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**A Story of Maggi**  
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## **Book Review**

**Arise, Awake**  
*Maruti N. Sadavar*



Karnatak Law Society's  
Institute of Management Education & Research  
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## From the Editor's Desk.....

Dear Readers,

Greetings from the IMER family!

We are pleased to present the twelfth volume of "Tatva" to you. "Tatva" is a peer reviewed journal published annually and is a platform for scholars, researchers and practitioners to share their knowledge and experience in the field of management. This issue contains ten scholarly research articles and one book review. We hope that these articles will be of great value to you.

Financial service accessibility has been an important option for alleviating poverty and economic development. Recently, Indian government has been actively pursuing various policy options to increase financial service accessibility. Financial accessibility minimizes the social omission and enhances the economic growth. The first article is an attempt made by the authors to study the accessibility of financial services to rural inhabitants in Karnataka state. The second article explores alternatives regarding adoption of self-service technologies in banking industry with a clear focus in the rural areas. In the third article, the researcher has conducted a study on Hotel Food Waste and has given valuable suggestions to turn the wastage into alternative food products for birds and animals, for producing bio-gas and fertilizers etc. The fourth article is an evaluation of marketing of groundnut and sunflower in Bagalakot district of Karnataka state.

Training and Development programmes contribute directly to the development of employees in an organization. In the fifth article, authors have conducted a study on Evaluation of Training and Development programmes in a bank and have made suitable suggestions to have a greater impact on the bank staff. The sixth article discusses on impact of modernization and stress management, it focuses on stress related diseases and provides remedies for the same. The seventh article is an empirical study of the effects of monetary policy on selected private and public sector banks.

Training and placement cell in an institute assist their students for the campus placements. It also undertakes the responsibility of giving the necessary training to the students to enhance their employability skills. The eighth article proposes to develop a model for the training and placement cells to function effectively and efficiently in a technical and management institutions. It has been our practice to include a case study and a book review. This issue carries a case study of URO enterprises and a book review on entrepreneurship. The name of the book is "Arise, Awake", authored by Rashmi Bansal. Arise, Awake is the story of 10 young entrepreneurs who started a business while studying in college, or right after graduation. In order to involve students' participation in the research, in this issue, we have included a research article on the interesting story of Maggi written by our students.

We are thankful to all the members of our editorial board, reviewers for their constant support and guidance in our journey towards continuous improvement. We thank all the authors for contributing scholarly articles, case studies and book reviews. We thank all our readers for their patronage, encouragement and invaluable feedback. We take this opportunity to invite contributions from you and your colleagues through scholarly articles, case studies and book reviews.

We wish you and your family a very happy and prosperous New Year.

**Dr. Poornima M. Charantimath**



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**Book Review**

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## Accessibility of Financial Services to Rural inhabitants - A Study of Karnataka State

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### Abstract

*Financial service accessibility has been an important option for alleviating poverty and economic development. Recently, Indian government has been actively pursuing various policy options to increase financial service accessibility. Financial accessibility minimizes the social omission and enhances the economic growth. In this article, we analyze growing interest in financial accessibility, define them and demonstrate their existence in the developed and developing worlds. We have tried to focus on whether financial accessibility has been implemented in the state of Karnataka where banks claimed that financial accessibility is complete. Majority of the rural inhabitants of Karnataka state have financial accessibility but it is just more than having bank account. Financial accessibility has deeper meaning than what has been usually portrayed. Our results show that social omission and personal deficiencies contribute to lesser financial access. We opine that financial accessibility is not just a single colossal phenomenon and need to be analyzed in different dimensions ranging from having bank account to usage of modern financial services.*

**Key words: Financial services, Micro-credit, Financial accessibility, Micro-finance**

### Introduction

In the late twentieth century, inequality has often been explored through the concept of social omission (Byrne, 1999). An important aspect of social omission that was often ignored is omission from the mainstream economy. Based on the assumption that omission from access to banking services creates poverty, proponents of financial accessibility are advocating for every person to have, at a minimum, a no frills bank account. They argue that access to safe, easy and affordable financial services for the poor, vulnerable groups, disadvantaged areas and production sectors relying on old technologies (such as agricultural) is required for accelerated growth and for reducing income disparities and poverty (Demircuc-Kuntet al., 2008). As such, financial accessibility has become a policy priority in many countries including India.

When announcing 2005, as International Year of Micro-Credit, UN Secretary- General Kofi Annan (2003) noted that: 'The stark reality is that most poor people in the world still lack access to sustainable financial services, whether it is savings, credit or insurance. The great challenge before us is to address the constraints that exclude people from full participation in the financial sector.' There is a worldwide search for novel approaches to alleviate poverty that may prove more effective than previous efforts (Chibba, 2009).

Access to affordable finance may enable the poor to undertake economic activities (such as small business loans) and to take advantage of growth opportunities necessary for financial empowerment. It is viewed as a precondition for achieving accelerated economic growth as well as for a reduction in income inequality and poverty. As stated by Rangarajan Commission in India. The sheer breadth of the problem prompted a special United Nations task force to produce a blue book that raised the basic question: 'why are so many bankable people unbanked?' The term unbanked is used to refer to those individuals and households who do not have a bank account.

Financial accessibility is poised to become the new mantra for poverty alleviation, in a manner similar to that of micro-credit and micro-finance some ten to fifteen years ago. Regardless of the early promise of micro-credit and microenterprise, it did not lift the very poor out of poverty (Cooney and Shanks, 2010). This may also be the fate of financial accessibility programmes. As we will show in this article, financial accessibility is gaining momentum both as a concept and as a policy solution, and, while it can do some good, it is not likely to change the economic fate of the world's poor. Regardless



of this, given the recent attention been given by the Indian government in the name of "Jan-dhanYojana", we need to understand it and assess its feasibility and merit.

## Literature Review

### Understanding of financial accessibility

A review of the literature reveals that there is no universal definition of financial accessibility broadly speaking; financial accessibility means access to finance and financial services for all in a fair, transparent and equitable manner at an affordable cost (Sarma, 2008). Fuller and Mellor (2008) noted that financial accessibility is the desire to develop 'alternative', welfare-oriented (rather than profit-driven), reliable, affordable and accessible financial services for all sections of the population. Others, however, view accessibility as a market driven solution for poverty alleviation (Alpana,2007). Financial accessibility is a desired outcome regardless of the motivation behind it as it can help poor people access financial services at a lower cost and reduce the consequences of poverty.

While micro-credit schemes are viewed as an integral part of financial accessibility as they bring saving and borrowing opportunities to marginalized groups, there is an aspect of financial accessibility that they do not cover micro-credit schemes which are based on a group of neighbors, usually women, who keep each other honest regarding saving and repaying loans. Financial accessibility, is mostly geared to the individual household level. While micro-credit focuses on loans and saving, financial accessibility includes all banking products alongside saving and loans. The Committee for Financial Sector Reforms noted that over-reliance on credit can lead to dangerous long-term results, including over-indebtedness and wasteful use of scarce resources. Finally, to some extent, micro-credit schemes view the poor as needy and outside the free market, while advocates of financial accessibility sees the poor as regular clients with fewer means. Most importantly, micro-credit can flourish in an environment of where financial accessibility is nonexistent.

### Who don't have financial service access and why?

Not surprisingly, those with access to financial institutions tend to be males, middle-aged professionals in full-time employment, in middle- to high-income groups who have cars, telephones and are home owners (Heimann and Mylenko, 2011). Conversely, those tending to be without are mostly women, the young, the old, the unemployed, those in semi-skilled or manual jobs and those of low socio-economic status.

Additional studies have found that people in rural areas or poor neighborhoods, who are rarely studied, are also less likely to access financial institutions (Carboet al., 2005). The majority of the literature on financial accessibility focuses on the urban poor, and we know very little of the level of financial accessibility in rural areas. It is quite possible that some who are unbanked may be so out of preference. These people who mistrust financial institutions, may prefer to deal with cash and to have immediate access to their money, may fear that government will tax their activities or may not want their neighbors to know that they are in possession of money.

### Measuring financial accessibility.

There are two key approaches to measuring financial accessibility. The first and most popular is to calculate bank accounts (or bank branches) per population (adults or households) (Beck and De La Torre, 2006). As Sarma (2008) noted: 'As banks are the gateway to the most basic forms of financial services, banking accessibility is often used as analogous to financial accessibility' Although many well-to-do consumers may have more than one account, it is considered a solid estimate of how many people are served by banks. The problem is that this approach is not only ignoring those with many accounts, but also that it does not assess accessibility to other financial services or take into account the experiences and perceptions of those who are unbanked.

The other approach, which avails itself to people's experiences and perceptions, is to survey households in a given area. This method enables researchers to examine accessibility to a wide range of financial services and assess the depth of financial accessibility. This approach is more costly and less often used.

### Financial Accessibility in India

In India, the nationalization of fourteen commercial banks in 1969 was a major landmark in the journey towards mass banking and away from class banking (Thingalaya, 2009). Remarkable progress was made in extending banking facilities and mitigating to some extent the regional inequalities in availability of banking services. Thousands of banking centers in remote villages started appearing on the banking map of the country. While institutional innovations in the rural credit delivery system



were introduced, the Indian government realized that the banking system had yet to reach a wide section of the population both in rural and urban areas. Mohan (2008) noted that as in many developing countries, the Reserve Bank of India (RBI) focuses not only on inflation but also on growth. Realizing that micro-credit failed to provide the expected growth, since 2004 enabling access to the largest number of people has become a top priority for the RBI. Ramesh and Sahai (2007) estimated that 'on an all-India basis, 59 per cent of the adult population in the country has bank accounts. 41 per cent of the population is, therefore, unbanked.' The Indian Council for Research on International Economic Relations (ICRIER) rated countries according to their levels of financial accessibility and found India to be lagging behind other nations (Sarma, 2008). India was ranked 50 out of the 100 studied countries included, although the bottom two thirds of countries had low accessibility rates. As such, India continues to suffer from a serious case of financial inaccessibility. In its January 2008 report, the Committee recommended launching a National Rural Financial Plan to provide access to comprehensive financial services, including credit, to at least 50 per cent of the financially excluded rural households by 2012, with the remaining households to be covered by 2015. To achieve these targets, it stipulated that 'semi-urban and rural branches of commercial banks and RRBs [Regional Rural Banks] should cover a minimum of 250 new cultivator and non-cultivator households per branch per annum', which it suggests is the most promising method of poverty alleviation.

Responding to the need for achieving financial accessibility, the bankers have started reaching out to the poor, and some are moving very fast. Even before the deadline, a few have declared the achievement of 100 per cent financial accessibility, adopting the route of 'no frills' accounts in the selected districts (Thingalaya, 2009). However, many questions remain unclear about the Indian experience of financial accessibility.

## Research Questions

The above review suggests that while financial accessibility is the newest form of poverty alleviation, much is still unknown about it. Most studies use macro analyses that provide regional or national data on the number of accounts divided by population size. Few have studied the household perspective and even fewer have paid attention to households in rural communities. The very few studies on rural populations have tended to focus on only one district and do not provide a comparative vantage point (Ramji, 2009).

Given that banks in India claimed successful comprehensive financial accessibility, we aimed to study the breadth and depth of financial accessibility in rural Karnataka state, and this study sheds light on the validity of claims of financial reach and breadth. Further, since the mere opening of bank accounts is not sufficient for inclusive growth, the study identifies barriers in accessing savings, credit and other financial services. We set to study these topics, focusing on the following questions:

1. How many households in the studied villages are financially included and what financial services are available to them?
2. From the perspective of rural villagers, what are the key perceived barriers that prevent financial accessibility?
3. What are the personal characteristics that distinguish the banked from the unbanked?
4. What is the role of micro-credit organizations (self-help groups) in increasing financial accessibility? Do the banked belong to self-help groups?
5. Are there people who are not interested in financial accessibility? What are their reasons?
6. What are the financial unmet needs of rural households in India?

## Methods

Similar to Mohan (2008), we administered household surveys to a sample of rural residents in four districts in Karnataka state: Koppal, Bagalkot, Uttara Kannada and Mysore. These states were randomly selected as they represent four political regions of Karnataka. Koppal represents Hyderabad Karnataka, Bagalkot represents Bombay Karnataka, Uttara Kannada represents Karavali Karnataka and Mysore represents Hale Karnataka. We resorted to selecting whole villages, as there are no lists of all people in the state or in a given neighborhood, and for each district we randomly identified one or two villages and aimed to study every household in those villages. The sample may not be representative of the population, as the chance of getting a typical village in the Bagalkot district was high and cannot be statistically assessed.

Our unit of analysis was a household, which is 'usually a group of persons, who normally live together and take their



meal from a common kitchen, unless the exigencies of work prevent any of them from doing so'. While we interviewed the person(s) that was at home, we collected data on each family member regarding background characteristics and financial involvement. In each village, local leaders were recruited to provide legitimacy and a list of every household, which enabled us to reach over 95 per cent accessibility in each of the studied villages. There were no refusals and the missing households were empty upon two visits to the village.

### Research Instrument and data collection

Based on the literature and on our research questions, we composed an eight page questionnaire that asked about family background; bank access information; income, assets and savings; loans; and expectations of development work by the government. The questionnaires were written in Kannada by the authors and with help of community leaders. All questions were factual and the majority (over 90 per cent) was close-ended. On average, an interview lasted 20 minutes, and they were conducted between June and November 2014.

### Sample

In all four villages selected out four districts, there was a bank in the village (through a weekly visit) or in a nearby larger village. All villagers regularly visited the larger villages where the local market was located. We discussed coverage with the branch managers of the nearest banks and in all cases they knew many families by name and their specific financial situation. As cost of labor in India is reasonably low, banks can afford to hire extra personnel to travel to small villages in rural areas and provide a weekly bank service, a luxury which does not exist where the cost of labor is high. As such, bank employees are familiar with villagers and are eager to open new accounts.

Table-1 shows the demographic characteristics of the sample. We found that the average household size is 3.66 persons. In Bagalkot, there were more people on average in households (4.0), while in Koppal there were the fewest (3.51). Regarding religion, significant differences existed between the villages. In Koppal and Bagalkot, almost all households were Hindu. In Uttara Kannada nearly 41 per cent were Muslims.

Regarding caste, there was great variability between the sites. In Koppal, the majority of subjects were members of the upper-level caste (others), while in Mysore only 4 per cent belonged to this caste. In all cases, less than 5 per cent of villagers were members of the lowest caste - Scheduled Tribe (ST). The majority are members of the other backward communities (OBC), a designation of middle-level caste. These differences are statistically significant

Given that rural India is a very traditional environment, we studied the presence of a husband/adult man in the household as a possible explanatory variable for variability in bank accounts. We found statistically significant differences between the sites regarding the presence of a husband/adult man in the household. In Uttara Karnataka, only 45 per cent of the families reported a husband living at home while in Bagalkot the percentage was 98 per cent. What we did not study is whether the missing adult man is dead or away (such as working in construction in a Gulf country). Finally, regarding annual household income, we also found significant differences. Using ANOVA and the Scheffe test reveals that the Bagalkot sample was significantly richer.

### Findings

Our first research question dealt with how many households in the studied villages are financially included and what financial services are available to them. We found that the majority of households have access to banks and only 23 per cent reported that no one in the household has a bank account. In 2007, it was estimated that 41 per cent of the population was unbanked (Ramesh and Sahai, 2007; Thorat, 2007), which is perhaps an indication of the success of the financial accessibility initiative. In about half of the households (44 per cent), more than one person has a bank account.

The first question asked what aspects of financial accessibility are available in the villages? Table 2 lists a set of possible financial services and their use by state. The most accessible financial services are savings accounts (69 per cent) and loans (62 per cent). These are followed by life insurance (34 per cent). The least accessible financial services (less than 10 per cent) are credit cards, money transfer and credit counseling. Again, in the Mysore district villages there were lower levels of making bank-related savings and of loans, but higher use of advanced financial services. Higher rates of possessing life and general insurance were noted mostly in the Koppal village. These findings suggest that, regardless of the wide coverage of bank accounts, real financial accessibility is far from being reached and is subject to geographical variability.

The second question focused on barriers to financial accessibility that are perceived as being most salient. To



approach this question, we used two methods. First, we asked those without bank accounts to list all the reasons as to why they do not have one. The most commonly reported reasons were: no security to offer (34 per cent), not aware of any bank (25 per cent), no need for bank services (23 per cent), bank is too far away (17 per cent) and not on my mind/did not consider (14 per cent). It was impossible to assess if those uninterested in bank accounts said so because they rationally preferred not to be included or that their abject poverty was so serious that they felt unworthy of such services.

We also asked people if they are comfortable asking banks for a loan. The majority of respondents who did not borrow felt comfortable. Again, the Mysore district village had the highest percentage of people uncomfortable with asking for a loan (28 per cent). For those households, we asked about the reasons for not asking for loans. The top answers were: bank never approached me (53 per cent), lack of information about loans (49 per cent), the bank is too far and offers high interest rates (43 per cent each), bank is unfriendly (35 per cent), readily available local money-lenders (38 per cent), no bus (transportation) (32 per cent) and lack of trust in banks (29 per cent). Clearly, those financially excluded suffer from accessibility barriers and financial illiteracy. Those who do not feel comfortable approaching banks are more suspicious of the banks, in addition to lacking financial literacy.

The third research question focused on personal characteristics that distinguish the banked from the unbanked. We performed a set of bi-variate analyses to be discussed here and later will report the results of a binary-logistic regression.

Religion, however, was a significant variable in explaining variability in financial omission. This difference was statistically significant ( $\chi^2 = 11.86$ ,  $df = 2$ ,  $p < 0.01$ ). Caste was also statistically significant ( $\chi^2 = 66.2$ ,  $df = 3$ ,  $p < 0.001$ ). Surprisingly, the lowest caste (scheduled tribe: ST or Dalit) is actually hardly been omitted (13 per cent), almost at the same level as and slightly better than the highest castes (16 per cent). This is most likely due to planned government programs designed to provide preferential treatment to people who are ST and were discriminated against for numerous generations. The second level caste, the scheduled caste (SC), is significantly more financially omitted (58 per cent), followed by the OBC, with 21 per cent of their member households not accessible.

Education was also found to explain variability in financial omission. Those households with at least one high school graduate (SSLC: Secondary School Leaving Certificate) and higher were significantly less likely to be omitted as compared with those without a member with a similar education (12 per cent and 37 per cent respectively;  $\chi^2 = 63.27$ ,  $df = 1$ ,  $p < 0.001$ ).

Having certain financial resources also explained variability in omission. Those who own land are less likely to be financially omitted as compared with those who do not (21 per cent and 52 per cent respectively;  $\chi^2 = 26.65$ ,  $df = 1$ ,  $p < 0.001$ ). Similarly, those who own a house are less likely to be omitted as compared to those who lease (21 per cent and 46 per cent respectively,  $\chi^2 = 16.63$ ,  $df = 1$ ,  $p < 0.001$ ).

From these analyses, we find that caste, religion, education and command of resources were significant in explaining financial accessibility. However, these findings will be further reviewed when we discuss the results of the binary-logistic regression.

We found that the distribution of access to bank accounts was uneven. In three villages, it ranged between 86 per cent and 89 per cent, while in Mysore village it was only 46 per cent. Such differences can be attributed to omission practices by local banks or to the low-income levels. However, Koppal, with a similar mean household income, reported 86 per cent financial accessibility. Mysore district reported the lowest rate of family members with beyond high school education (60 per cent), which may explain financial illiteracy, but Koppal, which has high financial accessibility, reported 56 per cent of households without a high school graduate.

We also found great variability in the manner by which those who do not use banks explain their omission. In Koppal, the top reported reason was 'no need for bank services'. In Bagalkot, the top answer was 'fear of inability to pay'. In Mysore, it was 'no security to offer'. In Uttara Kannada, it was a combination of 'too long to get a loan' and 'no need for banking services'. As such, the differences between the villages and states are many and are significant but may be the result of characteristics of residents rather than inherent state differences.

To assess the combination of village and characteristics, we performed a binary-logistic regression that included all the above household characteristics and village location. Most variables entered in the model were not statistically significant at the 0.05 level. As seen in Table 3, one significant variable explaining financial accessibility, defined as having a basic bank account, was education. Unlike caste and having taken loans, education can serve as a goal for government intervention. If at least one household member has an education level of above high school, the odds of being financially included is significant and 4.22



times greater than households where no-one has achieved high school education. Having loans significantly reduces the chance of being financially included. The majority of those who are members of SHG reported to have loans (81 per cent), while fewer households with non-SHG members reported to have loans (64.5 per cent). Because a small number of households are members of SHG, only 19 per cent of those who have loans are members of SHG. The odds of accessibility of those with loans are half those without loans. It should be noted that many households took loans from self-help groups, money-lenders or from neighbors or relatives but not from banks, which explains why those who took loans are less likely to be financially included. However, it does suggest that for many participation in these forms of financial transactions does not act as a stepping stone to accessibility in more formal financial services.

