are better than the urban branches.

Table 6: Annual Growth Rate in Deposits, Advances and CD Ratios of BDCCB

Years	Deposits/br. (In ` Lakhs)	Advances/ br. (In ` Lakhs)	CD Ratios (In %.)	Growth Rates (In %.)		
				Deposits	Advances	CD Ratios
2005-06	462	534	116	-----	------	--
2006-07	473	568	120	2	11	3.4
2007-08	493	530	108	4	-7	-10
2008-09	573	553	97	16	4.3	-10
2009-10	918	947	103	60	71	6
2010-11	1371	1269	93	49	34	-10

Source: Annual Reports of Lead District Bank.

Table 6 shows that deposits per branch of BDCC bank have increased from `462 lakhs during 2005-06 to `1371 lakhs in 2010-11, accounting for three times more than that of 2005-06. The growth rate in deposits has increased during period. In 2009-10, it was 60 per cent as against only 2 per cent in 2006-07. Similarly, advances per branch also increased to `1,269 lakhs during 2010-11 as against `534 lakhs during 2005-06 which is 2.5 times more. But growth rate in advances shows a fluctuating trend, which ranges in between -7 per cent to 71 per cent during study period. The branches of BDCCB in the district are aggressive in providing loans to agricultural sector. The CD ratio of BDCCB shows more than 100 per cent during all years of study. For the first two years, CD ratio is highest (116 per cent and 120 per cent). Further, there found wide fluctuations in the growth rate of CD ratios which ranges in between -10 per cent to +3.14 per cent. This shows that the progress of BDCCB in sanctioning credits is not consistent. This might be due to high rate of interest charged by these banks, and poor recovery of loans. Competition is also yet another reason for decreasing trend in the CD ratios.

Findings of the study

- Nearly 75 per cent of bank branches have been situated in rural and semi-urban area.
- There has a significant difference between urban and rural/semi-urban branches of BDCCB in deposit mobilization.
- There has a significant difference between the branches (urban and rural/semi-urban) of BDCC Banks in loans and advances.
- The CD ratio in BDCCB has been more 100 except 2008-09 and 2011-12.

Conclusion

The co-operative banks have been financing to all sectors of economy by having wide branch network both in rural and semi urban areas for their growth and development. The study revealed that there has significant difference between urban and rural branches in mobilizing deposits and deployment of credit. Therefore, bank can adopt latest strategic marketing strategies like service differentiation and positioning, cost leadership and focus strategy to expand their business both rural and urban area. In addition, they also adopt the principle of cost, liquidity and flexibility while performing business transactions.

References;

www.rbi.org. Trends and Progress of Banks in India.

1. Santosh Kumar and N.S.Vageesh, (2012), "Private Banks on Hiring Branch Expansion Spree", The Hindu, *Business Line,* Oct. 10 pp.6.
2. Saxena, K. K., (1988), "Bank Marketing Concepts and Applications", *Sky Lark Publications, New Delhi*, pp. 8-9.
3. Sarangpani, T M, (2008), "E-banking Implementation of Challenges", *Icfai University Press Professional Bankers,* 8(5), pp. 39-42.
4. Vijayraghvan, R., (2008), "Customer Service in Banks", *Professional Banker,* 8(5), pp.34-38.
5. Sharma, S.N. and L.P. Padhy, (2011), "Customer Service in Banks–Best Practices", *Bank Quest the Journal of Indian Institute of Banking and Finance,* 82(4), pp.21-26.
6. Udeshi, K.J, (2011), "The Wheels Grind slowly, but Surely for the Bank Customer", *Bank Quest the Journal of Indian Institute of Banking and Finance,* 82(4), pp.16.

7. Sharma, S.N. and L.P. Padhy, (2011), "Customer Service In Banks-Best Practices", *Bank Quest the Journal of Indian Institute of Banking and Finance,* 82(4), pp. 21-26.
8. Annual District Credit Plan for the Year 2010-11, Annual Reports of Lead Bank Belgaum, 2010-11. pp. 10-11
9. Das, M.R,(2011), "Best Practices in Customer Service in Indian Banks an Economist's Perspective", *Bank Quest the Journal of Indian Institute of Banking and Finance,* 82(4), pp. 17-19.
10. Ram Gopal Agarwala,(2013), "News Banking", *Banking Finance,* 26(1), pp. 7.
11. Shollapur, M.R,(1992), "*Credit Management in Central Co-operative Banks a case study of the Belgaum District Central Co-operative Bank in Karnataka State",* Ph.D. Dissertation, Karnatak University Dharwad.
12. Choragi, S.S,(2000), "*A Critical Study of Bank's Performance under Service Area Approach in Bijapur District",* Ph.D. Dissertation, Karnatak University Dharwad.