Among the four castes, when compared with the second level caste (SC most financially omitted) only the OBC (other backward caste) is significantly different, with the odds of Accessibility 3.3 times those of the second level caste. Regarding top caste households (others), they can be socially valued yet financially poor and omitted. Finally, the three villages other than Mysore district had significantly greater chances of being financially included. The -2 log likelihood was 440.4 and the Cox-Snell R square was 0.298.

The fourth research question dealt with the role of self-help groups in access to financial accessibility. While it is said that participation in micro-credit groups known as self-help groups (SHG) helps reduce financial omission, we found that there was no statistical difference between membership in SHG and banking, as seen in Table 3. In both groups (those who can and those who cannot borrow from SHG), about 23 per cent of households are unbanked. Among the financially included, only about a quarter (26 per cent) listed an SHG as a source through which they became aware of the bank, which was far below a family member (73 per cent) and almost as much as advertisement and bank employees (29 per cent and 26 per cent respectively).

The fifth question assumes that not all people would like to be financially included. Hence, we asked if there are people who are not interested in financial accessibility and for what reasons. Only 52 interviewees (31 per cent) out of the 169 who were financially omitted stated they either do not need bank services and/or had never considered the possibility of banking. We found that having the highest level of education, having a male adult in the house, income, owning land, owning a house, membership in an SHG and religion did not explain the difference between the omitted who are interested or not interested in banking. Among those not interested in banking, more of them are OBC (53 per cent), whereas among those interested in banking, more are SC (47 per cent).

Our sixth and final question focused on the unmet financial needs of people in rural area. As noted in Table 2, most households reported to not have debit or credit cards, money transfer services or credit counseling, and less than a third have access to insurance services. These financial options are clearly not available to the majority of studied households. In addition, we asked the respondents about their interest in another set of financial services. About two thirds of the respondents (65 per cent) wanted general information about the bank. A similar number (58 per cent) asked for help using bank services. These findings suggest that even the so-called banked are quite unaware of what the banks offer, how they practice and how to use them effectively. About half asked for advice in investing savings (47 per cent) and about a fifth asked for assistance in farm-related issues.

## Conclusions

There is still ambiguity regarding what financial accessibility is and how to define it. If we apply the simplistic definition of how many households in a given geographical area are banked, with at least one member of the household having a bank account, then our study shows good coverage. In the four villages we studied combined, three quarters of households are banked. This high rate was lowered by the village in Mysore district where only 46 per cent of the households are banked. This village likely does not represent the Mysore district, as it is more poverty stricken than most villages. Yet, it represents many villages of similar socio-economic status throughout Karnataka. Put differently, in the case of most villages, bank accounts are becoming the norm, but for the poverty-stricken villages, it is yet to come. This high rate of financial accessibility (77 per cent) is above the reported national standard just two years before the study was carried out and at the time of the Rangarajan Commission report (Ramesh and Sahai, 2007). In 2007, Usha Thorat, Deputy Governor of the Reserve Bank of India, reported 'that on an all India basis 59 per cent of adult population in the country have bank accounts - in other words 41 per cent of the population is unbanked' (Thorat, 2007). As such, the campaign for full financial accessibility is quite successful. However, the use of bank accounts per population is a simplistic measure of financial accessibility. The



poverty-stricken village in Mysore district reported the lowest rates of bank accounts, yet it also reported higher rates of using advanced banking services among those who are banked. Furthermore, even though three-quarters of studied households are banked, less than 10 per cent reported to know about the availability of investment options. These findings suggest that while access to bank accounts is indeed increasing, financial literacy and advanced use of bank services are lagging. It also suggests that financial accessibility is not a single phenomenon and should be studied in a multi-layered fashion, ranging from being banked to making full use of modern financial instruments.

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Table 1. Characteristics of the study participants

Variable	Koppal (N=131)	Bagalkot (N=162)	Uttara (N=250)	Mysore (N=187)	Total (N=730)	Results of statistical tests
Household size	3.51	4	3.56	3.6	3.66	F=19.89*
Religion	Hindu 99.2%	Hindu 99.5%	Hindu 45.4%	Hindu 100%	Hindu 81.5%	$\chi^2 = 90.35$ ***
Caste	Chris --	Chris --	Chris 12.4%	Chris --	Chris 4.24%	
	Muslim 0.8%	Muslim 0.5%	Muslim 41.2%	Muslim --	Muslim 14.35%	
	ST 1.5%	ST 6.3%	ST 4.2%	ST 0.5%	ST 2.8 %	$\chi^2 = 65.36$ ***
	SC 0.8%	SC 10.9%	SC 10.0%	SC 36.9%	SC 17.0%	
	OBC 40.5%	OBC 55.5%	OBC 55.8%	OBC 58.3%	OBC 52.8%	
	Others 57.3%	Others 27.3%	Others 30%	Others 4.3%	Others 27.4%	
Husband in household	95.40%	98.00%	45.60%	78.10%	73.77%	$\chi^2 = 45.36$ ,***
Annual household average income	80,893 INR	105,906 INR	41,584 INR	54,305 INR	66,171 INR	F = 8.62*

**Notes :** \*Denotes significant differences at the 0.05 level. \*\*\* Denoted significant differences at the 0.001 level

Table 2. Use of financial services by Districts

Financial/Products/Services	Koppal (N=131)	Bagalkot (N=162)	Uttara (N=250)	Mysore (N=187)	Total (N=730)
Household with a bank account	86.30%	85.80%	89.20%	46.00%	76.80%
Savings accounts	77.90%	80.90%	73.20%	47.60%	69.20%
Household with loans	95.40%	63.60%	58%	62.60%	62.10%
Life insurance	48.10%	37.70%	24.40%	33.70%	34%
General insurance	44.30%	9.90%	6.80%	12.30%	15.60%
Kisan (farmer) credit card	61.80%	1.90%	7.60%	1.60%	14.50%
Health insurance	11.50%	20.40%	2.80%	7.00%	9.30%
Debit/credit cards	5.30%	14.80%	2.40%	12.80%	8.40%
Money transfer	2.30%	16.70%	1.60%	4.30%	5.80%
Credit counseling	0.00%	6.20%	0.00%	9.60%	3.80%

**Note :** \*\*\*Denoted significant differences at the 0.001 level.



**Table 3. Binary logistic regression explaining likelihood to be financially accessible**

Variable	Categories	Significance (p value)	Odds ratio (ExpB)
Caste	Lowest caste (ST)	0.572 NS	5.545
	Second lowest (SC)(Reference)	---	---
	Third caste (OBC)	0.001	3.320 ***
	Top caste (Others)	0.055 NS	1.718
Ownership of house	Yes (Reference No)	NS	---
Ownership of land	Yes ( Reference No)	NS	---
Religion	Non-Hindus( Reference Hindus)	NS	---
Membership in SHG / Micro credit	Yes ( Reference No)	NS	---
Highest education of any member in household	High school (SSLC) and above ( below high school reference)	0.001	4.22 ***
Total family income	Sum of all income in Rs	NS	---
Having loans	Yes( Reference is no)	0.015	0.504 *
Household size	Number of members in Household	NS	---
Adult male in the house	Yes( Reference No)	NS	---
Districts	Koppal	0.001	6.80 ***
	Bagalkot	0.001	5.55 ***
	Uttara Kannada	0.001	13.81 ***
	Mysore (Reference)		

**Notes:** NS denotes no significant differences \*denotes a significant contribution at the 0.05 level. \*\*denotes a significant contribution at the 0.01 level \*\*\*denotes a significant contribution at the 0.001 level

**Table 4. R - Test results.**

Step1	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	.000a	0.298	0.439



# Exploring Rural Household's Adoption of Self Service Technologies in Banking Industry

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## Abstract

*After the advent of Self-Service Technologies(SST's), there has been a great shift in the way customers interact with the service providers. Any change is not considered worth unless it is usable, understandable and finally adoptable by the user). Many banking organizations at one point of time highlighted their SST capability as USPs. For e.g. Canara bank was the first to release mobile ATMs in India and SBI also claimed that it has the largest number of ATMs in India. Technological change can happen any time, in any form as it is imminent. When companies introduce innovations such as self service technologies, they have greater challenge of communicating, comforting the consumer to accept change. This paper explores variables of a conceptual model of attitude development by Davis, Bagozzi D Fred and Warshaw. Also an attempt has been made to explore alternatives regarding adoption of SSTs in Indian rural areas.*

**Keywords :** Attitude, SST, Banking Industry, Rural household, ATM

## Introduction

The self-service concept in businesses has grown in significance. Self service technologies play a vital role in reducing costs of an organization rendering automated interface between service provider and customer. For example, Amtrak introduced telephone self-service by means of an IVR (Interactive Voice Response) system that allowed cost savings of \$13 million; likewise, Royal Mail's IVR system led to a 25% reduction in its customer service costs. Once industry players learnt about advantages of SSTs, the rapid induction of same started happening in all streams of service delivery. This complicated service encounter with customers as sizeable segment of them didn't have required expertise to handle SSTs (Meuter et al. 2000). Examples of SSTs include Internet based services, automated hotel checkout, automated teller machines (ATMs), or mobile banking. Many studies have been conducted for technology adoption and Davis et al(1989), concluded that attitude has a major influence on developing intentions for accepting technologies.

'Self-service' can be defined as any technologically mediated interaction or transaction with a company where the only humans involved in the experience are the customers themselves (Meuter M, Ostrom A, Roundtree R and Bitner M, 2005). In recent times, public have been exposed to technological products such as ATMs, kiosks, and personal computers. For instance, an individual may form attitude towards computers based on his/her observation of other people's computer usage rate. More studies on attitude have provided insight as to why some consumers do (and do not) adopt SSTs. It is obvious if consumers don't form favorable attitudes; they will be placing themselves far from the technology based self-services and may feel neglected.

According to (Tony & Mark 2004), unfortunately, financial and banking service industry has been a clear target of hackers. On this line, global analysts fear a new trend in launching attacks. They are,

1. Earlier there were general attacks with an intention to infiltrate a terminal and observe the activities. But now the talents among hackers are being divided into money stealers, information thieves, profile targeters (maligining an individual's character by uploading false documents through computers online) etc.



2. Increase in the frequency of virus attacks across the worlds where for example, In case of Sony Corporation for illegally downloading movie "The Interview".

If a consumer has already experienced the technology before trying first hand experience offered by service provider, he would definitely adopt the technology (Dickerson and Gentry, 1983; Korgaonkar and Moschis, 1987). Even exposure to good or positive word of mouth also play positive role in getting a non user near to technology. Adoption is all about accepting a technology as harmless and developing a sense of trust and positive feeling towards using it without associating any risk with it. However the study takes a rural SST adoption view where the perceived risk element has a major role to play in rural areas as they have to be dragged out from their conservative mindsets with the help of well planned market campaigns. As it takes large scale of investment time and money to design, implement and manage the self service technologies, firms need to understand consumer intentions and ensure that there will be a pleasant service experience at the first encounter. Implementation of an information system can be termed as success when a user appreciates the progress in technology (Wang, Hsu and Fang 2005).

Service provider can also plan on a smart way of educating people about advantages by getting best of technologies. It is vital to note that large numbers of users subscribing for SST can not be read as overall success of a SST implementation and consumer adoption. This figure might be very evident in urban areas but not rural areas. Real India lives in rural sector and as per the balanced regional developmental policy laid by Government of India, the real development should happen in a geographical area , where collectively, if calculated, large number of people of a country live. Problems occur when the connectivity issue between the consumers and service providers start taking a dark and complex shape that finally fetches zero returns to the service providers over investment on the self service technology. The thought connection between two communities can happen only when the service provider gets knowledge of rural people's attitudinal formation as well as different patterns on SSTs. If there is a perfect understanding about relevant consumer attitudes driving the intentions to use SSTs, firms will be in a better position to achieve SST implementation goals and objectives. The rural households in the present situation retain lot of barriers such as negative frame of mind on technology. These barriers have to be countered with good penetration plans by the service provider.

## Overview of Rural Infrastructure

Rural infrastructure stands as a key to propel faster growth for the country. Better connectivity of the geography leads to increased market accessibility for industries and balanced regional development can be expected in these situations. The other factor that links rural infrastructure with the economic growth is poverty alleviation and human development. If rural areas are well connected through roads, then companies can think of investing in these areas and many SMEs also can be encouraged. These are some of the basic needs for a geographical region's eligibility to get synergized in a development wave. Business activities cannot take off unless these above mentioned points are taken care. Providing infrastructure facilities is not the key for development, but rural households should be able to use the infrastructure for improving their income and consumption should happen for example, having individual electricity connection to all households, ability to make phone calls and use roads for motorized transport. According to (Jocelyn Songco, 2002), rural infrastructure investments benefits the rural poor and results in increased incomes to help them consume more thereby stimulating and mobilizing the near dead consuming mechanism. If infrastructural importance is neglected, the gap will widen between poor and rich in rural areas. Many empirical studies around the world have published findings of close relationship between infrastructural investments and economic growth. According to World Bank sources, 1 percent increase in infrastructure stock is directly related to 1 percent increase in GDP across all countries. At the same time market access has an inverse relationship with travel time, which can be reduced through improvements in road networks. Broadly speaking, rural infrastructure development propels the growth cycle faster by:

- Creating better access to employment and providing further earning opportunities;
- Creating access to previously inaccessible commodities and services;
- Saving time, that can be better utilized in productive activities;
- Better health and physical conditions of the Region.

If companies ignore this point, customers may feel free to withdraw their business transactions entirely. Gartner



states that 68% of customers usually leave a service provider in case of a dissatisfactory service encounter, therefore by simple mistakes, competitors benefit using the weakness of strong player.

## Objectives

The main objective of the paper is to explore rural household's attitudinal development on self service technology. The sub objectives revolve around analyzing the approaches made by different research scholars to measure attitude development on SST. An attempt to link adoption of self service technologies by rural people and economic development has also been made by providing overview of rural infrastructure and importance of infrastructural projects in catalyzing economic development.

## Research Methodology

A secondary research approach was made to reach objectives. An extensive in-depth literature review was launched. Literatures were borrowed from eminent databases like Scopus, Proquest and EBSCO. Literatures were mapped to find gaps and objectives were generated. Findings and recommendations of researchers were mapped together to write an article probing insight for banking industry to implement self service technology (SSTs).

## Literature Review

In literature review we shall start with an introduction of technology acceptance and rejection percentages among world communities then percolate to core issues. A study by Jupiter Research (cited in Bailor, 2005) found that in UK that only 52% of customers are satisfied with self-service experiences. One of the chief reasons was, over 80% of calls to contact centers were common questions or standard problems. However, studies have shown that self-service does not replace the contact centre but in some cases supplements it.

Davis (1989) had already pointed out about several complex factors playing role in accepting new technologies. The benefits of ATMs in rural areas include fund transfer, cash withdrawal and balance enquiry. All these processes can also be handled at lower cost (Goldfield 1998). This kind of a facility in rural areas in developing countries would make a huge contribution by reducing risk in carrying cash (Hogarth and Anguelov 2004). Understanding SST would be a harder task for rural people. A technique applied in this context as a remedy is persona design for eg: Jenni by Yahoo Corporation is a computerized speech recognition system with a human touch (virtual female character) with bio data; age 24 years, height 5.5 ft and even her Zodiac sign Leo.

## Persona design in ATM's

A persona is an imaginary person who can be used in the process of designing a self-service application. A persona will have all the characteristics of a human being such as a name, age, gender, job title, accent, and even humor. According to (Schiffman and Kanuk, 2007), right brain is active in capturing visual aids and left brain is active in capturing the literature communication, here in case of rural consumer, the best way of personalizing technology is to introduce a persona or animated character that will guide these consumers in a local language instead of points display. The fun element from (Dabholkar, 2003) can also be made use in building a system that becomes rural customer friendly in a first encounter. There can't be a second word about self-service being hugely successful. SSTs have provided such a convenient platform with 70% of all cash withdrawals at UK in 2003 were through ATMs, amounting to a staggering £144.4 billion in cash (APACs, UK Payment association, 2006). Kiosks have become a real success story for some companies, just as ATMs have been for banks. But the success in Indian rural scenario has to be experimented with the help of rural people's attitude development. - Research Gap.

Davis, Bagozzi D Fred and Warshaw in the year 1992 constructed a model (Fig 1) that links the degree to which users think the system is easy to use and also believe the system is useful with final usage of the technology. This predicts user's attitude towards the system and likelihood of them using it.

The Figure 1., explains sequence of decision making in the minds of the targeted or prospective user. The research scholars have used perceived usefulness and perceived ease of use as external variables that help an individual's mind trigger an array of decision making activities that in turn gives rise to attitude development on a technology.



Some studies like (Davis FD 1989; Davis SA 1993; Venkatesh 2001; Reimenschneider 2001; Brooks, Reimenschneider & Hardgrave 2001) have concluded that end user training would have significant role in making people accept the technology. To facilitate this, first of all technology by target market should be perceived as a 'benefit'. The benefit can be understood as "perceived usage". This variable can be described as an individual's perception using a new technology enhancing or improving her/his performance (Davis, 1989, 1993). According to (Parrish & Servon 2006), people would welcome a technology when they see a strong relevance of the technological purpose and their present job.

PEOU (Perceived Ease of Use) is another variable where it explains the level to which a person sees learning a technology as easy. Ciccotello & Elger (2004) in the same line have stated that more than implementation, it is the way an approach is made, makes sense. Shirer and Tobe (2004) supported this suggestion in case of poor people that we can relate it to poor rural people of our country. If perceived usage and perceived ease of use elements are taken care in a service mediated by SSTs, then the target population would develop a favorable attitude leading to behavioral intention. Development of behavioral intention in a consumer forms an intention to trail use a technology thereby using it on regular basis (Davis 1989; 1993, Jen hung Hay & Yuma Lin, Su Ting Change 2006).

After developing an intention to use the technology, it has been more or less successfully adopted by an individual. Overall the benefit points from self-service may be pointed where technology is good at boring customers handling repetitive tasks but on the other side humans are good at empathy, relationship building, complex problem solving and creativity.

Marketers face challenges at one point where we all know that consumers differ in their preferences it may be demographic, psychographic profiles or by personality traits. Many researchers such as (Darian 1987; Stevens, Warren, and Martin 1989; Eastlick 1993; Fram and Grady 1997;) have contributed in the field of demographic factors relevance to technology based self service and they came out with findings depicting young, affluent, educated males are more likely to use SST options. But in recent days, women, older consumers, the less educated, and the less affluent have access to same level of SSTs and also they have become familiar. McMellon, Schiffman, and Sherman (1997) separated older consumers into technology lovers and technology users to understand online behavior. Like other researchers (Barczak, Ellen, and Pilling, 1997) divided banking consumers into security conscious, maximizers, instant gratifiers, and hassle avoiders to understand their preferences for ATMs, automatic deposit and withdrawal, and telephone banking.

Psychographic studies have provided insights to marketers with possible consumer segments. But they may not go far enough in understanding underlying consumer motivation. The concept of self-efficacy comes into light and is defined as an individual's assessment of his or her ability to perform a behavior. According to (Bandura 1977), experience is the main factor as it is based on performance accomplishments to produce higher, more generated and stronger efficacy expectations. Imparting financial literacy on adults is a tough task as they may not be prepared to take classes (Parrish and Servon 2006). National Endowment for financing education (2004), instead of asking reluctant adults to attend classes at one place they may be trained by demonstrations in shandies and haats in rural areas. (Krishnamacharyulu 2006).

The concept of customer segmentation has been helping companies to know the diverse needs of their different customers. A study by the Future Foundation (Howard M & Worboys C, June 2003) identified three broad groups that were primarily motivated by different factors to deal with companies.

Table 1 furnishes data on the factors, which motivate the groups to adopt SST's. The key issue is to decide on self-service options offering to these customers. Consumer perceptions of self-service technologies are colored by many elements such as expectations, previous encounters, emotional state and all have a strong influence on their thought of using self-service systems. It is also said that successful service providers must be able to relate technology with personal aspects of service delivery (Berry LL, 1999). Adding to that, (Meuter et al. 2005 and Dabholkar, Bobbitt, & Lee 2003), have made significant contribution on post SST usage behavior. In a typical business environment customer satisfaction is a major driver of customer retention and profit, waiting time is always a crucial factor adding to customer's experience (Davis and Vollmann 1990; Tom and Lucey 1995).

## Conclusion

Financial institutions, in order to facilitate diffusion of SST hassle free need to work more on security needs by setting up a good network (Ton & Park 2004). Hilgert & Hogarth (2003) concluded that there is a positive relationship between financial education, people behaviors and economic outcomes. Lyons et al (2006) supported it.



Despite large presence of self-service technologies there has been a lack of research on consumer attitudes and adoption of SSTs (Weijters et al., 2007). There are few studies that have probed into perceptions towards the use of SST among different age groups. Usage and diffusion of self-service machines essentially requires behavioral change on the part of consumers. As the literature review provides a clear window opening towards external variables like perceived ease of use and perceived usefulness. In the model presented by Bagozzi, Davis and Warshaw (1992), measure of perceived usefulness and ease of use has to be measured as these variables have to be analyzed in formation of attitude. Educating rural people in the right way would result in changing the mindset of rural people and help them coming out from conservative mindset (Bang, Ellinger, Hadjimarcou & Traichal 2000; Xu & Paulins 2005).

Researchers Igarria and Parasuraman (1989) and Kay (1993) have classified the types of anxiety such as, fear, apprehension, and expectations people feel while considering possible or actual use of computer technology and interestingly anxiety influenced by technology adoption is stated as negative state of mind about technology tools (Meuter et al. 2003). According to Wessels & Drennan (2010), Banks can work on three point strategy towards facilitating adoption. They are:

1. Embracing technology and greater standard of living in every promotion.
2. Setting up a customer relations team that introduces, demonstrates and addresses grievance of customers regarding technological problems.
3. Welcoming customers as savings bank holders and slowly encouraging them to use more technologically backed banking service.

There are four factors that affect attitudinal development of people towards technology. They are optimism, innovativeness, discomfort and insecurity where optimism and innovativeness are considered as positive drivers of technology adoption encouraging customers to use technological products/services and to stick on a positive attitude toward technology, while discomfort and insecurity are negative drivers, making customers reluctant to use technology.

Ziefle & Bay (2005), compared young age 20-35 and old age 50-64 consumers groups to measure difference in their interacting pattern with technology by testing their ability to learn and perform certain tasks on both simple and complex mobile phones. They came out with the findings that significantly lower percentage of people among older age group were successful in accomplishing the assigned tasks and older adults required longer time to complete the tasks (on average, nearly double the amount of time spent by the younger age group). Inference can be drawn that, based on prior encounter with technological devices; older consumers may have less confidence than younger consumers in using SSTs. So, the question of training or making rural elder class technology friendly is out of context but instead, there is a larger segment of young age group that falls in 20 - 35 category (NCAER, 2007) can be targeted to induce technological service consuming behavior. As present young generation gets older, slowly the transactions would be mastered and passed on to the younger generations and trust element would definitely escalate and will get stabilized on technology. The younger generations will walk on the foot steps of their adults. As we need phases to complete SST adoption process in the rural geography, it takes time for generations to adopt SSTs. Once there is a technology friendly environment exhibited by all the rural community in the area, the adoption of the SST can be treated as complete.

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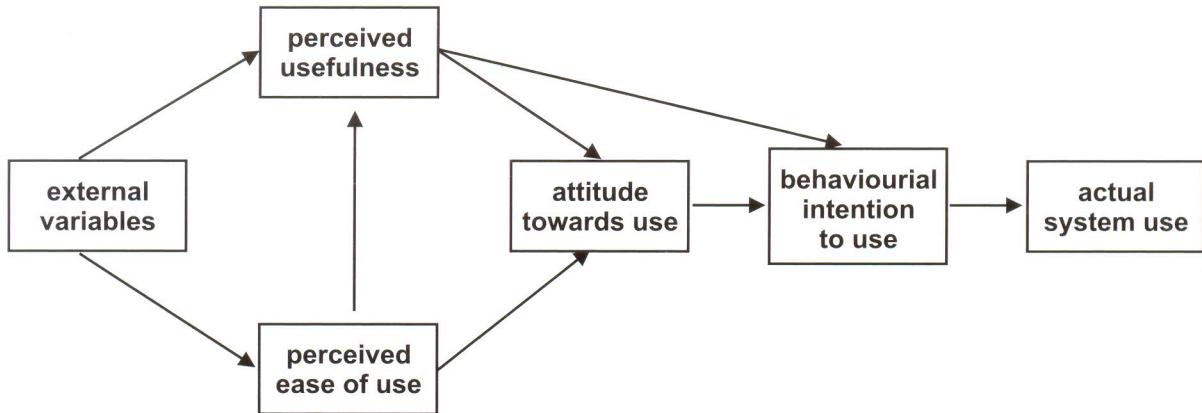
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**Exhibit 1. Model of Attitudinal Development by Davis, Bagozzi D Fred and Warshaw**



Source: Bagozzi, Richard P, Davis, Fred D; Warshaw, Paul R, "development and test of a theory of technological learning and usage", Human Relations, 1992, Vol 45, Iss 4, July, Page No. 659.

**Table 1. Groups motivated by three different factors**

Sl. No.	Groups Segregation	Preferred By
1	Speed	More males, younger, most likely to choose the Internet
2	Human contact	More middle aged, prefer telephone or face-to-face
3	Control	More female, older, more positive than other groups about using kiosks, although primarily use the telephone.

Source: Howard, H and Worboys, C, "self-service - a contradiction in terms or customer-led choice", Journal of Consumer Behavior, 2003, Vol. 2 Iss. 4, pp. 382-92.



## Hotel Food Waste: A Challenge

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### Abstract

*The hotel industry is playing a vital role in providing food and facilities for individuals, groups and carrying various business activities. In the present era hotel industry is also helping boost tourism. Thus, a hotel industry is known as one of prominent service industry where food and accommodation is being provided. The researcher has conducted a study of "Hotel Food Waste : A Challenge". The researcher has interviewed 966 customers and 19 hotel authorities on the basis of 144 parameters with stratified, clustered and snowball sampling methods and has drawn 98 findings, 109 applied suggestions, 12 practicable models regarding the study problem and 18 areas for future research is being suggested. It was found that, prepared food waste is created in different stages and food waste is a national waste and negatively affect revenue of hotels. The study is useful to hotel management discipline and it is useful for controlling wastage of food items. The suggestions are given to turn the wastage into alternative food products for birds and animals, for producing bio-gas and fertilizers, etc.*

**Key Words :** Hotel Food Marketing, Food Waste, Newspapers, Quality of Food, Good Services.

### Introduction

The hotel industry has been playing a prominent role in providing food and facilities for the people and for business meetings and conferences. The hotel industry is contributing to national development and supporting the other industries and business activities. In present era hotel industry helps to boost tourism sector because, hotels are of basic importance to visitors. The hotel industry is known as one of the prominent service industry which provides food and accommodations. The researcher has selected problems related to prepared food waste and waste control in the selected hotels of Kolhapur city of Maharashtra state. India has its unique culture, traditions and natural resources that have attracted people from all parts of the world and provided temporary shelter to people in institutions such as 'Saraikhana', 'Panth Niwas', 'Dharma Salas', 'Vihar', 'Hospice', 'Musafirkhana', 'Khanawal' etc. All these institutions were set up for the public as lodging for travelers, those which were similar to the inns in western countries. Considering the importance of hotel industry the research has focused on prepared food and food waste management. In the pilot study, it was found that there was no specific study that was undertaken by this title in the Kolhapur area.

Hotel industry is a service industry where different types of prepared food is marketed and served to the customers. In a pilot study, it was found that marketing of prepared food is challenging and there is a considerable waste of prepared food in the hotels. Due to cut throat competition in the market, the hotels have been offering attractive and substantial quantity and quality of prepared food to the customers whereas the customers are not able to consume the complete dish of ordered and served food.

'FOOD' is the basic need of human being where 'prepared food' management and minimization of waste with maximization of the sale of prepared food is required. So, the researcher has selected a topic entitled, "Hotel Food Waste:A Challenge". The study has covered the perception of customers and attitude of hotel employees with cross-cultural behavior of different customers in the selected area. The researcher has referred age, qualification, number of dependents, income level, frequency of the hotel visit, quality of food, quantity of food, occupation; customers' habits, etc. consisting of 144 variables for knowing the problem of prepared food waste in the sample hotels.

Food waste is created when consumers leave food unfinished and discard the same. According to WHO (World Health Organization), waste is defined as "every substance or object arising from human and animal activities that has to be discarded as useless or unwanted". Considering the global scenario around 30% food creates waste and its approximate



value is 31 crore dollars in developing country. This means 1/3 of food waste is created out of world food production. Although 70% of people in India face hunger problems there is still a 58 thousand crore value of food waste annually created in India (FAO).

The food waste occurs for many reasons, the causes are similar across all over world e.g. food often spoils when consumers buy more than they need with family sized packaging and buy 1, get 1 free offers. Some factors have greater variation and are less understood such as food used in cultural traditions, besides this, food waste at the consumer level is so widespread and it occurs every day in millions of households, food service venues like hotels, schools, hospitals, and other institutions worldwide and treating food waste is a big challenge. The waste created from prepared food waste from residential, hotel, school, hospital, etc., and it is a great challenge for the managing the same.

Considering the problems of prepared food waste as well as its negative impact on the society brought up a need for the study. It was found that there is an increasing trend to visit hotels. Food service industries are amongst fastest growing industries due to their use of dominant marketing activities which influence the customers. But the study also found, lot of food is wasted in the hotel by the consumers. It was also found that, prepared food waste is created in different stages viz after food preparation, before and after food served to customers and during consumption and after consumption. Hence, due to these types of wastes, mostly hotels face escalation in cost such as material cost, labour cost and energy cost, which negatively affect revenue of hotels as well increase liability and risk of hotels. Therefore, prepared food marketing and food waste management has been a challenging task to the hotel industry in India. The study area is Kolhapur in the state of Maharashtra.

### Significance of the Study

Prepared food waste is a national waste and it is necessary to prevent it. The study is to identify prepared food waste and reasons for prepared food waste in the selected sample hotels. The study is useful to the Hotel Management discipline and it is useful for controlling wastage of food items. The wastage has been subsequently turned into alternative food products for birds and animals, producing bio-gas and fertilizers etc.

Objectives of the study

- a. To identify the prepared food waste management and alternative reuse of food waste in the selected sample hotels.
- b. To find out the consumer behavior and perception of the consumers in the sample hotels regarding food and food waste.

### Hypothesis

- H<sub>0</sub>. Management of prepared food waste is not considerably ignored by the hotel authorities in the sample area hotels, where Food Service Management does not require alterations in the selected hotels.
- H<sub>1</sub>. Management of prepared food waste has considerably ignored by the hotel authorities in the sample area hotels, where Food Service Management needs alterations in the selected hotels.

### Data analysis and interpretation: Hotel food waste-a challenge

Table No. 1 furnishes the factors influencing customers to visit a specific hotel for meals. The researcher has identified various criteria influencing visit to a specific hotel for Food. This study found that the main criteria to visit a specific hotel for food are: quality of food, quantity of food, affordable price and good service, etc. 39% sample respondents have narrated that quality of food is the criteria, and 35% sample respondents have focused on good service. 12% sample respondents have mentioned other reasons which include quality, quantity, price, service, cleanliness and parking etc. About 2%, 5%, 5% and 2% sample respondents have quantity, price, cleanliness and parking criteria respectively for visiting the specific hotel for meals.

It is interpreted that quality of food and good services are the basic criteria for the visit to a specific hotel in the sample area. It was observed that customers are bothered more about quality and services rendered but not the quantity, cleanliness, parking and price. It can be noted that according to the customers; quality of food and services are more important. Food quality is a significant variable in a hotel business. It may be interpreted that better is the quality lesser is the



food waste and vice versa. It is also interpreted that customers are visiting the hotel for quality food which demand very good service from the hotel management. In this study, respondents have also focused on good services. It reveals that services are also very important such as quickness, neatness, and politeness. Hotel industry is in the service sector industry where rendering quality service is more significant. The customers visit the hotels which provide good food, better services and hospitality. The researcher has worked as an honorary waiter in a few hotels for observation and cross checking the collected data. It has observed that the collected facts are true that the customers are really visiting for better hospitality.

People from Kolhapur city are well known for their sense of "good taste". Considering marketing point of view the hotel management should take due care through advertisement regarding quality of food and hospitality. Customers visiting hotels are diverse in nature, where different factors have been affecting on food order and consumption. It is seen that to improve the frequency of customers to visit hotels, effective advertisement and hospitality play a key role. It was seen that customers are very particular about food quality and hospitality. It is noted that quality of food has a significant impact on frequency of visit to a specific hotel. Customers are expecting very good services from the hotel management whereas quantity, price, cleanliness and parking are not priorities for the customers. It means that these variables are less important in comparison with quality and services. It is noted that price, cleanliness and quantity have equal importance in the hotel industry.

To maintain the quality hotel, management should focus on quantity, price and cleanliness in the hotel food. Hotel management should declare quantity of each dish in grams with detail ingredients in it. Hotel Owners Association should establish uniform quantity in all hotels in the food dishes; price should not vary too much in similar type of hotels. Cleanliness should be strictly implemented, and self motivated practices should be adopted in the sample hotels. Workshops, trainings, should be conducted for cleanliness. Japanese concept such as "5 Ss and Six-sigma" should be implemented to provide a better physical environment and for various factors influencing customer preferences. Daily welcome, free prepared pan, visit discount (discount on the number of visits), bill discount (discount on total bill amount), seasonal discount, happy hour discount, discount for couples, 20% to 30% discount on the bill amount, should be provided as an incentive if customer has not wasted any ordered food item, which is practically possible in the study area.

Table No. 2 furnishes the information on approximate cost of food waste per dish. This question was asked to know the cost of food waste; this information is very much required for determination of food waste control strategy. The 79% respondents (majority) said that during prepared food consumption food waste cost is Rs. 10 per dish and remaining 21% sample respondents said that, approximate cost of food waste is Rs. 50 per dish.

Considering the above facts and figures it is interpreted that, in hotels based in Kolhapur there is a huge demand for prepared food by the customers. Visiting the hotels for food is a good indication to the hotel industry as well as it indicates spending power of the people in the study area. It also showed that prepared food waste per dish is Rs. 10 and indicates serious signal to the Indian mass population. Considering per dish, per person and total number of customers in all the hotels in the study area, there is a huge quantity and amount of waste in the hotel industry. Considering the average price of vegetarian per dish is up to Rs. 75 to Rs. 100 (minimum) and non-vegetarian, 'Handi' approximate cost varies from Rs. 250 to 500 per 'Handi'. It is also found that, 10-20 gm prepared food is wasted per dish, which is a considerable quantity. Considering wastage per dish is Rs 10 multiplied by 2 dishes per person multiplied by 168 average customers per day and per hotel multiplied by 19 sample hotels in the study area for 365 days in a year, the quantum of food wastage is Rs 2, 33,01,600 per year and Rs.63,840 per day in the sample area (figures are approximate) [According to customers the per day waste is Rs. 1, 11,685.]

Difference in wastage of ordered food in rupees according to customer's opinion and hotel management opinion is Rs. 47,845. This difference may be the perception of customers and the hotel authority. It indicates that there is a considerable wastage of prepared food in the hotel industry. This data indicates that factual information regarding prepared food waste and it adversely affect the growth and performance of hotels in our country, where the major issue is food security. It is depicted that 10 to 20 gms prepared food waste per dish and its cost is Rs. 10 and selected hotels spending Rs. 1, 11,685 per day which is loss to the economy, especially for developing and underdeveloped countries. This data provided factual information regarding prepared food waste, which negatively affect performance of hotel industry. Moreover, it is understood that prepared food waste arises due to improper marketing and food services.

Table No. 3 furnishes the information on reusing of hotel food waste. This variable has incorporated to know the re-processing of waste food, which is required for taking further steps for waste food processing. The majority (78%) of the respondents said that 'not at all' and equally 11% respondents said 'yes' and 'some time' respectively for Re-using of food waste.



It is interpreted that in Kolhapur city, hotels create considerable quantity of food waste and throw it in the municipal corporation dustbin. 78% of the respondents could not reuse the hotel food waste and remaining 11% respondents reuse prepared food every day and some time respectively. It is interpreted that almost all hotels disposed their prepared food waste through municipal corporation dustbin or van and some respondents 'reuse' prepared food waste for 'Biogas' and 'decomposition' of prepared food waste, which creates manure for agricultural use and indoor plants. However, it is found that prepared food waste usage for 'Biogas' in 2-3 sample hotels. It is depicted that in Kolhapur city area sample hotels (78%) could not 'reuse' of prepared food as like 'Biogas', 'Decomposer' for manure and donation to 'Beggars' etc., this negatively affect the environment and it causes pollution. Thus, it is noted that, prepared food of hotels cause waste hazards to the environment, considering this it is necessary to take collective efforts for food waste control and manure development and researcher has noted that effective marketing facilities helps in mutual development and good prepared food service helps to minimize prepared food waste, for this it is necessary to implement '3R' i.e. Reduce, Reuse and Recycle for effective management of prepared food waste.

Table No. 4 provides the various steps taken for prepared food waste management including: proper collection of waste food from restaurant, classification of waste food, storing of waste food, cleaning of dustbin before and after use, proper transport of waste food and proper dispose of prepared waste food. Herewith, researcher has noted that, these types of steps or waste management practices are found in the selected hotels (Hotel Authorities). This information is required for determination of minimization of food waste strategy in the hotel industry.

From the Table 4 it is found that almost all hotels have been collecting properly waste food from the restaurant i.e. 74% and remaining 26% could not collect waste food, followed by 68% (majority) respondents can't classify prepared waste food and 21% classified prepared waste food and 11% classified 'sometimes', then, 84% respondents said that they store prepared waste food and 16% said 'not at all'. Furthermore, regarding cleaning of dustbin; 89% (majority) respondents opinioned that they cleaned the dustbin before and after use, and 11% respondents sometimes cleaned the dustbin after and before use, and 79% respondents transported prepared food waste everyday through municipal corporation dustbin or van. Moreover, the last step of prepared food waste management is disposal of prepared food waste i.e. 63% (majority) respondents are not disposing prepared food properly, followed by 26% disposed prepared food for 'Biogas' and used as manure and least 11% respondents said that they dispose prepared waste food 'sometimes'.

Considering the above information it is interpreted that almost all selected respondents have collected prepared waste food i.e. 74% but the majority 68% respondents could not classify prepared waste food and collected food generally stored in dustbin and almost all respondents i.e. 84% made the clean dustbin before and after use of it, beside this prepared waste food was transported through Municipal Corporation van or dustbin, but also the majority (63%) respondents could not properly dispose of waste food. This data shows the Kolhapur based hotels adopted general or traditional practice for prepared food waste management (except some hotels) and due to this; hotels are responsible for the environment degradation (except exception). The, researcher suggested that, considering environmental and social responsibility hotel industries should come forward and take concrete decision regarding reuse and dispose of food waste. It is noted that in Kolhapur city area "Kolhapur Hotel Malak Sangh" took initiatives for motivating hotel owners for the prepared food waste management e.g. Biogas, Decomposers for manure, which is good for agriculture and conserve energy and donate edible food to Beggars etc., but these efforts are not satisfactory.

Table No. 5 shows the various methods for disposing of the waste food. To know the problems and consequences of disposed food, this information is essential. The 95% (majority) respondents said that they dispose of prepared food waste through Municipal Corporation dustbin and 5% respondents are using prepared food waste for compost plant i.e. 'Biogas' which is used for food preparation.

It is interpreted that, almost all selected respondents adopt traditional practice of prepared food waste management and dispose prepared food waste through Municipal Corporation dustbin and it is found that 5% respondents are using prepared food waste for compost plant for generation of 'Biogas', therefore, it is observed that the majority of the hotel authorities are not interested to manage effectively the prepared food waste, for which 'Kolhapur Hotel Malak Sangh', should take steps to motivate hotelowners to use prepared food waste for 'Biogas' plant. It is also interpreted that in Kolhapur city area hotels create a huge quantity (20 grams per person X 300 per person, per day, per hotel X 19 sample hotels = 114 Kg.) of prepared food waste per day, which negatively affects on environment and food waste is not good for our nation. Thus, it is noted that, prepared food waste hugely created by hotels, is hazardous to the environment. It is noted that, in Kolhapur city



hotels create the huge quantity of prepared food waste, and almost all hotels use the traditional practice for prepared food waste management (i.e. prepared food dispose of through Municipal Corporation dustbin), and this practice is not scientific in the present situation and which is a hazardous to the environment.

Table No. 6 furnishes the data regarding the total quantity of daily food waste. This attribute has set to know the quantity of daily food waste, which helps for determination of methods of food waste in the hotel industry. 32% sample respondents said that, total quantity of daily food waste is 21-30 kg per day, and 32% have mentioned 'not fixed' followed by 26% said 11-20 kg waste and 10% respondents 'could not' express opinion regarding the total quantity of daily food waste.