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Role of Rural-Tourism for development of Rural Areas

Priya Srivastava[1]

Abstract

Almost all rural societies in the world are suffering from economic crises. Challenges facing rural areas are numerous and have an interconnected nature. Ageing, depopulation, decline in agricultural employment are just a few to mention. Since 1990s, with the transformation in the socio- economic culture through globalization, various countries in the world experienced decollectivisation, privatization and re-establishment of free market economy in their rural territories. Those transformations highlight mainly economic, political, as well as social consequences on rural communities and individuals. Rural tourism is considered one of the activities to be supported to ensure rural development. Rural tourism is a multi-faceted activity and may include agritourism, sports tourism, cultural tourism, eco tourism and adventure tourism. Compared to conventional tourism, rural tourism is different. Rural tourism is experience oriented and location specific and solely dependent upon natural environment. Rural tourism begins with community initiative and arrangements, drumming local culture, entrenched local scenery. The beauty of rural tourism again depend upon seasons and local festivals and also on preservation of culture, traditions and heritage etc.Rural places attract tourists because of the charming and diverse artistic culture, famous racial and regional characteristics. As the larger economies of the world have moved inexorably towards globalization, rural sector sometimes faces difficulty to maintain the possible development to enrich its economy. So, the promise of a reinvigorated economy through tourism is certainly a strong lure to come across the economic slump faced by the rural communities throughout the world. As rural tourism is considered one of the activities to be supported to ensure rural development and it can develop a win -win situation among rural communities. As rural tourism is one of the major dimensions of rural development, it helps the rural people to improve their livelihood. Rural tourism attracts citizens of various cultures, languages and life style close to one another and it provides a broader outlook of life. It not only creates employment for the rural people but also builds up social, cultural and educational values globally.

Key Words: *agritourism, sports tourism, cultural tourism, eco tourism and adventure tourism.*

Rural Tourism: An Introduction

Rural tourism is one of the important component of rural development, refers to any tourism activity which takes place in rural locations, thereby benefitting the local people economically and socially. The concept of rural tourism may be a new concept in India but, in European countries and other parts of the world, it is being practiced since several years.

Tourism development prospective can be harnessed as an approach for Rural Development. The development potential of a strong policy about the concept of Rural Tourism is absolutely useful for the country where most of the people live in rural areas. Throughout the globe, the trends of urbanization through industrialization are the emerging issues today. This increases the rural migration from rural to urban centres.This urbanization trend leads to decline in income level and less job opportunities among the rural population. Rural tourism is an important activity to provide solution in this regard. There are also other factors which influence the development of rural tourism like growing awareness, increasing interest in heritage and improvement in culture and environmental sustainability etc.

Forms of Rural Tourism

1. Agritourism

Agritourism or farm tourism refers to an organization working on farm or agricultural plant made for entertainment of tourists, thereby generating income for the farm owners .This may help the farmers to interact with the visitors, thereby benefitting the visitors to enrich their knowledge regarding agritourism.Agritourism is generally practiced in wine producing regions of Italy and Spain.Agritourism is also popular in America. In America, tourists/visitors are allowed to pluck fruits, vegetables, ride horses, taste honey and wine etc.

2. Sports Tourism

Sports tourism involves tourists to participates or observe rural sports. It teaches the local rural people how to get scope/chance in international game and to compete with opponents. It enables the people of different cultural background to mix with other people and exchange cultural activities between the parties and thereby they are culturally enriched. Sports tourism also helps to protect local traditions through the presentation of traditional food, ethnic, culture etc, to the tourists and also display the national or regional identity etc.

3. Cultural Tourism

Cultural tourism refers to the countries or regions culture. Normally it highlights such type of communities who have unique art, distinct social culture and diverse customs. Cultural tourism includes both rural as well as urban cultures. In rural areas, cultural tourism includes rural festivals, functions, theatres; jatra etc.Cultural tourism is also becoming popular in rural Europe.

4. Ecotourism

Ecotourism generally refers to the ecological tourism. It is also one of the forms of rural tourism. Ecotourism attracts such type of tourists who are socially and ecologically conscious. Generally, ecotourism deals in volunteering, individual growth and learning to live on the planet in different ways; especially involving travels to different places where flora, fauna and cultural heritage are the main attractions. Well organized ecotourism minimizes the negative impact of conventional tourism through the intermingling of culture among different communities.