It is interpreted that 32% respondents said 21-30 kg total quantity of daily food waste and 26% said 11-20 kg per day and it is noted that 42% (32%+10%) respondents are unaware about quantity of prepared food waste per day. However, it is found that in Kolhapur city, hotels create 30-35 kg prepared food waste per day and aggregate quantity of prepared food waste by selected hotels is approximately 665 kg per day, this waste adversely affects on performance of the hotel, cost of food preparation and environment too. It is also interpreted that in Kolhapur, hotels create huge quantity of prepared food waste, the reason behind that is poor quality of food, the excess quantity of food, bad smell and odour, foreign material in prepared food dish, and improper services etc., all these factors are responsible for prepared food waste.

However, Kolhapur based hotels are trying their level best to provide better services to customers. It is found that, in the sample area hotels have been creating approximately 20-30 kg prepared food waste per day per hotel according to majority sample respondents and on the other hand 42% (32%+10%) respondents are unaware about prepared food waste, and they are not aware about prepared food waste. This data shows the situation of prepared food waste, which adversely affect on the environment and also growth and performance of hotels. The reason behind more quantity of prepared food waste is due to improper marketing practice i.e. improper service provided by untrained staff, ignorance to quality and quantity of prepared food, non cognizance at reception, communication gap between customer and hotel staff (particularly waiter), wrong marketing advertisement (club facilities, packages for family stay) etc. Considering this it is found that this is an important researchable area and needs to be addressed at national level.

Table No. 7 furnishes the information on percentage of waste from per kg of input. The researcher has interviewed the hotel authorities and found that there is a significant percentage of food waste. This information is useful for food waste control. 53% respondents said that 20% food waste is generated from per kg of input and remaining 47% respondents said that 10% of prepared food waste is generated from per kg of input, thus, this data indicates factual information on prepared food waste from per kg of input in percentage.

It is interpreted that, almost all customers said approximately 10% to 20% prepared food waste was created from per kg of input of prepared food. It is also opinioned by respondents that prepared food dish approximately weighs 200-250 gm (considerable variation has found in quantity of dish) and the waste created was to an extent of 10% to 20%. It is also found that 10% to 20% waste created by per kg of input. It has observed that 2 customers have been ordering minimum 3 dishes of prepared food for consumption and considering this daily 450-500 dishes (300 customers per day per hotel multiplied by 1.5 dish per person) is consumed by hotel customers and per dish average weight is 200 to 250 gm. Its mean is approximately 125 kg (250 gms dish multiplied by 300 customers)

From the above factual information, it is understood that 10% to 20% prepared food waste created from per kg of input and this adversely effects on performance of hotels, and it causes waste management problems. The reasons behind is the poor services of prepared food, poor quality and quantity, flavor, interior decoration, cleanliness, promptness, poor communication, arrangement of food etc. Thus, it is found that there is a correlation among influential factors of marketing, prepared food consumption and wastage from per kg of input. It is noted that, 10% to 20% prepared food waste from per kg of input influence the marketing practice of hotel such as promptness, cleanliness, approachability, improper service, lack of study of consumer need, want, and behavior etc.

## Conclusion

This research is undertaken from hotel management perspective regarding marketing and prepared food waste and food waste management in the study area. This article has analyzed seven variables by tables, diagrams, statistical tools with deep interpretation, conclusion and findings. The researcher has found quality is the significant criteria behind repetitive visit to hotels. It was found that more than 126 kg average input of raw material is consumed per hotel per day and



average output from 1 kg of input is about 1.5 kg to 1.75 kg. The variables considered in the study are size and weight of the dish, hygiene, food orders determinants, perception of customers, different service offered by the hotels, food consumption and physical personality etc. The perspective of the study is regarding marketing of prepared food and wastage control of food ordered by the customers. The respondents are very eager to minimize the waste. To minimize the ordered food waste the hotel authority should provide food as per requirement of the customers, provide very effective services, provide awareness to the customers to order limited food, to appoint skillful staff, train the customers to order the required amount of food in the hotels. The hotel authority has narrated that the customers are unaware about the food waste control. It is also found that there is no information painted or exhibited regarding 'not to waste food'. Hotel food management is a great challenge for India for Swacch Bharat Abhiyan.

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**Table 1. Criteria (s) to visit the specific hotel for Food:**

Sr. No.	Particulars	Respondents	Percentage
1	Quality of Food	367	39
2	Quantity of Food	23	02
3	Affordable Price	56	05
4	Good Service	339	35
5	Cleanliness	45	05
6	Sufficient Parking	22	02
7	Other (Specify) All Above	114	12
	<b>Total</b>	<b>966</b>	<b>100</b>

Source: Field Work



**Table 2. Approximate Cost of Food Waste (per dish):**

Sr. No.	Approximate Cost	Respondents	Percentage
1	Rs. 10	15	79
2	Rs. 20	00	00
3	Rs. 30	00	00
4	Rs. 40	00	00
5	Rs. 50	04	21
6	More than Rs. 50	00	00
	<b>Total</b>	<b>19</b>	<b>100</b>

Source : Field Work

**Table 3. Re-using of hotel food waste:**

Sr. No.	Re-using of waste food	Respondents	Percentage
1	Yes	02	11
2	Some time	02	11
3	Not at all	15	78
4	Can't Say	00	00
	<b>Total</b>	<b>19</b>	<b>100</b>

Source: Field Work

**Table 4. Steps taken for prepared food waste management:**

Waste Management Steps	Yes	Some Time	Not at All	Can't Say	Total	Median	Std. Deviation
Proper collection of waste food from restaurant	14 (74%)	00 (00)	05 (26%)	00 (00)	19 (100)	1.00	1.357
Classification of Waste Food	04 (21%)	02 (11)	13 (68%)	00 (00)	19 (100)	3.00	0.841
Storing properly - Waste Food	16 (84%)	00 (00)	03 (16%)	00 (00)	19 (100)	1.00	0.749
Cleaning of dustbin before and after use	17 (89%)	02 (11%)	00 (00)	00 (00)	19 (100)	1.00	0.315
Proper transport of waste food	15 (79%)	04 (21%)	00 (00)	00 (00)	19 (100)	1.00	0.419
Proper dispose off of waste food	05 (26%)	02 (11%)	00 (00)	12 (63)	19 (100)	4.00	1.374

Source : Field Work



**Table 5. Methods of Disposing off the Waste Food:**

Sr. No.	Disposing off the Waste Food	Respondents	Percentage
1	Our own compost plant	01	05
2	Municipal Corporation Dustbin	18	95
3	Road Side	00	00
4	Not Fixed	00	00
5	Can't Say	00	00
	<b>Total</b>	<b>19</b>	<b>100</b>

Source: Field Work

**Table 6. Total Quantity of Daily Food Waste**

Sr. No.	Total Quantity of Food Waste	Respondents	Percentage
1	1 - 10 Kg	00	00
2	11 - 20 Kg	05	26
3	21 - 30 Kg	06	32
4	Not Fixed	06	32
5	Can't Say	02	10
6	31 - 40 Kg	00	00
7	41 - 50 Kg	00	00
8	51- 60 Kg	00	00
9	61-70 Kg	00	00
10	71- 80 Kg	00	00
11	81- 90 Kg	00	00
12	91 - 100 Kg.	00	00
	<b>Total</b>	<b>19</b>	<b>100</b>

Source: Field Work

**Table 7. Percentage of waste from per kg of input:**

Sr. No.	Percentage	Respondents	Percentage
1	10%	09	47
2	20%	10	53
3	30%	00	00
4	40%	00	00
5	50%	00	00
	<b>Total</b>	<b>19</b>	<b>100</b>

Source: Field Work



## An Evaluation of Marketing of Groundnut and Sunflower in Bagalakot District of Karnataka State

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### Abstract

*Agricultural marketing is now being considered as an integral part of production process. The various aspects of marketing of groundnut and sunflower have been studied in six talukas of Bagalkot district of Karnataka state taking a sample size of 240 respondent that is around 40 respondent farmers from each taluka. An effort has been made to evaluate and examine the problems in the various functional areas of marketing of groundnut and sunflower crops pertaining to assembling, storage, packing, grading, insurance, transportation, channel of distribution, obtaining market information, pricing of product. It was found that the government as well as private warehouses and Agricultural Produce Market Committee (APMC) warehouses were used by the grower for storage. The responses indicated that they preferred sales at APMC yard. Grading was generally done by the farmers themselves with the help of expert laborers. The farmers did not insure their produce before it was sold and the main sources of market information was obtained from commission agents, APMCs, newspapers, radio and Television. All the farmers were not satisfied with the present system of price fixing for their produce and have affirmed that the price they obtained from the buyers is arbitrary.*

**Keywords :Marketing, respondents, farmers, storage, warehouse, pricing.**

### Introduction

India is predominantly an agricultural country and land of villages with 80% of population residing in about 6, 32,000 villages, spreading throughout its length and breadth. Agriculture and other allied activities contribute significantly to the Gross Domestic Product (GDP), accounting for nearly 16 per cent of the total GDP. It provides employment to around 64 per cent of the total work force while contributing 18 per cent of the total export. Thus agriculture forms the backbone of Indian economy, which contributes 32 percent to the national income about 68.8 percent populations depends on agriculture for their livelihood.

Agricultural marketing is now being considered as an integral part of production process itself. The development of the country is closely linked with the development of agriculture. The development of agriculture is dependent upon the facilities available for marketing of goods supplied by agriculture. For over a decade, farmer suicides in India has been a serious public policy concern. Agricultural marketing is expected to promote the welfare of the farmers' class in particular and that of the consumers in general. However, over the period, Indian agricultural marketing is criticized for its operational and pricing inefficiencies. Some of the inadequacies associated with the marketing of agriculture produce have been overcome in the post independence period. Important development in this direction relate to the enactment of regulated markets, linking of credit to marketing through cooperative marketing, grading, standardization of weights and measures, provision of weights and measures, provision of ware housing facilities, regulation of forward contract, fixing of floor prices, market intelligence and market news service and state trading of food grains. These and other measures and improvements have placed the farmer in the Bagalkot district in bargaining position but there is a need remove the intervention of middleman and to ensure him a greater share in the consumers' rupee.

### Methodology

#### Study Area

The study covers Bagalkot district comprising of six talukas viz., Badami, Bagalkot, Bilagi, Hungund, Jamakhandi and Mudhol. The area has dry climate and has vast stretch of black and red soil suitable for growing groundnut and sunflower.



## Choice of Respondent Farmers

A sample size of 240 respondent farmers growing Groundnut and Sunflower have been chosen for the study from a population of 5000 farmers by random sampling method. From each taluka 40 farmers were chosen for obtaining the data. The 40 farmers include 10 large farmers, 20 medium farmers and 10 marginal farmers to give proper representation to the three groups of farmers from each taluka. The actual selection of the farmers and their location is done on a random sampling basis by taking into account the area under Groundnut and Sunflower cultivation.

## Type of Data Collection

The study is based on primary data. Primary data is collected from the 240 respondent farmers growing Groundnut and Sunflower in the 6 talukas of the district. The data is collected by focused group interview and using structured questionnaire on major marketing areas.

## Data Analysis and Interpretation:

The data collected from the primary sources are presented in suitably planned statistical tables. Appropriate conclusions and inferences are derived from the statistical tables which are prepared from the data collected.

## Objectives of the Study

The main objective of the study is to evaluate and examine the problems in the various functional areas of marketing of groundnut and sunflower crops pertaining to assembling, storage and packing, grading, insurance and transport, channel of distribution, market information and pricing.

## Results and Discussions

### Assembly:

The first important step in the marketing of the Groundnut and Sunflower crops produce relate to proper assembling it in suitable premises. The farmers have been following the practice of assembling the produce in specially designated storerooms or in their residential places. The responses have been identical from all the 40 respondents each in all the six talukas of the Bagalkot district covered by the study.

The details furnished in Table 1 indicate uniformity in the practice of assembling the Groundnut and Sunflower crops after the harvesting is completed. This is first preparatory stage before marketing the agriculture production.

### Storage

The next step in the process of marketing the Groundnut and Sunflower crop is moving the assembled produce to marketing centers from the local villages and store them in suitable places in coordination with middle men. The storage options for the farmers are the Government warehouses, private warehouses and APMC warehouses. The farmers have indicated more than one option since they could not avail of only one of the options of storage due to inadequacy of space and the details are furnished in Table 2.

It is clear from Table 2 that all the respondent farmers used storage facilities of APMC. All the 40 respondents each in Bilagi, Hungund, Jamakhandi and Mudhol have used APMC warehouse facilities in case of both Groundnut and Sunflower crops. But few respondents in Badami and Bagalkot taluka have used Government warehouse for Groundnut and Sunflower crops respectively. However, no respondent have used the private warehouse.

### Location of sales

The respondent farmers have exercised two options of locations for the sale of Groundnut and Sunflower crops. Sales have been taking place locally as well as at APMC yards. The local sales take place due to prior commitment of the farmers with the local merchants based on prior advances received by the farmers. Some farmers sell locally due to transport or personal financial difficulties. Farmers who are able to wait for a better price and whose stock of Groundnut and Sunflower crops is of large volume take their produce to APMC yards. The responses of the 40 farmers each selected in six talukas have resorted to sell part of their produce locally and the rest at the APMC yards.

### Reasons for Local sales of Groundnut crop:

The respondent farmers in the six taluka of Bagalkot district have advanced more than one reason for the local sales



of their produce. It is evident from the details furnished in Table 3 reveal that all 40 respondents each in the six talukas of Bagalkot district have indicated that the need for immediate cash compelled them to sell their produce locally. Similarly repayment of old debt to merchants and moneylenders also compelled all the 40 respondents each in the six talukas to sell their produce locally. The third reason that compelled them to sell locally was to avoid the transport cost in carrying the produce to APMC. The study also revealed that the local sales of Groundnut and Sunflower crop by them were due to the small quantity of production and storage difficulties of the produce.

#### **Preference for sales at APMC:**

The responses obtained from the 240 farmers in the 6 talukas indicate that they preferred sales at APMC yard for some specific reasons.

Table 4 furnishes a consensus about the reasons for preference to sell their produce at APMC Yard. The reasons are relating to better price to the produce, storage facilities, grading facilities and weighing have been considered useful and are responsible for preferring sales at APMC Yards.

#### **Channel of Distribution**

Channel of distribution refers to the course taken in the transfer of the title to commodity. The respondents engaged in production and marketing of Groundnut and Sunflower crops, sell their produce through commission agents and cooperative marketing societies. The responses indicate complete unanimity among all the farmers selected for the study. There is a divided opinion about the satisfaction among the respondents regarding the channel of distribution.

It is evident from the details in the Table 5 that majority of 221 respondents are satisfied with the channel of distribution in their sales of Groundnut crop. 19 respondents are not satisfied with the channel of distribution. All the 40 selected farmers each in Badami, Bagalkot and Hungund are satisfied with the channel. However the opinion of 40 respondents in Bilagi taluka is divided since majority of 36 of them are satisfied, while 4 of them are not satisfied with the channel of distribution. Similarity was found in Jamakhandi taluka that majority of 30 respondents are satisfied and 10 respondents are not satisfied and in Mudhol taluka majority of 35 respondents are satisfied and 5 respondents are not satisfied.

#### **Grading of the product:**

Grading is the division of products into classes made up of units possessing similar characteristics of size and quality. It is sorting of individual specimens of a product to predetermined standard grades or classes to which they belong. Grading is generally done by the farmers themselves with the help of expert graders. The groundnut and sunflower is graded by the private graders and also by the APMC nominated graders.

#### **Insurance of the product:**

The respondents have asserted that they did not insure their produce before it was sold. Hence they did not incur any cost on insurance. The respondents suggested that the cost of insurance was high and hence they have not opted for insuring the Groundnut and Sunflower crop. However, all the respondents affirmed that they get crop insurance benefit for loss of crop before harvesting as provided by the state Government under Crop Insurance Scheme.

#### **Transport of the product:**

The respondent farmers have been using tractors, trucks, and carts for transporting their produce. The farmers are using own vehicles and hired ones for transportation of the product. It is found that a majority of 198 farmers have hired vehicles while only 42 farmers have used their own vehicles for transporting of their produce. Table 6 furnishes the details of transportation of groundnut and sunflower crops.

From Table 6 it is clear that all the 40 respondents in Badami, Bilagi and Hungund taluka depended on hired vehicles for their transporting but in Bagalkot 28, Jamakhandi 24, and Mudhol 26 respondents used the hired vehicles. However, 12 farmers in Bagalkot, 16 farmers in Jamakhandi and 14 farmers in Mudhol had their own vehicles for the transportation of agricultural products.

#### **Market information**

Market information refers to any information about the marketing of the products traded in the market. The



information pertains to demand and supply conditions of the product, price conditions, transport and warehousing conditions, channel of distribution, competition and facilities of infrastructure like banking insurance, grading etc. The sources of market information are market intermediaries like wholesalers and retailers, etc.

#### **Sources of Market Information:**

Information obtained through personal interview with the farmers revealed that the main sources of market information were commission agents, APMC newspapers Radio and TV.

The details furnished in the Table 7 indicate uniformity in responses from all the 40 respondents from six talukas of Bagalkot district. A significant revelation from the discussion with the respondents reveal that none of them incurred any expenditure in obtaining the market information from the above-mentioned sources. However a very interesting fact that was emerged from the discussion with the respondents was that they did not get any benefit from the market information obtained from those sources.

#### **Marketing finance**

The farmers required finance for different marketing operations like storage, grading, transport, packing etc. The responses of the 240 respondents in the study area indicate that they require finances for the marketing of their Groundnut and Sunflower crops. There has been complete unanimity among all the respondents regarding this aspect.

The respondents have indicated that they have relied on their own funds and bank loans for their marketing expenditures. There is again a complete unanimity of opinion among all the respondents.

Table 8 furnished the information on requirements of finance and the funds used by them for the marketing operations. The study reveal that 126 respondents used 20-40% of their own funds for meeting the financial needs while 114 of them relied on 40-80% of their own funds for the marketing purposes. However, maximum of 172 respondents used 40-80% of the bank loans to meet their financial needs for marketing their produce.

#### **Pricing of the product**

Price is the value of product attributes expressed in monetary terms which a buyer pays or is expected to pay in exchange and anticipation of the expected or offered utility. Pricing is a marketing function and it is the most important variable next only to product which affects the success or failure of business.

#### **Pricing of Groundnut and Sunflower crops in the study area**

The farmers are faced with market conditions, more close to monopolistic competition. Numerous sellers of the Groundnut and Sunflower crops are faced with a comparatively smaller number of buyers who may be wholesalers, retailers or mill units. The prevalent market conditions determine the prices. The role of a few merchants influences the price of Groundnut and Sunflower crops. The market supply and demand influence the price of Groundnut and Sunflower crops. However some imperfections in the market influence the prices greatly. As mentioned earlier the local merchants and money lenders who advance cash to small farmers and exploit them through quoting lower prices compared to market prices. The Groundnut and Sunflower crops seller like other farmers is forced to become a price taker rather than a price maker. The influence of APMCs is still not fully felt in villages because of the local sales taking place due to financial limitations of growers.

The respondents clearly indicated that they are not satisfied with the present system of price fixing for their produce as furnished in Table 9. All the respondents' in each 6 taluka of Bagalkot district have affirmed that the price they obtained from the buyers of Groundnut crop is not commensurate with cost of production and is arbitrary. Similarly all the 40 respondents in each of the 6 talukas have opined that the pricing is influenced by the middlemen and is not influenced by the government's price support policy.

The details furnished in the Table 10 reveals that all the 40 respondents have favored organization of cooperative marketing societies for sales of their produce. Similarly all of them have urged that the APMC should play more active role in getting better price for Groundnut and Sunflower crops. The 30 respondents in Bagalkot, 40 each in Jamakhandi and Mudhol talukas have suggested for a direct sale of their produce to mills so that the share of middlemen could be avoided for getting a better price for their produce.



## Findings

The analysis has resulted in the emergence of the following findings in the study area:

1. The process of agricultural marketing deals with: assembling; storage; packing; insuring; transporting; obtaining marketing information; channel distribution and pricing of products. Farmers have been assembling their Groundnut and Sunflower in specially designated store rooms or in their residential premises.
2. Most of the respondents in Bilagi, Hungund, Jamakhandi and Mudhol have used APMC warehouse facilities in case of both Groundnut and Sunflower crops. Very few respondents in Badami and in Bagalkot talukas have used Government warehouse facilities for storing Groundnut and Sunflower crops. However, no respondent have used the private warehouse.
3. All the respondents have suggested that sale of Groundnut and Sunflower take place at their local places and at APMC Yard. The need for immediate cash for the farmers has been one of the major reasons for local sales of their produce. The other two major reasons relate to the repayment of old debts to merchants and money lenders and to avoid transport cost in carrying their produce to APMC Yard. Local sales result in selling at prices dictated by the local merchants and money lenders which are generally unreasonable.
4. The respondents opinioned that it is beneficial to sell their produce through APMC, which ensures better price for their produce. They reasons being APMC provided better facilities for storage, grading and proper weighing of the produce. The study found that APMC provides market information to the farmers. Despite these advantages of selling at APMC premises the farmers are forced to sell their produce locally due to prior financial commitment with the local merchants and money lenders.
5. The channel of distribution for the farmers growing Groundnut was through commission agents and cooperative marketing societies.
6. The respondents have adopted the system of grading their produce before selling the same. The responses suggest that private expert graders and graders nominated by APMC do the grading. The farmers have mentioned that grading creates better demand for their products.
7. The respondents have not insured their produce before it was sold. The reason was the higher insurance cost.
8. All the respondents have used trucks, tractors and carts for the transportation of their products.
9. Market information is obtained from Commission Agents, APMC, Newspapers and Radio/TV. The responses of the farmers indicated that there was no expenditure in obtaining market information and were not benefitted by the same.
10. The farmers needed finances for their marketing operation. The purposes for which marketing finances were used related to storage, grading, transportation and packing.
11. The groundnut price is generally fixed by oil mills, wholesale merchants or commission agents. The respondents are naturally unhappy on the present pricing system and they are exploited by middlemen and that the pricing is not influenced by government price support policies.
12. All the respondents have suggested for organising cooperative marketing society to obtain better price for their produce. The study found that there is a need for a more active role by the APMC in ensuring better price for the products.

## Conclusion

Marketing problems of Groundnut and sunflower relate to various issues such as higher cost of storage, packing, insurance, transportation, agents' commission etc. The other problems identified were: inadequate market information; faulty weighing: large quantity of samples collected from the farmers; faulty pricing and delayed payment by buyers such as oil mills and marketing societies etc. The government agencies and the APMCs should try to provide greater facilities at lower cost. The growers should get current market information. However there is a need for effective enforcement of market regulation and use of technology for marketing of products declaring the crop as a notified commodity.



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**Table 1. Assembling of Groundnut and Sunflower crops**

Taluka	No. of Farmers Ground Nut		No. of Farmers Sunflower	
	Storeroom	Residential Premises	Storeroom	Residential Premises
Badami	-	40	-	40
Bagalkot	04	36	-	40
Bilagi	-	40	-	40
Hungund	-	40	-	40
Jamakhandi	02	38	08	32
Mudhol	-	40	02	38
<b>Total</b>	<b>06</b>	<b>234</b>	<b>10</b>	<b>230</b>

Source : Field Survey

**Table 2. Storage of Groundnut and Sunflower crops.**

Taluka	No of Farmers									
	Govt. Ware house		Private ware house		APMC Ware house		Others		Total	
	Ground Nut	Sun-flower	Ground Nut	Sun-flower	Ground Nut	Sun-flower	Ground Nut	Sun-flower	Ground Nut	Sun-flower
Badami	01	03	-	-	39	37	-	-	40	40
Bagalkot	02	01	-	-	38	39	-	-	40	40
Bilagi	-	-	-	-	40	40	-	-	40	40
Hungund	-	-	-	-	40	40	-	-	40	40
Jamakhandi	-	-	-	-	40	40	-	-	40	40
Mudhol	-	-	-	-	40	40	-	-	40	40
<b>Total</b>	<b>03</b>	<b>04</b>	<b>-</b>	<b>-</b>	<b>237</b>	<b>236</b>	<b>-</b>	<b>-</b>	<b>240</b>	<b>240</b>

Source : Field Survey



**Table 3. Reasons for Local Sales of Groundnut and Sunflower Crops (No. of Farmers)**

Sl. No.	Reasons	Badami	Bagalkot	Bilagi	Hungund	Jamakhandi	Mudhol	Total
1	Need for Immediate Cash	40	40	40	40	40	40	240
2	To repay old debts to merchants moneylenders etc	40	40	40	40	40	40	240
3	To avoid transport cost to carry the produce to APMC	40	40	40	40	40	40	240
4	Quantity of produce is small	40	40	40	40	40	40	240
5	Storage Difficulties	40	40	40	40	40	40	240

Source: Field Survey

**Table 4. Preference for sales of Groundnut and Sunflower Crops at APMC (No. of Farmers)**

Sl. No.	Reasons	Badami	Bagalkot	Bilagi	Hungund	Jamakhandi	Mudhol	Total
1	APMC Ensures better price	40	40	40	40	40	40	240
2	APMC provides facilities for storage	40	40	40	40	40	40	240
3	APMC provides facilities for grading	40	40	40	40	40	40	240
4	APMC provides facilities for proper weighing	40	40	40	40	40	40	240
5	APMC provides facilities for better market information	40	40	40	40	40	40	240
6	APMC provides best arbitrary decisions in case of quarrels between the farmers and the buyers in respected of quality color, size etc.	--	--	--	--	--	--	--

Source: Field Survey

**Table 5. Opinion regarding the Present Distribution Channel By Commission agents and Co-operative marketing societies (No. of Farmers)**

Taluka	Satisfied	Not Satisfied	Total
Badami	40	-	40
Bagalkot	40	-	40
Bilagi	36	04	40
Hungund	40	-	40
Jamakhandi	30	10	40
Mudhol	35	05	40
<b>Total</b>	<b>221</b>	<b>19</b>	<b>240</b>

Source: Field Survey



**Table 6. Own and Hired Vehicles for Transportation of Groundnut and sunflower crops (No. of Farmers)**

Taluka	Own vehicles	Hired vehicles	Total
Badami	-	40	40
Bagalkot	12	28	40
Bilagi	-	40	40
Hungund	-	40	40
Jamakhandi	16	24	40
Mudhol	14	26	40
<b>Total</b>	<b>42</b>	<b>198</b>	<b>240</b>

Source: Field Survey

**Table 7. Various Sources of Market Information (No. of Farmers)**

Sl. No.	Source	Badami	Bagalkot	Bilagi	Hungund	Jamakhandi	Mudhol	Total
1	Whole sales Merchants	-	-	-	-	-	-	-
2	Commission Agents	40	40	40	40	40	40	240
3	APMC	40	40	40	40	40	40	240
4	News paper	40	40	40	40	40	40	240
5	Radio - TV	40	40	40	40	40	40	240
6	Friends and Relatives	-	-	-	-	-	-	-

Source: Field Survey

**Table 8. Finance needed for Marketing (No. of Farmers)**

Sl. No.	Taluka	Own Funds (Percentage)			Bank Loans (Percentage)		
		20-40	40-80	80 and Above	20-40	40-80	80 and Above
1	Badami	20	20	-	12	28	-
2	Bagalkot	15	25	-	15	25	-
3	Bilagi	10	30	-	26	14	-
4	Hungund	40	-	-	-	40	-
5	Jamakhandi	22	18	-	05	35	-
6	Mudhol	19	21	-	10	30	-
	<b>Total</b>	<b>126</b>	<b>114</b>	<b>-</b>	<b>68</b>	<b>172</b>	<b>-</b>

Source: Field Survey



**Table 9. Reasons for Dissatisfaction about Present system of Pricing (No. of Farmers)**

Sl. No.	Reasons	Badami	Bagalkot	Bilagi	Hungund	Jamakhandi	Mudhol	Total
1	Price is not commensurate with cost of production	40	40	40	40	40	40	240
2	Price is arbitrary	40	40	40	40	40	40	240
3	Price Indicates the exploitation of middlemen	40	40	40	40	40	40	240
4	Price is not influenced by govt. price support policy	40	40	40	40	40	40	240

Source: Field Survey

**Table 10. Suggestions for Better Price of Groundnut and Sunflower crops (No. of Farmers)**

Sl. No.	Suggestions	Badami	Bagalkot	Bilagi	Hungund	Jamakhandi	Mudhol	Total
1	Organizing cooperative marketing societies for sales of the produce	40	40	40	40	40	40	240
2	More active role for APMC in getting better price	40	40	40	40	40	40	240
3	Selling directly to mills and avoid middlemen	-	30	-	-	40	40	110

Source: Field Survey



## A Study of Impact of Training and Development Programmes on Bank Employees by Total Years of Service

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### Abstract

*Training and Development programmes contribute directly to the development of employees in an organization. To develop human resources, organizations need to organize Training and Development programmes where employees can acquire knowledge and skills and develop healthy behavior. A good Training and Development system ensures that employees develop in directions congruent with their career plans. Training and Development is a periscope to see the future. It is intended to identify the talents and enable the organization to develop them to make future leaders.*

*Today, Training and Development programmes have become an integral part of any organizational activity. Training and Development programmes converts people into human resources so that an organization survives, develops and grows. Intense competition has made organizations to develop their personnel through continuous Training and Development programmes. The authors have conducted a study on Evaluation of Training and Development programmes in a bank and have made suitable suggestions to have a greater impact on the bank staff.*

### Introduction

Training and Development programmes contribute directly to the development of employees in an organization. To develop their human resources, organizations need to organize Training and Development programmes where employees can acquire knowledge and skills and develop talents required by the organization. A good Training and Development system ensures talent management in the organization. Intense competition has made organizations to develop their personnel through continuous Training and Development programmes.

### Definitions of Training and Development

Employees develop in directions congruent with their career plans. Training and Development is a periscope to see the future. It is intended to identify the futures talents and help the organization to develop them to make future leaders. Today, Training and Development programmes have become an integral part of any organizational activity. Training and Development programmes converts people into human resource.

Department of Employment Glossary of Training and Development Terms (1981) Britain defines Training and Development as "the systematic development of the attitude, knowledge, skill, behaviors pattern required by an individual to perform adequately in the given task or job".

According to Edwin. B. Floppy <sup>1</sup>, "Training and Development is the systematic modification of behaviors' through learning, which increases skills and knowledge to perform a particular job"

According to Michael. J. Jucious <sup>2</sup>, "Training and Development is a process by which the attitudes, skills and abilities of employees are developed and improved to perform specific jobs".

### Purposes of Training and Development Programmes

The major purpose of Training and Development programmes is to make the employees much more productive by weeding out performance deficiencies, which are the result of the employees' inability to perform at the desired level.



Training and development programmes increase knowledge, skills and attitudes of an employee for improving his/her performance on the job in keeping with the organization's objectives.

Training and Development programmes:

- Helps to absorb latest technology which makes the workforce more flexible.
- Increases the potential for survival and profitability of staff.
- Increase quality of staff.
- Tackles human problems effectively.
- Leads to self - development and self-actualization.

### Importance of Training and Development Programmes

The success of every organization depends not on money, machines, and materials but on people who are trained and experienced. Training and Development programmes are a process, which enables continuous learning. It helps the employees to understand rules and procedures to guide their behavior. Training and Development programmes help an employee to improve his/her performance in the current job and prepares for an intended job.

An effective Training and Development system has two key features: It is based on a systematic approach to Training and Development programmes (Needs assessment system) and, it utilizes the Training and Development programmes (Need information) in a cost effective manner for improving job performance.

The impact of Training and Development programmes depends on serving a need shared by people in an organization. Training and Development is a continuous learning experience that seeks a relatively permanent change in an individual that will improve his/her ability to perform the job.

Evaluating the impact of Training and Development programmes is a continuous process. Evaluation is an integral part of the Training and Development system. The impact of Training and Development programmes has to be monitored on a regular basis. Top management needs to know the investment made on Training and Development programmes. The present study helps in providing the organization to know the impact of Training and Development programmes conducted.

### Review of Literature

Men have been trained in one or the other activity for the last so many years. Training and Development of human resources should be reactive and also proactive. B.R. Virmani and Premila Seth <sup>3</sup> have conducted action research on evaluation of Training and Development. Their main focus was on the methods determining both efficiency and the effectiveness of Training and Development programmes. Jackson <sup>4</sup> has looked at Training and Development as an instrument in Human Resource Development (HRD).

He says that trainers should be able to calculate the value of Training and Development to organizations by describing the impact of Training and Development to organizations in the form of financial benefits, increased productivity etc. Paul <sup>5</sup> Has conducted a study on the effectiveness and strength of Training and Development methods for a group of 60 trainees. The study revealed that Training and Development methods were found to be highly effective by the participants.

### Objectives of the study

- 1) To assess the impact of Training and Development programmes on bank employees by total years of service in the organization.
- 2) To identify components of training and development programmes.

### Hypothesis

There is no significant difference between bank employees belonging to different years of services of (0-9 years, 10-19 years and 20+ years) with respect to components of training and development programmes such as:

- Expectations from training and development programmes
- Perception about training and development programmes



- Impact of training and development programmes on behavioral change
- Impact of training and development programmes on job performance
- Perception about administration of training and development programmes
- Organization climate for transfer of learning after attending training and development programmes
- Overall opinion about training and development programmes
- Perception about training centers
- Impact of training and development programmes on self development
- Perception about the trainers

### Methodology and sample design

The study is a micro level study and has been confined to Karnataka State only. The study is conducted in a leading bank. For all practical purposes the name of the organization is not disclosed. The primary data and other relevant information were collected from 480 respondents. The respondents were given a questionnaire. And the researcher has also conducted focus group interview. The responses were measured on Likert's 5-point rating scales. Researcher has used necessary statistical tools and techniques to conduct the study.

### Scope and Limitations of the Study

1. The study has considered only total years of service of bank staff.
2. The study has been conducted in Karnataka State only.

### Analysis and Interpretations of the study

Table 1 provides the mean and Standard Deviation (SD) of evaluation of training and development programmes and its components of bank employees by total years of service. The mean of training and development programmes is  $510.49 \pm 32.80$ , in which the bank employees belonging to 20 and above years of service have higher mean of training and development programmes score ( $515.56 \pm 28.46$ ) followed by employees belonging to 10-19 years of service ( $514.31 \pm 31.72$ ) and 0-9 years of service ( $498.36 \pm 37.11$ ). The mean and SD of components of evaluation of training and development programmes are also presented according to total years of service in the Table 1 and also in Exhibit 1.

**Hypothesis :** There is no significant difference between bank employees belonging to different years of service of (0-9 years, 10-19 years and 20+ years) with respect to training and development programmes. To test this hypothesis the one way ANOVA test was applied and the results are presented in the Table 2.

From the results Table 2, it is found that, the bank employees belonging to different years of service of (0-9 years, 10-19 years and 20+ years) differ statistically and significantly with respect to training and development programmes scores ( $F=12.9979$ ,  $p<0.05$ ) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, the bank employees belonging to different years of service (0-9 years, 10-19 years and 20+ years) have different training and development programme scores.

If F is significant, to know the pair wise comparison of years of service (0-9 years, 10-19 years and 20+ years) of bank employees by applying the Newman-Keuls multiple posthoc procedure and the results are presented in the Table 3.

Table 3 reveals that, the bank employees belonging to 0-9 years and 10-19 years of service ( $p<0.05$ ); 0-9 years and 20+ years of service ( $p<0.05$ ) differ significantly with respect to training and development programmes scores. In other words, the bank employees belonging to 20+ years of service have higher training and development programmes scores as compared to bank employees belonging to 10-19 years and 0-9 years of service.

To test this hypothesis the one way ANOVA test was applied and the results are presented in the Table 4.

**From the results of the above Table 4 it is observed that,**

- i. The bank employees belonging to different years of service (0-9 years, 10-19 years and 20+ years) differ statistically and significantly with respect to components of training and development programmes i.e.



- expectations from training and development programmes scores ( $F=5.3014$ ,  $p<0.05$ ) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, the bank employees belonging to different years of service (0-9 years, 10-19 years and 20+ years) have different expectations from training and development programme scores.
- ii. The bank employees belonging to different years of service (0-9 years, 10-19 years and 20+ years) differ statistically and significantly with respect to components of training and development programmes i.e. perception about training and development programmes scores ( $F=3.5642$ ,  $p<0.05$ ) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, the bank employees belonging to different years of service (0-9 years, 10-19 years and 20+ years) have different perception about training and development programme scores.
  - iii. The bank employees belonging to different years of service (0-9 years, 10-19 years and 20+ years) differ statistically and significantly with respect to components of training and development programmes i.e. impact of training and development programmes on behavioral change scores ( $F=14.8075$ ,  $p<0.05$ ) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, the bank employees belonging to different years of service (0-9 years, 10-19 years and 20+ years) have different impact of training and development programmes on behavioral change scores.
  - iv. The bank employees belonging to different years of service (0-9 years, 10-19 years and 20+ years) differ statistically and significantly with respect to components of training and development programmes i.e. impact of training and development programmes on job performance scores ( $F=13.7646$ ,  $p<0.05$ ) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, the bank employees belonging to different years of service (0-9 years, 10-19 years and 20+ years) have different impact of training and development programmes on job performance scores.
  - v. The bank employees belonging to different years of service (0-9 years, 10-19 years and 20+ years) differ statistically and significantly with respect to components of training and development programmes i.e. Perception about training and development programmes administration scores ( $F=11.1975$ ,  $p<0.05$ ) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, the bank employees belonging to different years of service (0-9 years, 10-19 years and 20+ years) have different Perception about training and development programmes administration scores.
  - vi. The bank employees belonging to different years of service (0-9 years, 10-19 years and 20+ years) do not differ statistically and significantly with respect to components of training and development programmes i.e. climate for transfer of learning after attending training and development programmes scores ( $F=1.8502$ ,  $p>0.05$ ) at 5% level of significance. Hence, the null hypothesis is accepted and alternative hypothesis is rejected. It means that, the bank employees belonging to different years of service (0-9 years, 10-19 years and 20+ years) have similar organization climate for transfer of learning after attending training and development programmes scores.
  - vii. The bank employees belonging to different years of service (0-9 years, 10-19 years and 20+ years) do not differ statistically and significantly with respect to components of training and development programmes i.e. overall opinion about training and development programmes scores ( $F=1.8751$ ,  $p>0.05$ ) at 5% level of significance. Hence, the null hypothesis is accepted and alternative hypothesis is rejected. It means that, the bank employees belonging to different years of service (0-9 years, 10-19 years and 20+ years) have similar overall opinion about training and development programmes scores.
  - viii. The bank employees belonging to different years of service (0-9 years, 10-19 years and 20+ years) differ statistically and significantly with respect to components of training and development programmes i.e. perception about training center ( $F=14.7240$ ,  $p<0.05$ ) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, the bank employees belonging to different years of service (0-9 years, 10-19 years and 20+ years) have different perception about training center.
  - ix. The bank employees belonging to different years of service (0-9 years, 10-19 years and 20+ years) differ statistically and significantly with respect to components of training and development programmes i.e. impact of training and development programmes on self development scores ( $F=9.6479$ ,  $p<0.05$ ) at 5% level of



significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, the bank employees belonging to different years of service (0-9 years, 10-19 years and 20+ years) have different impact of training and development programmes on self development scores.

- x. The bank employees belonging to different years of service (0-9 years, 10-19 years and 20+ years) differ statistically and significantly with respect to components of training and development programmes i.e. perception about the trainers ( $F=8.5759$ ,  $p<0.05$ ) at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, the bank employees belonging to different years of service (0-9 years, 10-19 years and 20+ years) have different perception about the trainers.

If F is significant, to know the pair wise comparison of years of service (0-9 years, 10-19 years and 20+ years) of bank employees by applying the Newman-Keuls multiple posthoc procedure and the results are presented in the Table 5.