5. Adventure Tourism

Adventure tourism is a special type of rural tourism which includes exploration through travelling in remote and possible hostile areas. Adventure tourists expect to come across unexpected things by visiting such areas. Generally, adventure tourism includes, trekking, rock climbing, mountain biking, rafting etc.

6. Heritage Tourism

Heritage tourism means to stay in heritage hotels located in rural areas with visits to local or community fairs, craft fairs etc.

7. Pilgrim Tourism

Pilgrim tourism refers to the tourist spots where basically rural pilgrims sites are visited and rural community based festivals are performed according to the visitor's choice.

8. Nature Tourism

Nature tourism refers to natural scenery based tourist spots in rural setting .Generally; tourists visit such type of spots for experiencing the natural beauty

Branding Rural Tourism for sustainable Economic Development

While in the past, rural destinations were able to market themselves on attributes of exotic cultures and values for money, there has been a change of trend now. At present, the industry as a whole is characterized by a varied list of significant trends, suggesting competition. The brand serves to differentiate a destination from competing destination. Some destinations do not have a brand strategy, and are supported by inconsistent advertising campaigns, creating a confused image to prospective tourists.

Creating a very strong brand image is very important. But the problem for the rural tourism lies here. With low budgets and mostly seasonal, communication needs to be very effective. If the image is unfocussed or unclear; the destination will have difficulty competing with images created by competing regions. Advertising, PR and promotion must complement informal information obtained through word-of-mouth and personal recommendations, by either building upon the latter or correcting negative perception that may be incorrect .In building strong brands, developing a strong image for any brand requires a carefully planned brand strategy based on

1. A well defined and unique brand personality
2. Selection of the correct positioning strategies
3. 'Themed' product development
4. Consistent and appropriate "advertising and promotion".

The destinations image should come to customer's mind, while he/she is planning to visit a destination. It should have a clear cut focus with consumer in mind. The area should be differentiated from other destinations in terms of offer as a destination.

The questions that need to be asked are:

What do we want to be known for?

How will we stand out from the crowd?

What words do we want to come to mind when people hear our names?

The first objective is identification and differentiation. The second one, in contrast to traditional product branding, emphasizes that it is especially important that a rural brand conveys the promise of a memorial

experience. In rural tourism, for a destination to compete and success, it must offer a high quality "stream of product/service transactions"- or what is referred to as a "quality experience."

Thus, to create a unique differentiation, different methods must be adopted to brand them. These brands will create economically sustainable model for the overall growth of the region in the long run. The process of sustainable development will have strong positive effects on the central and state economies. Not only that, the rural population living below the poverty line will be assisted, directly or indirectly to come out of the morass of stagnation.

Rural Tourism Challenges and Opportunities

The major challenges are - need to preserve the environment and natural resources, the need for education, proper understanding between tourists and local people, and the need to generate a democratic movement which helps people at all levels to participate in tourism development. They also need to focus on occupation training, handicrafts promotion, and improvement of both the landscape and the basic infrastructure, to increase the villager's quality of life by creating a healthy environment. The cooperative system in rural tourism can be an effective approach in bringing positive impact in rural areas. Local people can monitor and control the negative impacts of tourism in their own society, if they have an equal stake and authority in management and development.

Following are the basic challenges:

- Legislation problem
- Lack of trained manpower
- Insufficient financial support
- Lack of local involvement
- Underdeveloped people
- Lack of proper physical communications
- Lack of basic education
- Language problems
- Business planning skills
- Trained tourist guide
- Communication skills

The opportunities that this sector has are the tourists look for quality environment and meaningful experience. People are interested in rural tourism, if the trip can bring pleasure and relaxation to body and mind. Urbanities show their interest to go for rural tourism, especially to those areas where there is beauty of natural elements like mountains, forests, sea, lakes etc, along with that traditional customs, handicrafts of rural flock, traditional foods and their hosting style and the cultural programmes. In Rajasthan, we can see reflection of these types of programmes in Jaipur and Udaipur especially.Jaipur and other cities of Rajasthan have developed some unique selling proposition to attract domestic and foreign tourists. Some of the hotels of Rajasthan are providing traditional food in a very traditional style. They entertain the tourist in the evening with traditional folk dances and songs. They decorate the hotels with a traditional look for Rajasthan palaces. They are promoting the Rajasthan handicrafts and garments. This is a glimpse of what Rajasthan is doing to attract the attention of the tourist. If they can provide a meaningful holiday and fulfill the expectation of tourist at a reasonable price there is a higher chance that the tourist will make a return visit in future.