**The data presented in Table 5 reveals that,**

- i. The bank employees belonging to 0-9 years and 10-19 years of service ( $p<0.05$ ); 10-19 years and 20+ years of service ( $p<0.05$ ) differs significantly with respect to component of training and development programmes i.e. expectations from training and development programmes scores. In other words, the bank employees belonging to 0-9 years of service have higher expectations from training and development programmes scores as compared to bank employees belonging to 10-19 years and 20+ years of service.
- ii. The bank employees belonging to 0-9 years and 20+ years of service ( $p<0.05$ ) differs significantly with respect to component of training and development programmes i.e. perception about training and development programmes scores. In other words, the bank employees belonging to 20+ years of service have higher perception about training and development programme scores as compared to bank employees belonging to 0-9 years and 10-19 years of service.
- iii. The bank employees belonging to 0-9 years and 10-19 years of service ( $p<0.05$ ); 0-9 years and 20+ years of service ( $p<0.05$ ) differs significantly with respect to component of training and development programmes i.e. impact of training and development programmes on behavioral change scores. In other words, the bank employees belonging to 10-19 years of service have higher impact of training and development programmes on behavioral change scores as compared to bank employees belonging to 0-9 years and 20+ years of service.
- iv. The bank employees belonging to 0-9 years and 10-19 years of service ( $p<0.05$ ); 0-9 years and 20+ years of service ( $p<0.05$ ) differs significantly with respect to component of training and development programmes i.e. impact of training and development programmes on job performance scores. In other words, the bank employees belonging to 20+ years of service have higher impact of training and development programmes on job performance scores as compared to bank employees belonging to 0-9 years and 10-19 years of service.
- v. The bank employees belonging to 0-9 years and 10-19 years of service ( $p<0.05$ ); 0-9 years and 20+ years of service ( $p<0.05$ ) differs significantly with respect to component of training and development programmes i.e. perception about training and development programme administration scores. In other words, the bank employees belonging to 20+ years of service have higher perception about training and development programme administration scores as compared to bank employees belonging to 0-9 years and 10-19 years of service.
- vi. The bank employees belonging to 0-9 years and 10-19 years of service ( $p<0.05$ ); 0-9 years and 20+ years of service ( $p<0.05$ ) differs significantly with respect to component of training and development programmes i.e. perception about training center. In other words, the bank employees belonging to 10-19 years of service have higher perception about training center as compared to bank employees belonging to 0-9 years and 20+ years of service.
- vii. The bank employees belonging to 0-9 years and 10-19 years of service ( $p<0.05$ ); 0-9 years and 20+ years of service ( $p<0.05$ ) differs significantly with respect to component of training and development programmes i.e. impact of training and development programmes on self development scores. In other words, the bank employees belonging to 10-19 years of service have higher impact of training and development programmes on self development scores as compared to bank employees belonging to 0-9 years and 20+ years of service.



- viii. The bank employees belonging to 0-9 years and 10-19 years of service ( $p < 0.05$ ); 0-9 years and 20+ years of service ( $p < 0.05$ ) differs significantly with respect to component of training and development programmes i.e. perception about the trainers. In other words, the bank employees belonging to 20+ years of service have higher perception about the trainers as compared to bank employees belonging to 0-9 years and 10-19 years of service.

### Suggestions

1. Top management should make changes regularly in the components of training and development programmes viz; aims and objectives, knowledge, and skills to be learnt by trainees in order to meet the expectations of bank belonging to 0-9 years of service group.
2. Human Resource Development department should make behavioral science as a major component of training and development programmes in order to change the behavior of bank staff belonging to 0-9 and 20+ years of service group. This will help them to adjust with the changing banking environment.
3. Training and development programmes should become bridge between competencies, skills, knowledge of bank staff and competencies, skills and knowledge to be acquired by the staff during training and development programmes. This will certainly increase the job performance of bank staff belonging to 0-9 and 10-19 years of service groups.
4. Top management should also conduct programs on personality development, analytical skills and language skills in order to help and motivate for the self development of bank staff belonging to 0-9 and 20 + years of service groups.
5. Trainers should also use various pedagogical tools such as: case study, seminars, group discussion method, interactive sessions, outbound training programmes , activity based leaning with trainees belonging to 0-9 and 10-19 years of service groups.
6. Top management should give necessary instructions to the branch managers to depute their subordinates to training and development programmes in order to develop talents. Bank staff can enhance their knowledge; improve skills and develop positive attitude by attending more number of training and development programmes.

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**Table 1. Mean and SD of training and development programmes and its components of bank employees by total years of service**

Variable	n	0-9 years	10-19 years	20+ years	Total
		131	146	203	480
Training and development programmes	Mean	498.36	514.31	515.56	510.49
	SD	37.11	31.72	28.46	32.80
Expectations from training and development programmes	Mean	29.18	28.96	29.57	29.28
	SD	1.82	1.83	1.68	1.78
Perception about training and development programmes	Mean	36.40	37.03	37.22	36.94
	SD	2.94	2.80	2.65	2.79
Impact of training and development programmes on behavioral change	Mean	61.65	64.46	64.37	63.66
	SD	5.78	4.84	4.43	5.09
Impact of training and development programmes on job performance	Mean	53.15	55.23	55.38	54.73
	SD	4.80	4.04	3.50	4.16
Perception about training and development programmes administration	Mean	39.82	41.34	41.55	41.02
	SD	3.95	3.35	3.05	3.48
Organization climate for transfer of learning after attending training and development programmes	Mean	40.73	40.42	40.66	40.61
	SD	1.59	1.58	1.27	1.46
Overall opinion about training and development programmes	Mean	26.24	26.13	26.32	26.24
	SD	1.07	0.77	0.88	0.91
Perception about training centers	Mean	136.05	142.74	142.30	140.73
	SD	13.43	11.22	10.53	11.92
Impact of training and development programmes on self development	Mean	39.16	41.11	40.81	40.45
	SD	4.56	3.80	3.72	4.06
Perception about the trainers	Mean	35.98	36.89	37.37	36.85
	SD	3.67	2.86	2.63	3.06

**Table 2. Results of one way ANOVA between bank employees belonging to different years of services of (0-9 years, 10-19 years and 20+ years) with respect to training and development programmes**

Source of variation	Degrees of freedom	Sum of square	Mean sum of squares	F-value	P-value	Signi.
Between years of service	2	26628.65	13314.3250	12.9979	0.0000	S
Within years of service	477	488611.25	1024.3422			
<b>Total</b>	<b>479</b>	<b>515239.90</b>				



**Table 3. Pair wise comparison of years of service of bank employees with respect to training and development programmes by Newman-Keuls multiple posthoc procedure**

Years of service	0-9 years	10-19 years	20+ years
Mean	498.3588	514.3082	515.5616
0-9 years	-		
10-19 years	0.0001*	-	
20+ years	0.0000*	0.6992	-

\*Significant at 5% level ( $p < 0.05$ )

**Table 4. Results of one way ANOVA between bank employees belonging to different years of services of (0-9 years, 10-19 years and 20+ years) with respect to components of training and development programmes**

Components	Source of variation	Degrees of freedom	Sum of squares	Mean sum of squares	P-value	F-value	Signi.
Expectations from training and development programmes	Between years of service	2	33.13	16.5663	5.3014	0.0053	S
	Within years of service	477	1490.57	3.1249			
	Total	479	1523.70				
Perception about training and development programmes	Between years of service	2	54.96	27.4780	3.5642	0.0291	S
	Within years of service	477	3677.41	7.7095			
	Total	479	3732.37				
Impact of training and development programmes on behavioral change	Between years of service	2	726.63	363.3168	14.8075	0.0000	S
	Within years of service	477	11703.65	24.5359			
	Total	479	12430.28				
Impact of training and development programmes on job performance	Between years of service	2	451.89	225.9425	13.7646	0.0000	S
	Within years of service	477	7829.81	16.4147			
	Total	479	8281.70				
Perception about training and development programmes administration	Between years of service	2	259.82	129.91	11.1975	0.0000	S
	Within years of service	477	5534.05	11.60			
	Total	479	5793.87				
Climate for transfer of learning after attending training and development programmes	Between years of service	2	7.87	3.9359	1.8502	0.1583	NS
	Within years of service	477	1014.71	2.1273			
	Total	479	1022.58				



Overall opinion about training and development programmes	Between years of service	2	3.07	1.5346	1.8751	0.1545	NS
	Within years of service	477	390.38	0.8184			
	Total	479	393.45				
Perception about training centers	Between years of service	2	3955.39	1977.6931	14.7240	0.0000	S
	Within years of service	477	64069.41	134.3174			
	Total	479	68024.79				
Impact of training and development programmes on self development	Between years of service	2	307.41	153.7062	9.6479	0.0001	S
	Within years of service	477	7599.39	15.9316			
	Total	479	7906.80				
Perception about the trainers	Between years of service	2	155.87	77.9335	8.5759	0.0002	S
	Within years of service	477	4334.72	9.0875			
	Total	479	4490.59				

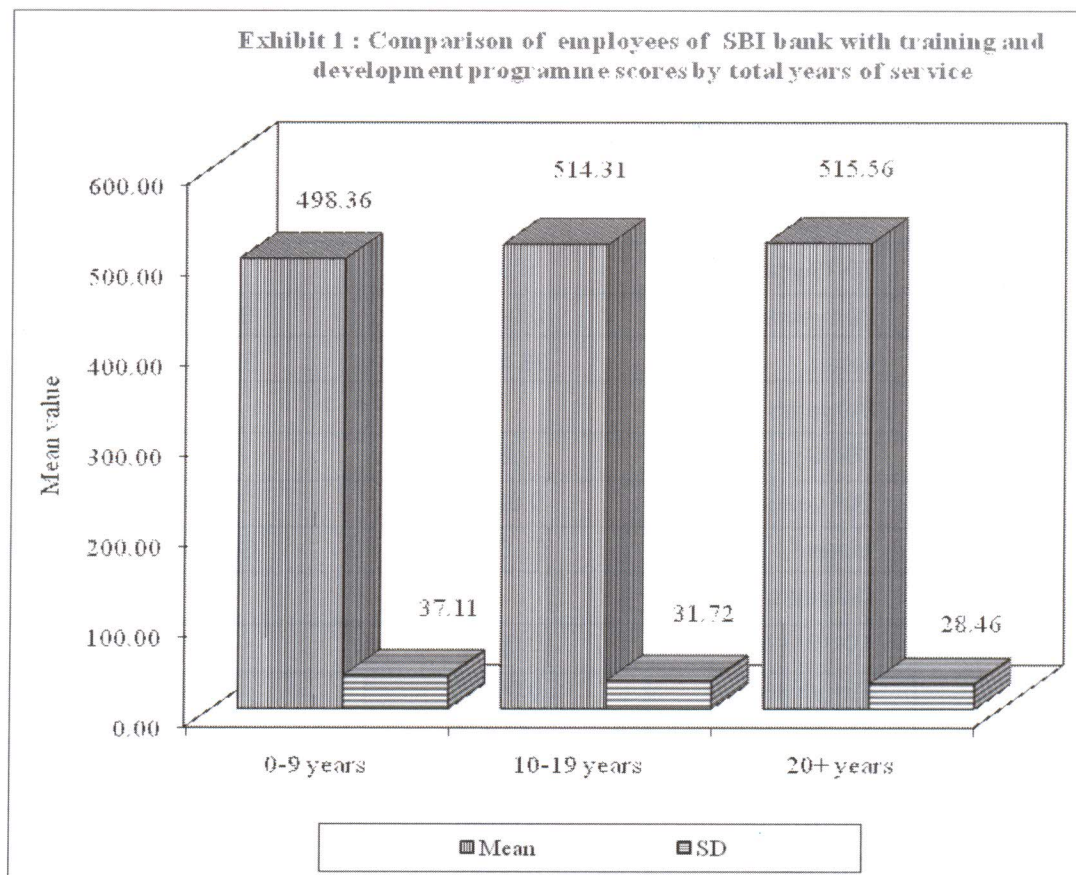
**Table 5. Pair wise comparison of years of service with respect to components of training and development programmes by Newman-Keuls multiple posthoc procedure**

Components	Years of service	0-9 years	10-19 years	20+ years
Expectations from training and development programmes	Mean	29.1756	28.9589	29.5665
	0-9 years	-		
	10-19 years	0.3255	-	
	20+ years	0.0455*	0.0015*	-
Perception about training and development programmes	Mean	36.4046	37.0342	37.2217
	0-9 years	-		
	10-19 years	0.0688	-	
	20+ years	0.0088*	0.5248	-
Impact of training and development programmes on behavioral change	Mean	61.6489	64.4589	64.3744
	0-9 years	-		
	10-19 years	0.0000*	-	
	20+ years	0.0000*	0.8658	-
Impact of training and development programmes on job performance	Mean	53.145	55.226	55.3842
	0-9 years	-		
	10-19 years	0.0001*	-	
	20+ years	0.0000*	0.6962	-



Perception about training and development programmes administration	Mean	39.8244	41.3425	41.5517
	0-9 years	-		
	10-19 years	0.0006*	-	
	20+ years	0.0000*	0.5443	-
Perception about training centers Mean	Mean	136.053	142.74	142.3005
	0-9 years	-		
	10-19 years	0.0000*	-	
	20+ years	0.0000*	0.7086	-
Impact of training and development programmes on self development	Mean	39.1603	41.1096	40.8079
	0-9 years	-		
	10-19 years	0.0001*	-	
	20+ years	0.0004*	0.4595	-
Perception about the Trainers	Mean	35.9771	36.8904	37.3744
	0-9 years	-		
	10-19 years	0.0210*	-	
	20+ years	0.0001*	0.1029	-

\*Significant at 5% level (p<0.05)





## Impact of Modernization and Stress management

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### Abstract

*The impact of modernization can be observed by the erratic changes in the environment, worldwide. The term which is conventionally used to describe these changes is 'Global Warming'. Infact this issue has become a very debatable issue in every country. Governments worldwide have acknowledged the need to take corrective measures as the effects of Global Warming can be observed in not only the erratic weather conditions and natural calamities occurring all around us but also the increasing level of stress related diseases on every individual.*

*This study focuses on stress related diseases the remedies that we as concerned individuals need to observe and follow. The paper highlights possible solutions that can be adopted by every person to ensure less influence of global warming on each one of us.*

**Key words :** Global warming, Environment, Stress, Stress related diseases.

### Introduction

Several studies have established the fact that a wide range of issues relating to health and livelihood are caused by the effect of Climate Change. Infact, changes to the environment and health of every living being is associated to Climate Change (Mc. Michael et.al. 2008). The focus world-wide, is on the increasing severity of stress related diseases, which is also becoming a burning issue, due to Global Warming . The term Global Warming has been described as the increase of Earth's average surface temperature due to the effect of greenhouse gases, such as carbon dioxide emissions from burning fossil fuels or from deforestation, which trap heat that would otherwise escape from Earth. The negative effects include heat stress, mental health issues, air pollution, and extreme weather events. Climate related vulnerability at the workplace leads to stressful work conditions leading to a decline in employee productivity, loss of man-hours, lethargy and stress related ailments like high / low blood pressure etc.

According to the 4th Assessment Report (AR4 2007), report by the Intergovernmental Panel on Climate Changes (IPCC), "warming of the climate system is unequivocal, as is now evident from observations of increases in global average air and ocean temperatures; widespread melting of snow and ice and rising global average sea level". The AR4 further specifies that hot days, hot nights and heat waves have become and will become more frequent over most land areas. Human beings are exposed to climate change directly through changing weather patterns (e.g. heat waves and extreme events such as floods) and indirectly through changes in water, air, food quality and quantity, ecosystem, agriculture, livelihood and infrastructure.

Based on the various literature and studies involving the effect of Global Warming and Climate Change on the Environment as a whole and increase in stress related diseases among individuals in particular, this study tries to understand and substantiate the effect of the ecological imbalance affecting the health of individuals and their behavior, leading to stress and stress related disease.

### Significance of the study

Individuals are observant of the sudden climatic changes affecting our health. A city like Mysuru, which was considered to be a 'Pensioners Paradise', a city of palaces and greenery with naturally cool and pleasant climate, seems to have lost its sheen. The gadget called 'Air Conditioner' was very alien to the city; however of late every office finds it mandatory to install an Air Conditioner as it has become a necessity. Secondly, we also are observant of the early advent of summer, winter and the extremities of the climatic conditions. Similarly the cases of stress related illness like cardio-vascular diseases, early ageing, and in turn increase in the number of hospitals justifies the effects of global warming on all of us. This study tries to highlight the cause for these illnesses which are all stress related and suggest means and remedies to handle and decrease such effects.



## Objectives of the study

Various studies on the subject suggest that individual factors such as physical fitness and health play a fundamental role in heat tolerance. With majority of the people preferring modern gadgets to do their daily chores and the magnitude of physical activity at offices, shows the tendency for individuals to get afflicted with medical conditions like cardiovascular diseases, diabetes, skin disorders, liver disorder, kidney failure, pregnancy related issues and lung problems. Additional factors affecting heat tolerance include substance abuse like intake of alcohol, caffeine and nicotine.

Keeping in view the effects of stress on our daily activities, the objective of this study is to find out the causes of stress and suggest ways of coping with stress induced by climatic changes and also suggesting methods of addressing the important concern of stress in individuals.

## Literature Review

This study follows the secondary research methodology to identify and assess the effect of stress on individuals due to climate changes. This can be justified by the following literature, related to the study being put forth and arriving at a conclusion.

The psychological wellbeing of an individual can greatly be affected due to Climate change and can influence his/her work productivity as well. The degree of affect on all living beings could be related to the kind of weather and climatic changes in the environment. This includes different levels of stress, mental disorders through depression, insomnia, irritability, substance abuse. Janet K Swim et.al, (2011), in their study on human behavioral contribution to climate change, state that individuals are facing rapid changes in the global climate and these changes are attributable to human behavior, further Dietz, Thomas & Rosa (1994) states that the current level of human consumptions, in combination with growing population are having a significant negative impact on the natural environment and are contributing to climate change. Similarly a research article titled 'Effects of heat stress on working populations when facing climate change', authored by Lundgren Kalev Kuklane et.al (2013), reviews various related articles on effects of heat stress on working individuals and the main factors found to exacerbate heat stress in the current and future workplace are the urban 'heat island effect', physical work, individual differences and the developing country context where technological fixes are often not applicable. The study further states that increasing temperature reduces work productivity.

A research article titled 'An overview of Climate change', by Jill Tatarski (1996) highlights the effect of climate change on human community, the article states that an increase in global temperature cause many disruptions in human life around the world, further global warming have caused the rise in global temperature, the risk of huge natural disasters the spread of diseases, and the death of about 150000 people annually according to the WHO. A study on 'Human Health Perspective on Climate Change (2010), states that human health is being affected globally and all sector of society. The study states that environmental consequences of climate change that have been observed and anticipated, such as sea-level rise, changes in precipitation resulting in flooding and drought, heat waves, storms and degraded air quality will affect human health both directly and indirectly.

## Suggestions

Stress is undoubtedly the most dangerous of all diseases and a silent killer. An individual never knows when he gets affected by stress. It is only when an individual get affected by stress related diseases that he/she realizes the implications of the matter. Though we are all aware that global warming is one of the main reasons for the advent of new killer diseases, it is not possible to change the effects of global warming instantaneously. However, we can try to bring down its negative effects through small actions and through changing our behavior, in relation to our day to day activities and measures for decreasing global warming. The study proposes the following activities that could help us overcome stress and prevent further damage to our health:

1. Trees and plants are our best friends and inseparable. They give us the most valuable Oxygen for us to breathe and live. Therefore, we should ensure that our home and office should be surrounded with flora and fauna. To make our surrounding look beautiful, flower and decorative pots and greenery can be arranged. The presence of plants and flowers creates tranquility and a pleasant work environment.
2. The Indian system of reducing stress and enhancing our metabolism is the famous YOGA. Simple Yogic exercises need to be included in our daily routine not only at the workplace but also for those at home. Infact it



- can be made a compulsory routine which would give the individual a break from the normal work hours.
3. A relaxed walk in a park or even on the terrace of one's home could be an effective remedy for reducing stress.
  4. Good ventilation, lighting and also pleasant colour of the wall paint also plays a major role in reducing stress.
  5. Taking a break from the routine and going out with family and friends on picnic, including sports or pursuing a hobby are all stress busters.
  6. The HR managers of companies should ensure that the breaks in between work schedules should include activities that break the work monotony.
  7. Soft music ( where possible to implement) can be played as a background score to induce a better work atmosphere.
  8. Social activities like visiting an old age home or spending time with orphans can help in breaking our usual focus on monotonous daily chores. It can also assist in making us more humane and improve our overall well being.
  9. Adopting a pet can also positively affect our lives. They help in distressing our lives to a great extent.
  10. Music is undeniably one of the best stress busters. In fact there are several studies which has proven that stress related diseases can be cured through music. Indian classical music has done wonders in this endeavor. Similarly, surrounding ourselves with friends who are positive thinkers, watching programmes which would tickle our funny bone should also be included in the list.

The British had always referred to India as a land of mystery and miracles. The ancient system of Yoga and meditation are simple, tranquil and composed method of ensuring a healthy mind and body. Yoga is now recognized the world over and we also celebrate the World Yoga Day.

Yogic exercises have proved that stress and stress related diseases can be easily cured. Practice of Yoga is the best method for relieving stress and avoiding stress related diseases. Some yogic exercises and mudras could be practiced anywhere and at a time convenient to us. By practicing some easy mudras, which we could adopt in our daily routine, at our place of work, could help us handle stress and stress related diseases. The following three Mudras and the acupressure technique can help reduce stress.

Exhibit 1 shows the Dhyana Mudra, bring the tip of the thumb and the index finger in contact with each other. Focus on your breathing pattern. This Mudra is also used during meditation by resting the arm on the knee. The Dhyana Mudra can be practiced at any time and at one's convenience. This mudra helps to increase concentration in the individual. Practicing this mudra can help the individual stay free from depression and is helpful for all mind related problems.

Exhibit 2, demonstrates the Prithvi Mudra. Bring the tip of the thumb in contact with the tip of the ring finger. Focus on your breathing pattern. This Mudra helps the individual relieve stress and attain peace of mind. This Mudra helps to keep the body active.

The Hridaya Mudra, as seen in Exhibit 3, helps to regulate breathing and is good for those with respiration related problems like asthma. For this mudra, bring the tip of the thumb, the tip of the index finger and the tip of the ring finger together. Focus on the breathing pattern.

Environment pollution leads to global warming and that effects the health of every living creature. When we are affected with stress, it also manifests in our breathing pattern.

Exhibit 4 demonstrate an acupressure technique for relieving Headache, which is a symptom of stress. If the cause of the headache is due to stress, this action will help in reducing the headache.

Gently but firmly, press the area of the hand between the thumb and the index finger, as seen in Exhibit 4 in rhythmic pressure.

## Conclusion

As enlightened individuals, we need to be cautious about our well-being. One major step in this direction is to ensure that we surround ourselves with nature. We need to grow more plants and trees, use water economically and judiciously, save on electricity and other natural resources. Through this study, we can identify the effects of ecological imbalance on all living creatures. The effect of global warming on individuals can be observed by the increasing number of stress related diseases, increase in crime rate and related issues. Following simple steps could take us in the right direction and help us

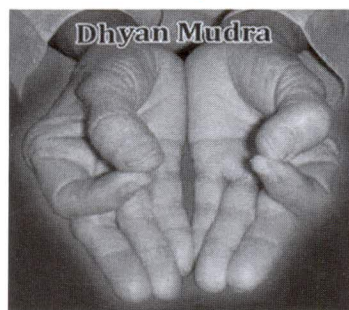


prevent ourselves from these diseases, which, when ignored in its initial stages can impair our lives forever. Though modernization has brought with it several positive changes, however, just as in the two sides of a coin, it have also brought several negative aspects. We as enlightened individuals, need to take care of ourselves, our family members and our environment, thus ensuring that we minimize our expenses on huge and increasing medical bills and also well-being. We need to make up our minds to ensure a safer and better planet earth in the years to come.

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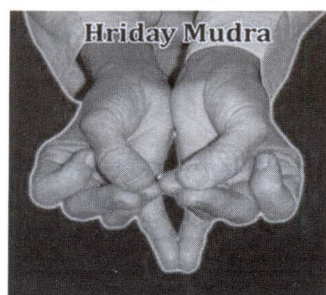
**Exhibit 1. Dhyan Mudra**



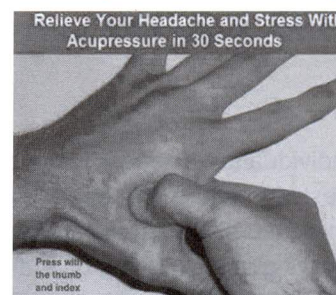
**Exhibit 2. Prithvi Mudra**



**Exhibit 3. Hridayi Mudra**



**Exhibit 4. Acupressure for relieving stress**





## The Effects of Monetary Policy on Selected Private and Public Sector Banks - An Empirical Study

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### Abstract

*The evidence of studies conducted on effects of Monetary policy on banks and their behavior clearly states that the frequent changes in the instruments of Monetary policy has a direct and indirect influence on the operations of banks and this in turn affects the operations of small and medium scale industries. Industries try to reduce their borrowings and postpone their investments during tight money. At the same time banks take a conservative approach while lending. Banks try to be selective due to funds shortage and put restrictions on overdraft facilities. This paper examines what effect banks have and how they behave during policy on rates changes.*

*The study conducted reveals that, the monetary policy tools play an important role in deciding the lending and borrowing rates of the banks. A hike in key policy rates leads to increase in banks lending rates which results in low demand from the borrowers and increased bad debts which in turn creates Non Performing Assets (NPA) for banks. Banks did not find significant number of individuals approaching other money lenders during credit squeeze. Customers did not approach money lenders as they relied on the trade credit rather than relying on banks credit.*

**Key words : Monetary policy, Non-performing assets, Fixed deposits, Trade credit, bank credit**

### Introduction

Monetary policy is the process by which the monetary authority of a country controls the supply of money, often targeting an inflation rate or interest rate to ensure price stability and general trust in the currency. Monetary policy is referred to as either being expansionary or contractionary, where an expansionary policy increases the total supply of money in the economy more rapidly than usual, and contractionary policy expands the money supply more slowly than usual or even shrinks it. This paper examines what effect banks have and how they behave during key policy rates changes. Investigation on impact of monetary policy is essential as the banks get affected with tight monetary policy.

Frequent and unexpected changes in the key policy rates will definitely have an impact on the lending and borrowing activity, supply and demand for the fund, performance and profitability of the banks. As the major source of funds for the banks is deposits, such variations in key policy rates will force banks to change the rates of deposits and lending. The monetary policy tools play an important role in deciding the lending and borrowing rates of the banks. A hike in key policy rates leads to increase in banks lending rates which results in low demand from the borrowers and increased bad debts which in turn creates Non Performing Assets for banks.

### Objectives of the study

- To understand how banks are affected due to changes in key policy rates and how they respond to this.
- To examine the effects of key policy rates on banks during contractionary monetary policy.

### Need for the study

The evidences of studies conducted on effects of Monetary policy on banks and their behavior clearly states that the



frequent changes in the instruments of Monetary policy such as Cash Reserve Ratio (CRR), Statutory Liquidity Ratio (SLR), Marginal Standing Facility (MSF), Repo and Reverse Repo has a direct and indirect influence on the operations of banks and this in turn affects the operations of small and medium scale industries. Industries try to reduce their borrowings and postpone their investments during tight money. At the same time banks take a conservative approach while lending. They try to be selective due to funds shortage and put restrictions on overdraft facilities. This paper examines what effect banks have and how they behave during key policy rates changes. Investigation on impact of monetary policy is essential as the banks get affected with tight monetary policy. Hence there is need to study the behavior and impact of Monetary Policy on banks and how well they respond to it.

### Scope of the study

The study entitled "The effects of monetary policy on selective Private and Public sector Banks - An empirical evidence" undertakes study of impact of some factors of monetary policy on bank behaviour such as Repo rate, reverse repo, MSF, CRR and SLR. The study is restricted to the top five private sector banks and top fifteen public sector banks located in Hubballi.

### Research Methodology

To accomplish the objectives of the study entitled "The effects of monetary policy on selective public sector and private sector banks - An empirical evidence", various reports relating to the effects of monetary policy on banks are reviewed and evidences were observed. A questionnaire is drafted to analyse the banks behavior relating to the effects of monetary policy. This questionnaire is administered to regional branch managers of 15 public and 5 private sector banks located in Hubballi. Views on past, present and future expectations of the branch head regarding the effects of key policy rates are collected. The time period for the study is from February 2015 to July 2015. Names of the banks selected for the study are mentioned in Table 1

### Literature Review

Several researchers have tried to study the effects of monetary policy on small industries. In the study conducted by Benjamin Caplan (1940) reveals that the change in the interest rate increases the profitability of existing machines, it will, *cet. par.*, lower the rate of reinvestment. On the other hand, if the change in the interest rate decreases such profitability, it does not follow automatically, that this will lead to an increased rate of reinvestment. Doris M. Eisemann (1958) concluded that a tightening of credit would impede the inventory build-up in those industries which do not tend to be cyclically sensitive just as much as in the other industries. It is found that the inventory level of large firms is not very sensitive to changes in monetary policy. Victor L.

Andrews, Seymour Friedland and Eli Shapiro (1959), analysed the receivables/payables ratio by industry and firm size for the corporate universe which indicates that trade credit tends to flow from large firms to small firms. The increase in trade credit extended by manufacturing corporations exceeded the increase in bank loans. In 1956, trade credit was the single most important source of funds for the small corporations. Sachin Chaudhuri (1962) found that burden of interest is significantly heavier on small units than on large units and that it is the lightest on foreign companies. The larger companies are able to pass on a substantial part of the burden of financing their working capital needs to their suppliers in the small sector in the form of trade credit.

James W. Christian and Warren F. Mazek (1969), found differential effects in the extension of bank credit which favor large firms during tight money periods and was contradictory to findings of Bach and Huizenga who concluded that there was no substantial discrimination by banks against small firms during the 1955-57 tight money period, despite their finding that bank lending to large firms increased relative to small firms. H. T. Parekh (1974), Observed that normally the ruling interest rates in the non-organised market are 3 to 5 per cent higher than in the organised market which caters primarily to the small-scale industry, agriculture and the small businesses, in urban and in rural areas. The availability of funds and the rates of interest at which such funds are available in this market depend directly on the supply and rates of interest in the organised money market. The impact of any upward change in the organised sector is quickly and sharply felt by the unorganised sector. Banks will never be able to grant to this sector all the finance it needs and the businesses will continue to have to depend on the non-organised market for a vital part of their needs.



Mark Gertler and Simon Gilchrist (1993), Evidence from the manufacturing sector, further, suggests a strong compositional effect on small versus large firms. After tight money, lending to small firms declines relative lending to large firms. Mark Gertler and Simon Gilchrist (1994) found that small firms contract substantially relative to large firms and credit flows to small firms contract relative to credit flows to large firms after tight money. Lawrence J. Christiano, Martin Eichenbaum and Charles Evans (1996) showed that the measures of contractionary monetary policy shocks are associated with persistent declines in real GDP, employment, retail sales and non financial corporate profits as well as increases in unemployment and manufacturing inventories. Following a contractionary shock to monetary policy, net funds raised in financial markets by the business sector increased for roughly a year.

Ruby P. Kishan and Timothy P. Opiela (2000), argue that bank asset size and bank capital affect the ability of banks to raise funds and maintain loan growth during contractionary policy. Allen N. Berger and Gregory F. Udell (2002), in their article highlighted that, tight monetary policy reduces bank lending and lowers the growth and investment of small businesses, consistent with the bank lending view. Saibal Ghosh (2006), The study presents empirical evidence on the lending channel in India, using annual bank level data covering the period 1992-2004. The analysis indicates that for banks classified according to size and capitalisation, a monetary contraction lowers bank lending, although large and well capitalised banks are able to shield their portfolio from monetary shocks. If central bank manages to diminish money supply, the real interest rate is expected to rise, by dampening the real demand. A monetary policy tightening by increasing the interest rate, deteriorates the net worth of position and credit worthiness of the private sector, prompting the banker to raise hurdle rates on loans. Saibal Ghosh (2008), Analysis lends some support to the theoretical prediction that constrained banks raises lending to less risky borrowers in response to a monetary contraction.

## Analysis & Interpretation

Table 2 shows Fixed Deposits as the major source of finance for the 80 per cent of the banks for lending activities. They seem to be less dependent on Saving Bank account and Current account funds.

According to Table 3, Majority of respondents are of the view that the monetary contraction results in decreased bank lending as it makes less funds available for lending. Banks try to restrict themselves from lending activities during contractionary monetary policy implementation.

According to Table 4, Majority of the respondents are of the opinion that banks are sensitive to key policy rates changes. Frequent changes in key policy rates forces the banks to change their key interest rates and restrict to selective lending.

From Table 5, it is found that Majority of the respondents said that their key lending rates change when key policy rates change. It is understood that there is direct relationship between key policy rates and lending rates of the bank. When key policy rates change lending rates are bound to change.

From Table 6, it is clear that Majority of the banks are affected by the changes in all key policy rates in one or the other way. Frequent changes in all the key policy rates such as CRR, SLR, MSF, and REPO and reverse Repo have affected the banks in the past and will have a significant impact on banks in future.

As shown in Table 7, 70 per cent of the respondents are of the opinion that profitability of the banks is affected by the frequent and unexpected variation in the key policy rates. Bank's internal rate of return fluctuates due to the variation in key policy rates.

As shown in Table 8, 50 per cent of the banks disburse loans to only selective borrowers who have high credit worthiness and longterm relation during tight money policy.

According to Table 9, 42 per cent of the banks found variation in demand for all the segments of lending during contractionary monetary policy. 26 per cent of them faced variation in demand from only the business loan segment. Monetary contraction or expansion will have an impact on the variation in demand for business loans.

According to Table 10, Majority of the banks prefer to lend short term loans during tight money policy. Banks would like to be on the safer side and hence they prefer short term lending during tight money. Short term lending helps the banks to recover the lent money immediately and rotate it.

As shown in Table 11, Majority of the banks NPA found to be increased during lack of liquidity and higher interest



rates periods. NPA's of the banks will increase as a result of defaults rise due to the higher interest rates and defaults in repayments.

The data shown in Table 12, reveals that 44 per cent of the bank managers observed that the investment decisions and borrowings of the companies came down during contractionary monetary policy. 25 per cent of them did not find any variation in investment decisions and borrowings from the companies during contractionary monetary policy. During contractionary monetary policy the new investments and expansionary activities of the companies either diminishes or else remain stagnant.

From Table 13, It is observed that companies drop the projects due to higher interest rates and lack of availability of credit which had an impact on the profitability of the banks.

Results from Table 14 show that, there were no much reductions observed in the overdraft limit to the companies during tight money policy. Even during tight money policy banks didn't reduced the overdraft limit to the companies.

As shown in Table 15, It is observed that frequently companies relied more on the trade credit during periods of low credit and higher interest rates. Companies go for trade credit from suppliers rather depending on credit from banks during tight liquidity and higher interest rates period.

## Conclusion

Frequent and unexpected changes in the key policy rates will definitely have an impact on the lending and borrowing activity, supply and demand for the fund, performance and profitability of the banks. As the major source of funds for the banks is deposits, such variations in key policy rates will force banks to change the rates of deposits and lending. The monetary policy tools play an important role in deciding the lending and borrowing rates of the banks. A hike in key policy rates leads to increase in banks lending rates which results in low demand from the borrowers and increased bad debts which in turn creates Non Performing Assets for banks.

Expansionary monetary policy is good for the economical growth. Further contractionary monetary policy of RBI results in liquidity tightening and higher interest rates prevail in the economy. As per the observations the rate at which the industries borrow is an important factor to them. Interest rate decides whether to undertake an investment decision or to let go a project in the hand. During higher interest rates and tight money period, if the investment opportunity is very much attractive and gives the internal rate of return more than the cost of capital then, the rate of interest would be the secondary factor.

It is observed that even during contractionary situation, banks had sufficient funds for lending. They did not find significant number of individuals approaching other money lenders during credit squeeze. Banks didn't reduce the overdraft limit to the companies. The bankers believed that customers did not approached money lenders as they relied on the trade credit rather than relying on banks credit.

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**Table 1. Names of the Banks selected for study.**

Public Sector Banks	Public Sector Banks	Public Sector Banks	Private Sector Banks
Bank of India	State bank of India	Vijaya Bank	HDFC
IDBI	Bank of Baroda	State Bank of Hyderabad	AXIS Bank
Union Bank	Punjab National Bank	State Bank of Mysore	Yes Bank
Syndicate Bank	Central Bank	Federal Bank	ICICI Bank
Corporation bank	Canara Bank	Indian Overseas Bank	Kotak Mahindra Bank

**Table 2. Major source of funds to Banks.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Fixed Deposits	16	80.0	80.0	80.0
	CA & SA	4	20.0	20.0	100.0
	Total	20	100.0	100.0	

**Table 3. Opinion on the statement "Monetary contraction lowers bank lending".**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Highly agree	4	20.0	21.1	21.1
	Agree	8	40.0	42.1	63.2
	Average	2	10.0	10.5	73.7
	Disagree	5	25.0	26.3	100.0
	Total	19	95.0	100.0	
Missing	System	1	5.0		
Total		20	100.0		

**Table 4. Banks sensitivity to key policy rate changes by RBI.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Highly Sensitive	5	25.0	25.0	25.0
	Sensitive	10	50.0	50.0	75.0
	Average	3	15.0	15.0	90.0
	Less Sensitive	2	10.0	10.0	100.0
	Total	20	100.0	100.0	



**Table 5. Effect on lending rates due to key policy rates change.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very often	5	25.0	26.3	26.3
	Often	8	40.0	42.1	68.4
	Sometimes	4	20.0	21.1	89.5
	Rarely	2	10.0	10.5	100.0
	Total	19	95.0	100.0	
Missing	System	1	5.0		
Total		20	100.0		

**Table 6. Key policy rates changes affected in the recent past.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	CRR	4	20.0	20.0	20.0
	SLR	2	10.0	10.0	30.0
	REPO	3	15.0	15.0	45.0
	All of these	11	55.0	55.0	100.0
	Total	20	100.0	100.0	

**Table 7. Impact on the profitability of the bank due to frequent changes in key policy rates.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Highly agree	4	20.0	20.0	20.0
	Agree	10	50.0	50.0	70.0
	Neutral	3	15.0	15.0	85.0
	Disagree	3	15.0	15.0	100.0
	Total	20	100.0	100.0	

**Table 8. Loan disbursals during tight money policy.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very often	6	30.0	30.0	30.0
	Often	4	20.0	20.0	50.0
	Sometimes	6	30.0	30.0	80.0
	Rarely	3	15.0	15.0	95.0
	Never	1	5.0	5.0	100.0
	Total	20	100.0	100.0	



**Table 9. Variation in demand in different segment of lending.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Individual loan	1	5.0	5.3	5.3
	Business loan	5	25.0	26.3	31.6
	Housing loan	2	10.0	10.5	42.1
	All of these	8	40.0	42.1	84.2
	No variation	3	15.0	15.8	100.0
	Total	19	95.0	100.0	
Missing	System	1	5.0		
Total	20	100.0			

**Table 10. Preferred lending during tight money policy.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Short term lending	14	70.0	70.0	70.0
	Long term lending	2	10.0	10.0	80.0
	Both of these	4	20.0	20.0	100.0
	Total	20	100.0	100.0	

**Table 11. Effect on NPA of the bank due to lack of liquidity & higher interest rates.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Increase	11	55.0	57.9	57.9
	Decrease	3	15.0	15.8	73.7
	No change	5	25.0	26.3	100.0
	Total	19	95.0	100.0	
Missing	System	1	5.0		
Total	20	100.0			

**Table 12. Variations in investment decisions and borrowings of companies during contractionary monetary policy.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Increase	5	25.0	27.8	27.8
	Decrease	8	40.0	44.4	72.2
	No change	5	25.0	27.8	100.0
	Total	18	90.0	100.0	
Missing	System	2	10.0		
Total	20	100.0			



**Table 13. Drop in the project due to higher interest rates and lack of credit availability during tight money.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very often	4	20.0	21.1	21.1
	Often	4	20.0	21.1	42.1
	Sometimes	5	25.0	26.3	68.4
	Rarely	5	25.0	26.3	94.7
	Never	1	5.0	5.3	100.0
	Total	19	95.0	100.0	
Missing	System	1	5.0		
Total	20	100.0			

**Table 14. Reductions in the overdraft limit to the companies during tight money policy**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Sometimes	3	15.0	15.0	15.0
	Rarely	7	35.0	35.0	50.0
	Never	10	50.0	50.0	100.0
	Total	20	100.0	100.0	

**Table 15. Reliance on the trade credit during periods of low credit availability and higher interest rates.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very frequent	2	10.0	10.5	10.5
	Frequent	6	30.0	31.6	42.1
	Sometimes	5	25.0	26.3	68.4
	Rarely	5	25.0	26.3	94.7
	Never	1	5.0	5.3	100.0
	Total	19	95.0	100.0	
Missing	System	1	5.0		
Total	20	100.0			

## Developing a Model for Training and Placement Cell in Private Technical and Management Institutions

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### Abstract

*Training and placement cell in an institute assist their students for the campus placements. It also undertakes the responsibility of giving the necessary training to the students to enhance their employability skills. Students are encouraged to take campus interview in the fields they desire. Training and placement cell also provides necessary guidance on higher education and entrepreneurship especially in the technical and management institutions. The functioning of different training and placement cells in the different technical and management institutions have been studied and to enhance the employability of their students a model is proposed. The study was descriptive and explorative in nature and the data was collected through survey method by using set of structured questionnaire. Thirty-six private technical and management institutions in Karnataka were visited to collect the data after conducting the pilot survey. Collected data was processed and it was analyzed using statistical t - test. Finally, a model for the training and placement cells to function effectively and efficiently in a technical and management institution was proposed.*

**Key words : Training and placement cell, Technical and Management institution, Employability skill, Graduate attributes.**

### Introduction

Training is a systematic programme to increase the knowledge, skills, abilities and aptitudes of employees to perform specific jobs. Training is concerned with increasing the knowledge and understanding of the total environment (K. Aswatappa, 2006)

Placement is a process of assigning a specific job to each of the selected candidates. It involves assigning a specific rank and responsibility to an individual. It implies matching the requirements of a job with the qualifications of the candidate. The significances of placement improve employee morale, helps in reducing employee turnover and helps in reducing absenteeism.