Marketing of rural tourism is a specialist job .If you are farmer or an orchardist you are aware of the importance of getting a specialist to sell your products to the respective markets. Similarly, for rural tourism , rural people have to surrender themselves to professional marketers who understand the complexity of their task .The business depends on the development of networks, creation of trust and loyalty and information systems, all of which take money and time to develop , which is beyond the resources of most individuals. Different villagers marketing some special interests like adventure, safaris, farm stays etc. can link together for promotion. A specialized skill is necessary for marketing rural tourism product. It is virtually impossible to do it alone. This is because tourism draws on so many industries-the hospitality, entertainment, transport, catering, education, accommodation, retailing, hiring as well as marketing. As one cannot be expected to be an expert in all of these, it is necessary, therefore, to exchange the resources. Thus, there is a need for ability to co-operate with each other towards achieving common goals.

As tourist become more and more educated, more aware of facilities available and more experienced, there expectation will also increase. People are interested in exploring new places. Rural tourism in India has great future, since it not only provides natural elements of beauty but also the indigenous local traditions, customs and foods. Direct experience with

local people can be a unique selling proposition to attract tourists. Every state in India has some unique handicrafts, traditions and food. The rural tourism should not go for mass marketing .Rural tourism should develop a different strategy for different segment to make it successful. Trying to appeal every one is a common mistake. To be effective and successful, marketer needs to focus on particular segment or segments at a time.

Different segments for rural tourism are:

1. Newly married couple
2. Family
3. School children
4. College students
5. Patients
6. Foreigners
7. Artists
8. Adventurous persons
9. Corporate

Benefits of Rural Tourism

Rural tourism is a prospective enhancer for regional development. It gives an opportunity to the local people for earning extra money, and cerates demand for infrastructural development for the interest of local people and the tourist in the region. Rural tourism not only gives the scope to the rural masses individually but also develops the regional and rural economy as a whole. Development of tourism products should maintain a balance between ecological, cultural and socio-economic systems. For the development of rural tourism, natural forests, beautiful agricultural lands and historical places should be protected through local administration.

One of the major objectives for the promotion of rural tourism is to create employment generation. Rural tourism can also create additional indirect employment through the construction of village roads, hospitals, schools and through the revival of arts and crafts etc.

Another positive aspect of rural tourism is the cultural exchange among the local people and the tourists. This exchange of cultural develops good relationship and uplifts the people to adopt improved culture. Thereby, it reduces the regional violence, conflicts etc.

As ecotourism makes the environment sustainable through the maintenance of natural beauty, it makes the region pollution free. Ecotourism not only maintains natural beauty through plantation but also includes water conservation, energy efficiency, scope of additional earning for the local people etc.Besides making the environment pollution free, it also attracts the tourists to experience the charming rural natural environment, thereby benefit the rural economy.Rural tourism can also check migration of rural people into the urban centers.

Conclusion

If a proper marketing plan is done, rural tourism can bring lots of benefits to our society. It could be a sustainable revenue generating project for rural development of our government. It can help inflow to resources from urban to the rural economy. It can prevent migration of rural people to urban. Both short terms and long terms planning, implementing and monitoring are vital in avoiding damage to rural area. Environmental management, local involvement, sound legislation, sustainable marketing and realistic planning are crucial for development of rural tourism.

Rural tourism will emerges an important instrument for sustainable human development including poverty alleviation, employment generation, environmental regeneration and development of remote areas and advancement of women and other disadvantaged groups in the country apart from promoting social integration and international understanding. The government should promote rural tourism to ensure sustainable economic development and positive social change.

References:

www.incredibleindia.org
www.jharkhandtourism.com
www.tourismindia.com

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Water Management in India: An Explorative Study

Subir Ghosh[1]

Abstract:

Water is a precious natural resource and it is vital for the existence of living organisms including human beings. With the onset of new millennium the world is faced with the problem of acute scarcity of fresh water and India is no exception. In fact India is facing a serious problem of water availability in view of population growth and economic development. It is therefore imperative that the use of this precious national asset needs appropriate planning, development and management. India has to support 1/6th of the world's population with 1/50th world's land and with only 1/25th of the world's water supply. Over the years utilizable water resources including that of ground water resources is decreasing at an alarming rate. The problem is further compounded with rapid population growth. This has placed an ever increasing emphasis on industrial activities and dependence of agricultural factors on chemicals and fertilizers. Such heightened industrial activities and over-dependence of the agriculture sector on chemicals and fertilizers has led to the overcrowding of the carrying capacity of our water bodies to assimilate and decompose waste, which leads to contaminated water. It is a common knowledge that 80% of the diseases in India and over 1/3rd of the deaths are caused by consumption of contaminated water. Therefore, careful scientific management of water resources is of paramount importance to the country.

This paper therefore discusses the concept of Integrated Water Resources Management (IWRM) in India. Further, the paper highlights the laws relating to water management in India, strategies for sustainable water management, including development of aquifers, rain water harvesting and artificial recharge methods.

"We shall not finally defeat AIDS, tuberculosis, malaria, or any of the other infectious diseases that plague the developing world until we have also won the battle for safe drinking water, sanitation and basic health care."

– Kofi Annan, United Nations Secretary-General.

Introduction

Water is a valuable resource and also shared resource too. As water is essential for the survival of all living organisms and more importantly for the entire human race, water is considered as life. But today, most of the countries including developing countries like India are facing various types of water related problems. One of the reasons is the huge pressure of population which the countries are facing.

This rapid growth of population warrants greater and more efficient use of water for consumption (mainly for drinking) and production (mainly for the use of agriculture and industry) purposes. Therefore, the need of the hour is to put in place an effective system of water resource management. Integrated Water Resources Management (IWRM) is the practice of making decisions and taking actions while considering manifold viewpoints regarding efficient management of water resources. Activities concerning decision-making and initiating concrete actions involve institutional arrangements for adequate flow of funds, controlling reservoirs, framing new laws etc. Again decision-making process involves several stakeholders' financial institutions, Self-Help Groups (SHGs), Non-Government Organizations (NGOs), community participation etc. which make the water resources management process more dynamic and successful.

According to Global Water Partnership (GWP), Integrated Water Resources Management is "a process which promotes the coordinated management and development of water, land and related resources, in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems[1]"

India has about one-sixth (1/6th) of total world's population who survive on only with one-twenty fifth (1/25th) total water availability and they live on one-fiftieth (1/50th) of total world's available land. It may be worthwhile to note that while the total population of

[1] The Global Water Partnership is an international network open to all organizations involved in water resources management. It was created in 1996 to foster Integrated Water Resources Management (IWRM).

the country has increased two-and-half times over the last fifty years, the share of India's urban population alone has increased from 14 percent to 33Percent[2]. Consequently, with the increasing pressure of population, with increased industrial activities and agricultural activities on chemicals and fertilizers have all led to additional burden on carrying capacity of water bodies to decompose wastes materials.

This has led to occurrence of various water borne diseases. A study of India's Water Economy estimated that 80 percent of water borne diseases and more than one-third (1/3rd) of deaths occur due to the consumption of contaminated water[3]. It is therefore imperative to stress on the importance of water management in India.

Integrated Water Resources Management (IWRM) in India

Water has become a subject of worldwide concern in recent years. At the international level, several organizations and forums – including the World Watch Institute, World Water Forum, the World Bank and the World Water Conference have warned against the growing scarcity of fresh water supplies relative to the growing requirements for human consumption, for increasing food and agricultural production, and for meeting the demands of the rapidly growing industrial sector. They have also drawn attention to the excessive and imprudent use of water, overexploitation of ground water, the increasingly widespread pollution of water sources, and the prospect of aggravation of conflicts within and between nations over water. All these are real and serious problems and water related issues figure prominently in public and policy debates in our part of the world.

Further, there is a general agreement that water resource development has been far too preoccupied with the increased exploitation of this resource in the name of development without paying much, if any, attention to its environmental impacts; its efficient and equitable use; and long run sustainability. There is also recognition that major changes in policies, priorities, and institutions are necessary to address these issues. But widely divergent views exist on what kinds of changes are appropriate and how they are to be brought about.

The water resources and their proper use have a significant implication for a country like India. Though there is no proper survey conducted for water resources so far but according to the estimate of National Commission on Agriculture, there would be around 300 million hectares of total available ground water resources in India. In 1960s, it was proposed to increase the use of tube-well irrigation for agricultural purposes but actually only 1 percent of net agricultural land was covered by tube-well irrigation in 1960 and the same coverage increased to 27 percent by 1988. The demand for use of water in industrial sector rose to nearly 151 billion liters per day in 2001 which resulted in serious depletion of ground water tables but the government authorities did not initiate adequate measures to recharge ground water.

Such depletion of water tables has severe economic consequences for a country like India where agriculture is main economic activity. This leads to competition between urban and rural water users and also causes serious threat to the food economy.

Ground water being a dynamic and replenishable resource has to be estimated primarily based on the component of annual recharge which could be subjected to development by means of suitable structures and which could depend on the hydro-geological and climatic conditions[4]. Tables 1, 2 and 3 depict different types of water uses by different users. Table 4 shows the contribution of ground water in irrigation potential in India.

[2] Integrated Water Resources Management and National Water Policy—Prospects and Challenges, 2004.

[3] India's Water Economy, 2004 & 2013.

[4] Kumar C P (2003), "Fresh Water Resources: A Perspective", National Institute of Hydrology.

Table 1: The Percentage of People Using Different Water Resources in India				
	Tube Wells and hand - pumps	Taps	Wells	Other Sources
Source of Drinking Water in Rural Households	51%	27%	18%	3%
Source: www.mospi.nic.in, year: 2002.				

Table 2: Tube-Wells and Hand-Pumps in Rural Households (For Drinking	
Karnataka	60%
Gujarat	58%
Tamil Nadu	77%
Madhya Pradesh	60%
Orissa	63%
Uttar Pradesh	86%
Andhra Pradesh	54%
West Bengal	78%
Punjab and Chattishgarh	76%
Bihar	89%
Source: www.mospi.nic.in, year: 2002.	

Table 3: The Proportions of Urban India Using Different Water Resources	
Taps	74% households (80% in urban slums)
Tube-Wells and Hand-Pumps	20% households
Wells	5% households
Source: www.mospi.nic.in, year: 2002.	

Table 4: Contribution of Groundwater in Irrigation Potential of India			
Source	Irrigation Potential (Million Hectares)		
	Ultimate	Created upto 2003-04	Utilized upto 2003 -04
Major & Medium (Surface Water)	58.5	39.2	32.4
Minor Irrigation (Surface Water)	17.4	13.1	7.8
Minor Irrigation (Ground Water)	64.2	64.8	47.0
Minor Irrigation (Surface & Ground Water)	81.5	77.9	54.8
Total (Major, Medium and Ground Water)	140	117.1	87.8
Percentage of Groundwater in Irrigation Potential	46%	75%	54%
Source: CWC, 2006.			

Table 4 clearly shows that out of a total irrigation potential of 117.1 million ha created up to 2003-04, utilization has been to the extent of only 54%, i.e., 87.2 million ha.

India's rainfall scenario mainly depends on northeast and southwest monsoons, depressions, low pressure, local storms etc. Most of the areas of Indian peninsular

receive rainfall of less than 600 mm per year on an average. Therefore, the contribution of rainfall as a source of total water supply in India is inadequate.

Thus, with the rapid depletion of ground water resources due to intense pressure on its usage by both the urban and rural water users, and due to insufficient recharge because of inadequate rainfall, there is an urgent need to conserve available water resources and to use efficiently for the maintenance of ecological balance and sustainable development.

Indian Water Laws

In the post-constitutional period, the first two water laws passed by the Indian parliament are The River Boards Act, 1956 and Inter State Water Disputes Act, 1956. The whole idea behind these acts was to restore water and to make sure that household and industrial wastes are not passed into the main water sources.

The Central and State Pollution Control Boards were constituted in September, 1974 under the Water (Prevention and Control of Pollution) Act, 1974. Further, the Central Pollution Control Board (CPCB) was entrusted with the powers and functions under the Air (Prevention and Control of Pollution) Act, 1981. As the Central Pollution Control Board (CPCB) is responsible for collection and dissemination of technical data relating pollution of water, therefore, Water Quality Monitoring and Surveillance are the principle tasks of both central and state pollution control boards.

The two laws as indicated above also empowered the pollution control boards to enforce minimum punishment of imprisonment up to six years and fine for defaulters. These boards in some cases were given power to issue appropriate directions in this regard.

Further the Water Cess Act, 1977 was passed by the parliament for water prevention and control of pollution in India to deal with the financial problems (through the provision of some incentives) of these Pollution Control Boards. This law also empowered to different state governments to enact laws relating to drinking water facilities, conservation of water, irrigation, flood control, and water pollution etc. Again in 1987, another water policy was announced by Indian Government but it did not mention anything about the participation of private sector in water resource management. However, the National Water Policy of 2002 sought to bring about a paradigm shift in water management through privatization of water. This policy encourages different private bodies like Non-Government Organizations (NGOs), Self-Help Groups (SHGs) etc. to participate in planning, organizing, introducing innovative ideas, generating financial resources, development and management of different water resources.

Strategies for Integrated Water Management

Integrated water management is an important tool for poverty alleviation, environmental sustainability and overall economic development in any developing country including India. Since fresh water has potential to control over several water borne diseases caused by contaminated water, it is the primary task of the water users to use fresh water as far as possible. As the sources of water are limited and water availability in India is under remarkable pressure due to rapid population growth, increasing demand of urbanization, rise in demand for agricultural and industrial use and demand for maintaining ecological balance etc., proper strategic management of water resources is of vital necessity. To fulfill the objective of sustainable development, the strategies of water management should focus on the following grounds.

Conservation of Water

Public awareness for water conservation should be made by government through various media like television, radio, news paper, internet etc. All rural as well as urban citizens should be educated regarding the available source of water supply, costs involved in supplying fresh water both in monetary terms and in terms of opportunity lost for wastage of water. Again, special awareness should be created among the women who are the major water users. As another measure of water conservation, fixation of water meter in each household is recommended with nominal charge for use of water.

Water Re-Cycling and Re-Use

Water re-cycling and re-use are the two major tools of efficient water management strategies. In most of the major urban areas, there is severe problem of water supply as the sources of water supply are limited. In urban areas, about 30 percent to 40 percent of total municipal water supply is wasted through leakage at

the time of distribution. Therefore, the concerned municipality should take appropriate steps in this direction towards minimization of wastage water through leakage. In industrial sector also there is scope to economize the water usage through the adoption of new technologies. According to the Bureau of Industrial Costs and Prices, 10 to 30% saving in water consumption in industries is possible by recycling, modifications in processing and evaporation control etc[5].

Apart from controlling of leakage of water and adopting water conservation method, the industrial units may also introduce appropriate technologies for water processing, pollution control mechanism, water re-cycling, re-use etc. so that waste grey / black water can be used for different purposes like grease trap, anaerobic filter etc. and filtered waste water can be passed to wet land, ponds etc which can be used for irrigation purposes. It is also noteworthy to mention that today industrial effluents and municipal wastewater are treated and are used for several other non-drinking purposes in India.

Development of Flood Plain and Water Logged Areas

Flood plains and water logged areas may be used as water reservoirs. Appropriate management of flood plain may supply additional requirement of water for the area. The ground water management and development of Yamuna flood plain is a successful instance of scientific water resources management in Delhi. Reserve water in water logged areas may be used for irrigation purposes. Therefore, proper development and management of flood plain and water logged areas play crucial role in water resources management.

Development of Ground Water in Canal Commands

This is one of the appropriate methods of ground water management. Under this method, surface water is stored in one place adjacent to canal commands and recharge by development of ground water. It can serve the purpose of sub surface drainage to the areas.

Conclusion

The new millennium is faced with the problem of scarcity of fresh water, the critical input for survival of all living organism. Integrated water resource development and management and legal framework backed by adequate infrastructure is thus a necessity of this new millennium to keep up the tempo of development and also to ensure availability of clean fresh water and environment to the next generation. This will need appropriate infrastructure, adequate fund, legal provisions and above all awareness and involvement of the people. Private sector participation is therefore one of the important factors in Integrated Water Resources Management (IWRM).

For this purpose, local communities, NGOs, SHGs etc need to be roped in to participate in water management in India. But now in India, most of the water management projects are in the hands of government bodies and these projects are suffering from inefficient policy decisions which involve non-transparent and non-participatory process of water management.

However, there needs to be a paradigm shift in the policy of water management in the country and should incorporate a participatory approach involving local bodies such as municipalities in urban areas and Gram Panchayats in the rural areas. Such bodies should involve themselves in operation, maintenance of water (structures/ facilities. Water User's Associations may be formed comprising of the user members of the bodies. Such associations may be suitably empowered to levy water charges for domestic use. Suitable penal provisions may be inbuilt in the water charges for misuse/irrational use of water. Water meters may be installed in each and every user's location and a ceiling in the usage of water may be considered beyond which additional charges may be levied. Such user's associations may also be sensitized by Government functionaries on the significance of rain water harvesting in appropriate water management in the country. The associations would, in-turn provide suitable training to the actual users in this aspect.

References

APFM (The Associated Programme on Flood Management) 2012. Technical Document No. 1, second edition, "Integrated Flood Management-

[5] R S Goel (2004), "Integrated Water Resources Management and National Water Policy—Prospects and Challenges", ICFAI Journal of Infrastructure, December.

Concept Paper", World Meteorological Organization and Global Water Partnership.

Global Water Partnership, 1998. Water as a Social and Economic Good: How to Put the Principle into Practice. TAC Background Paper No. 2.

Global Water Partnership, 1999. The Dublin Principles for Water as Reflected in a Comparative Assessment of Institutional and Legal Arrangements for Integrated Water Resources Management. TAC Background Paper No.3.

Global Water Partnership, 2000. Integrated Water Resources Management. Technical Background Paper No. 4.

Kumar C. P (2003), "Fresh Water Resources: A Perspective", National Institute of Hydrology.

P Nair and Deepak Kumar (2005), *"An Introduction to Water Management",* IJ Infrastructure.

Rajiv Khare (2006) *"*The Journey of Water Resource Law and its Management: Doom or Dawn?*", The Icfai Journal of Environmental Law*, *Vol. V, No. 3.*

R S Goel (2004) "Integrated Water Resources Management and National Water Policy— Prospects and Challenges", *Icfai Journal of Infrastructure, December.*

Sudha Menon(2007) "Ground Water Management Need for Sustainable Approach", The Icfai University Press.

The Weekly Economic Bulletin, issued by the Investment & Technology Promotion Division, Ministry of External Affairs, Government of India Period: Upto–25 November 2002.

Vaidyanathan A (2006), "India's Water Resources: Contemporary Issues on Irrigation", Oxford University Press.

www.greatlakesdirectory.org/zarticles/083002_great_lakes.htm

www.imf.org/external/pubs/ft/fandd/1997/03/pdf/haarmeye.pdf

www.unesco.org

vigyanprasar.com/comcom/develop46.htm – Supplemental Result english.kowaco.or.kr/

EngUser/Info/Menu_Html.aspx?menuid=000003&id=000042&depth=3&order=1

www.wsws.org/articles/2002/sep2002/wate-s07.shtml

http://www.angelfire.com/bc/nihhrrc/documents/fresh.html

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1 Ahl, H.J., 2002, The Making of the Female Entrepreneur, JIBS Dissertation Series No 015, Jönköping International Business School, Sweden.

2. Davidsson, P., 2003, The Domain of Entrepreneurship Research: Some Suggestions, in Katz, J. & Shepherd, D. (eds.), Advances in Entrepreneurship, Firm Emergence and Growth, Vol 6, Greenwich, CT: JAI Press.

3. Gartner, W.B., 2001, Is there an elephant in entrepreneurship? Blind assumptions in theory development, Entrepreneurship Theory and Practice, 25, 4, 27-39

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- Poona College of Pharmacy, Pune
- New Law College, Pune
- Yashwantrao Chavan Institute of Social science studies and Research, Pune
- Interactive Research School for Health Affairs (IRSHA), Pune
- Research and Development Centre in Applied Chemistry, Pune
- Yashwantrao Mohite college of Arts, Science and Commerce, Pune
- Audiology and speech language Pathology at Medical College, Pune

NEW DELHI

- Institute of Management and research, New Delhi

NAVI MUMBAI

- Dental College and Hospital, Navi Mumbai
- College of Nursing, Navi Mumbai

SANGLI

- Medical College and Hospital, Sangli
- Dental College and Hospital, Sangli
- College of Nursing, Sangli
- Institute of Management and Rural Development Administration, Sangli

KOLHAPUR

- Institute of Management, Kolhapur

KARAD

- BVDU - Yashwantrao Mohite Institute of Management - Karad

SOLAPUR

- Abhijit Kadam Institute of Management and Social Sciences, Solapur
- Abhijit Kadam Institute of Management and Social Sciences (MSW), Solapur

RESEARCH INSTITUTES

- Interactive Research School in Health Affairs (IRSHA), Pune
- Research and Development Centre in Pharmaceutical Science and Applied Chemistry, Pune
- Yashwantrao Chavan Institute of Social Sciences, Studies and Research, Pune

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About Institute

Abhijit Kadam Institute of Management and Social Sciences is a premier leading B-School in Western Maharashtra located in Solapur. The institute is approved by AICTE, recognized by UGC and is under the umbrella of Bharati Vidyapeeth Deemed University, Pune. It has a well-established history and prides itself for its academic reputation. Having been set up in 1981, AKIMSS has emerged as a citadel of learning and research with a symbiotic relationship with the worlds of business and industry.

We create an environment within which actionable learning takes place and thus provide the breeding ground for managerial leadership of the future.

We presently offer post graduate programmes MBA, MCA, MSW and undergraduate programmes BBA and BCA. The institute has excellent full time faculty with a proven track record and a slew of visiting faculty who bring the experience of the real world into the classroom. Specialist scholars come and deliver lectures enabling the student to expand their horizons of gyan (knowledge), buddhi (intelligence) and vivek (the consciousness to discern). The result is that our product is so good that their placement takes place with minimal effort.

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