The major objective of placement is to identify the talented and qualified professionals before they complete their education. This process reduces the time for an industry to pick the candidates according to their need. It is a cumbersome activity and hence majority of the companies find it difficult to trace the right talent.

Training and Placement Cell (TPC) has an important role to play in student's future and an indispensable pillar of the Institute. This department continuously strives to help students in pursuing their career goals by acquiring employment skills and ultimately to attain desired employment. This is accomplished through building a strong partnership amongst students, alumni, faculty members, trainers and industries.

### Literature review

In his paper B. Sripala (2011) explains training is important for students to enhance their skills and to achieve good placement in various Industries. Training of students and equipping them with life skills has become an important responsibility of the Institutions. Along with technical expertise, development of a holistic personality is also necessary.



In most of the technical and management institutions, the placement cell, apart from providing information regarding higher education in India and abroad, job opportunities available in the market through its notice board, emails and sms, they also extend their services by offering various trainings to the students on personality development and career development skills. The database of the students is managed by the cell which plays a critical role in getting jobs for their alumni too.

In India, more number of engineering graduates and management graduates pass out every year than any other country. But surprisingly, only minuscule amount of professionals are employable or ready for employment after their education. Divya Shukla (2012) describes the importance of the employability in the Indian labor market and it has now commonly discussed topic in almost every HR forums. According to a NASSCOM report (2012), each year over 3 million graduates and post-graduates are added to the Indian workforce. Of these, only 25 percent of technical graduates and 10-15 percent of regular graduates are considered employable by the industry. Most of the proficient and non-proficient workforces are produced by public and private technical and management institutions. The main reason behind this truth is lack of employability skills apart from their technical and professional knowledge and age old curriculum they study.

### Objectives of the study

- To design a model for training and placement cell for the technical and management institutions
- To give suggestive measures to enhance employability skills of the students

### Methodology

The study conducted was both descriptive and exploratory in nature. The data was collected through the survey method from both students and Training and Placement Officer (TPO) in different private technical and management institutions in Karnataka. There were two sets of questionnaire one for TPOs and other for the students. The questionnaire was consisting of 48 questions for TPOs and 41 questions for students. The questionnaire was categorized under four headings. First part was demographic questions which will truly give actionable and meaningful results to assist in making better decisions, Second part was to know the present working models of the placement cell, third part consist of future Plans for the placement cell which will help to develop effective and efficient model to improve placements, to attract top companies and placing maximum number of students in industries. Final part consisting of enhancing the employability skills of the students and give the suggestive measures. Survey was conducted for different age groups and for both male and female students. Even survey was applicable to both urban and rural institutions.

The data was analyzed by using statistical t-test. Data collected was under the categories of Nominal and Ordinal. The present study was carried out for the technical and management institutions in Karnataka. The survey was conducted for thirty six Training and Placement Officers (TPOs) and three hundred seventy students from thirty six technical and management institutions in Karnataka.

### Results and analysis

Data collected from the institutions was reviewed and then analyzed using statistical t - test using SPSS software to meet the objectives of the project work.

#### Hypothesis Testing

Following two hypotheses were formulated to meet the objectives of the study.

- H<sub>01</sub>: There is no significant difference among TPOs and students regarding various factors required for development of TPC model.**
- H<sub>02</sub>: There is no significant difference among TPOs and students regarding the skill parameters required to enhance employability skills of the students.**

After collecting the data, the independent t-test was conducted for the opinions given by both the students and TPOs to the questionnaire at the significant level of 95%. The p-values obtained from the t- test and the test outcomes are shown in From the Table 5.1, it is understood that the p- values for the factors D8, D2, D3, D5, D9, D4, D6, D1 and D7 are higher than the 0.05. Thus, it was revealed that there is not enough evidence to reject the null hypothesis. However, for the factors D11,

D10, D14, D15, D12 and D13 the p - values are less than 0.05. Hence, the null hypothesis was rejected for all these factors.

From the Table 5.2 independent t - test result indicates that the p - values for the factors S3, S4, S12, S5, S10, S11, S12, S13, S14, S1, S16 are higher than the 0.05. Thus, it was revealed that there is not enough evidence from the data to reject the null hypothesis. Hence, the null hypothesis was accepted for all these factors. For the factors S2, S6, S7, S8, S9, S16 the p - values are less than 0.05. Hence, the null hypothesis was rejected for these factors.

### Proposed Model

Based upon the statistical tests results, suggestions collected from both TPOs and the students during the survey and the best practices being practiced in few of the TPCs of the Technical and management institutions, the following model for effective and efficient working of the TPC was proposed.

#### Organization Structure

- The TPC should have the full time TPO.
- The full pledged TPC with all infrastructure and facilities is required for the institutions.
- The vision and mission statements should be stated for TPC and displayed in the office.
- Well planned and organized process should be prepared for TPC.
- The TPC must include staff placement coordinators and student coordinators from each branches of the institution.
- Additional remuneration should be given to the TPO and TPC staff for each placement of the student as motivational factor.
- Sufficient funds to be provided by the institutions to the proper functioning of the TPC.
- TPC should publish Placement Brochures consisting the details of the present batch of students with their specialization and few top alumni to be given to the prospective employers.
- Depending upon the strength of the students in the college, the TPC may consist of TPO, Asst. TPO, FDC, SDC, Attender / helper.
- The TPC should have the well established office room, computer lab, meeting room, seminar room, and practice hall.
- Additional remuneration to be paid for the TPO/staff who spend extra time for training program on holidays / after college working hours.
- The transportation facilities should be provided for the students to attend the campus drives in other institutions.
- TPO has to seek the support from the management, staff and students to run the TPC office smoothly.
- TPO has to keep update information through the newspapers advertisements, employment news and from employment exchange offices about the vacancies at both public and private sector enterprises / companies. The students should be informed about such vacancies enabling them to attend Interviews at the premises of the Companies on specified dates and time for their recruitment.

#### Assessments

- For continuous monitoring and evaluation of the student performance, pre and post training assessments have to be conducted as per industrial standards.
- TPC has to help the students in improving the students' performance by giving training, showing the motivation videos, arranging guest lecturer from industry people and alumni.
- Keeping a tracking system for performance of the students from enrollment to employment.
- Regular feedback is taken from the students and company people after every drive.



## Training

- The soft skill, industrial training, internship and project based learning training are to be incorporated in regular curriculum.
- The training to be given to the students from the very first year especially in improving communication skill.
- Arranging for certificate training programs which the industry demand.
- Improving the Industry?Institute Interaction by organizing lectures inviting the professionals from different industries.
- To enhance the skill sets of the students, following modules with number of training hours is recommended as suggested by both TPOs and Students which is shown in the Table 5.3.

There is variation in number of hours of training in these modules as suggested by TPOs and students. The final decision is made based on the situation.

- From the survey it was obtained that the criteria to select the professional trainee consultants or trainers to train the students should be based upon;
  - i. Modules they cover
  - ii. Previous training history
  - iii. Number of hours of training to the students
  - iv. Fees charge
  - v. Additional support they extend to the students after training

## Placement

- Identification of student's potential and mapping their competencies.
- Cataloguing the database of students (their specialization, interests and their academic performances) to provide to the prospective recruiters.
- Providing interlink for the enthusiastic talent ready to explore new horizons alongside the growing requirement of the corporate world.
- Working as a platform for moulding the students according to the requirements of the corporate world and Research & Development Departments.
- Designing a web-based job-search portal for the Institute.
- Carrying out career counseling for students on regular basis.
- To enhance the placement cell activities, the institutions have to consider following points in order of their preference;
  - i. Infrastructure of the college
  - ii. Accreditation of the college
  - iii. Branding of the college
  - iv. Sufficient eligible strength of the students
  - v. Previous placement records
  - vi. Sufficient funds
  - vii. Alumni base

## Conclusion

The data was collected from the 33 private technical and management institutions in Karnataka for both TPOs and students. The independent t test was conducted for the design and development of a TPC, skill parameters to enhance the

employability of students and training hours recommended to the students were analyzed. It was found that in most of the factors there was no significant difference among TPOs and students as the significant p - value of each factor was greater than 0.05 and hence null hypothesis was accepted.

Finally, a model was proposed for training and placement cell for the private technical and management institutions under four headings; namely TPC Structure, Training, Assessment and Placement. This model will help an institution; to establish a full pledged TPC, it's organization structure, the facilities to be provided to the students during training and placements, the number of hours of training to be given to the students in different skill sets, different works to be carried out by the TPOs and the bases of selection of the trainees, training modules to enhance the employability and placements of the students.

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22. the Tables 1 and Table 2

**Table 1. Hypothesis results for design and development of TPC**

Factors	p-value	Test outcome
D8	0.342	There is no significant difference between TPOs and students regarding student feedback after each placement drive.
D2	0.332	There is no significant difference between TPOs and students regarding number of placements enhance the brand image of institution.
D3	0.322	There is no significant difference between TPOs and students' regarding soft skill training has to be incorporated along with regular curriculum.
D5	0.210	There is no significant difference between TPOs and students regarding TPC to become member of professional bodies such NASSCOM, FICCI etc.
D9	0.182	There is no significant difference between TPOs and students regarding arranging of alumni meet every year.
D4	0.121	There is no significant difference between TPOs and students to develop database of alumni.
D6	0.096	There is no significant difference between TPOs and students regarding requirement of awareness training on career vs. job.
D1	0.082	There is no significant difference between TPOs and students regarding need for common TPC model.
D7	0.053	There is no significant difference between TPOs and students regarding placement has an effect on college admissions.
D11	0.047	There is significant difference between TPOs and students regarding training program should be a part of regular time table.
D10	0.033	There is significant difference between TPO and students regarding training should be given from first year to the students.
D15	0.014	There is significant difference between TPOs and students regarding attending of regular alumni talk.
D14	0.004	There is significant difference between TPO and students regarding developing of database of company profile.
D12	0.001	There is significant difference between TPOs and students regarding importance of full pledge office for TPC.
D13	0.001	There is significant difference between TPOs and students regarding developing of database of students.

Source : Field Survey

Table 2. Hypothesis results for skill parameters

Factors	p-value	Test outcome
S3	0.559	There is no significant difference between TPOs and students regarding conduct of regular industrial visits to the students.
S4	0.390	There is no significant difference between TPOs and students regarding conduct of inter college competitions.
S12	0.381	There is no significant difference between TPOs and students regarding implementation of mentoring programmes to the students.
S5	0.277	There is no significant difference between TPOs and students regarding providing add on training programs.
S11	0.269	There is no significant difference between TPOs and students regarding training to improve social skills.
S13	0.194	There is no significant difference between TPOs and students regarding making use of IT to teach employability skill.
S14	0.192	There is no significant difference between TPOs and students regarding making practice sessions compulsory for attending drives.
S10	0.165	There is no significant difference between TPOs and students regarding encouraging the student to interact more with the industries.
S16	0.100	There is no significant difference between TPOs and students regarding arranging guest lecturers from industry.
S1	0.062	There is no significant difference between TPOs and students regarding establishing finishing school in the college.
S6	0.032	There is significant difference between TPOs and students regarding conducting personality development programmes.
S7	0.028	There is significant difference between TPOs and students regarding giving English language training compulsorily to all the students.
S9	0.026	There is significant difference between TPOs and students regarding insisting students to target minimum at scoring of 60% in university exams.
S8	0.023	There is significant difference between TPOs and students regarding motivating students to take more competitive exam like GATE / GRE / CAT / MAT etc.
S15	0.012	There is significant difference between TPOs and students regarding empowering the students to take active part in TPC activities.
S2	0.001	There is significant difference between TPOs and students regarding making all the training programmes compulsory to all the students in multidisciplinary areas.

Source : Field Survey



Table 3. Number of hours training to the students

S. No.	Modules	Number of hours of training as suggested by the	
		TPOs	Students
1	Aptitude	60	60
2	Communication/Soft skill	32/42	32/42
3	GD skill	32	32
4	English Language Skill*	60	42
5	Career counseling	32	32
6	HR interview skills	32	32
7	Resume preparation	32	32
8	Company centric training*	42	60
9	Campus Recruitment training		
	Certificates	32	32
10	Technical skills	60	60

Source : Field Survey

## A Case Study of URO Enterprises

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### Abstract

*Often Entrepreneurs recognise opportunities considering their prior experience and networking as investment capability. Mr Vijay, a technocrat entrepreneur, having over 20 years of design and manufacturing experience started a new venture of URO Enterprises for manufacture of quality disposables for Urological applications in hospitals. Though products were of high quality, the price was higher than the competitors, mainly from abroad.*

*The initial marketing plan, through all India distributors, did not fetch benefits. The unit also faced problem of key raw materials procurement due to low batch production and inability to scale up due to slow sales growth. He used internet and networking with suppliers from abroad. He also developed a good working team. But his design and product development overshadowed the marketing planning and efforts required.*

*After four years the unit was at the breakeven level. Vijay wants to grow, increase his production and sales, as well as improve the market share. His present subjective performance and satisfaction levels were gathered. The course of further action has to be recommended to Vijay to reach a growth stage of URO Enterprises*

**Key words: Opportunity recognition, Technocrat entrepreneur, UROlogical applications, Consulting, Management.**

### Introduction

URO Enterprises, a small enterprise engaged in designing and manufacturing specialised medical disposables for Urology applications, is facing a problem of slow market penetration and growth. It faces competition from imported items, which are 20 - 30% cheaper to the products of URO Enterprises. Mr Vijay the Owner-manager has indigenously developed these special products, but is worried about slow sales growth, though it was four years of his concentrated and dedicated work on product development, manufacture and marketing.

The details of the enterprise are given below:

- |      |                       |   |                                      |
|------|-----------------------|---|--------------------------------------|
| i.   | Products manufactured | : | Disposables for Urology applications |
| ii.  | Year of establishment | : | 1995                                 |
| iii. | Capacity / sales      | : | Approximately Rs 6 lakhs per month   |
| iv.  | Capital investment    | : | Rs 10 lakhs ( Rs 1 million)          |

### Promoter's Background

Mr. Vijay initially set up URO Enterprises, a small enterprise in the year 1995. Vijay was a technical person. He had a Diploma in Mechanical Engineering way back in the year 1970. Initially he had technical training and workshop teaching experience of 10 years. He later worked in electric clock manufacturing unit in design and production department. He was also later employed at Gulf for seven years in a construction company. A mixed experience of over 20 years indeed. After returning from Gulf, he decided to become an entrepreneur. His initial search for an opportunity led him to medical supplies / disposables considering his engineering design experience and skills of workshop practices.

He commenced initially by attending to certain medical equipment repairs at a major, well known hospital in Udupi district, Karnataka, During this time the doctors in the Urology department suggested him to design and develop good quality disposables for Urology applications. These disposals were imported at that time. Certain modifications were also suggested in product design and for cost effectiveness. This was the starting point for Vijay. He started the design and



development work for the disposable items by establishing a unit, URO Enterprises. Initially items manufactured were supplied and tested at the hospitals and were found to be acceptable, and of good quality compared with imported items. He used internet for researching the product development status globally, and for more information on medical technology and testing. He took help of USA based firms for development and testing. The products developed were also sent abroad to USA for testing and certification / approval.

To start this venture, he had one more partner to support him, who was also working previously at Gulf. His family supported him in this new venture idea and also doctors extended support and encouraged him. Thus right opportunity recognition and assessment was the key to the start-up. Financial support was available from his partner. Initially at URO the operations were focussed on new product development activities, manufacture of required dies and a few semi finished items. Some of these semi finished items were supplied to a firm in Bangalore, which finished these items, assembled and marketed them as medical disposable items. Therefore these initial operations helped to develop the product specifications.

Later in 1995, the unit was fully established at Industrial estate in Udipi district with in-house manufacturing facilities. The unit stabilised its operations and manufactured a range of disposable products for UROlogy such as kidney baskets, J hooks, vacuum pumps and other items.

### Production Facilities

The main facilities required for manufacture of the disposables are die making set up, machine tools and other assembly facilities. The initial capital investment was around Rs. 10.00 lakhs. URO had these facilities established in-house. Vijay with his vast experience in tool, die design and manufacture was able to take up the basic design and development work for the components of the products. However he faced certain problems peculiar to his unit such as procurement of fine size stainless steel tubes and wires, and nylon / Teflon materials. He had some known source of vendors for outsourcing the components from abroad. He often sent the finished dies and got the extruded components and other parts from abroad. He used Internet and e-mail for sourcing raw materials from abroad. He wanted to get ISO standards for his unit and initiated the process. Vijay had the prime objective to design, manufacture and offer high quality disposables to the Healthcare sector and become a reputed manufacturer. On the production front, the unit faced the issue of low production due to procurement problem faced in raw materials and supplies. It used to be constrained by small batch production. To be more cost effective, ordering level for procurement has to be higher, but commensurate sales level as expected did not grow. The selling price of URO was 20-30% higher compared to imported items from competitors.

Over the years, Vijay had developed new products for medical application. He developed a special vacuum pump also for Urology application. He was able to indigenise the products hitherto imported with improved design and features. Many of the products had to compete with the imported disposables from far Eastern countries. The unit had nine skilled and qualified employees. His interaction with his shop floor employees was extremely cordial and transparent. He motivated them and encouraged their product improvement efforts.

### Marketing

During the initial years of the operation, the products were sold mostly to local hospitals. Later the unit entered into marketing tie-up with a distribution company to market the products on all India basis. But the distribution company did not effectively market the products, and URO suffered financial problems / working capital and receivable problems in sales front. URO then appointed direct sales distributors in selected locations of Mumbai, Chennai, Ahmedabad, and Mangalore and in Kerala. Efforts were initiated to export to a firm in South America also. He thought about the brighter prospects of medical insurance sector opening up in India and expected that hospitals would be able to purchase and use quality Urology disposables, and hence URO's sales growth would happen thereafter. Estimated turnover of the unit was around Rs 60-70 lakhs per annum with the present capacity base. However, the distributors have not been able to aggressively market the products in the country. Therefore Vijay started selling through other pharmaceutical outlets and directly to hospitals. The pricing was based on cost plus, as well as on competitive basis in case of large orders.. In the domestic market his products were priced 25-30% higher than the imported items because of the quality of URO's products. His main concern was to achieve increased sales level in the next 2-3 years and onwards



## Consultancy Intervention

Vijay using his design skills, tool making capabilities and innovative thinking, developed most of the new products. Though, to begin with, he closely studied the imported products, he improved upon the design; materials used and developed the products to be cost effective to the extent possible. He often consulted and took advice and suggestions of the Urologists and other doctors. In this case, the external assistance taken from doctors was of great help and relevance to the success of the product development work. The open mind of the owner-manager, perseverance, networking, seeking outside help contributed to the overall initial performance of the unit.

After having operated the unit for four years, when asked to as how he rated his performance, Vijay replied that the present performance was just at breakeven level though he was able to use his vast technical experience for product development. In the face of several problems faced, he used his information seeking nature, networking and problem solving skills to resolve the crisis. He is quite optimistic about the market growth for the products.

## Management

Vijay himself being a technocrat entrepreneur was a good owner -manager. He perceived customer' s needs precisely by close interaction with doctors, patients, and developed product specific designs after identifying product features required by users / buyers. He organised and motivated his team. He participated in medical seminars to promote the products of URO. His greatest strength was in organising resources, networking and coordinating various tasks. He also reasonably delegated the managerial functions to second level. But the product development efforts, over the years over shadowed necessary the marketing strategy and plans, because he did not have an experienced marketing executive, as URO being a small enterprise. His commitment and drive for success of unit was high. He was very persistent, though he agreed that there could emerge other competitors in the country and from abroad.

It may be noted that in case of Small Enterprises, the performance assessment based on sales and financials data are a little difficult to gather. Therefore based on open discussion with Vijay, the Owner- Manager, the subjective measures of performance of URO Enterprise were collected and are presented in Table 1 and Table 2.

## Future initiatives and course of action

Though the products of URO Enterprises were of high quality and indigenously developed by a technocrat entrepreneur, the key issue faced was the slow market growth i.e. A quality product not able to get good market penetration. Against the estimated sales level of Rs. 60-70 lakhs per annum, the sales was stagnating at Rs. 25 lakhs per annum even after 4 years of start-up. The marketing strategy and marketing plan have to be drawn considering the needs of health care industry, its competition, pricing issues, and export potential, promotion and marketing channel decision etc.

## Conclusion

Considering the above details and status of URO Enterprises, what initiatives and future course of action could be recommended to Mr Vijay to be more successful and to achieve the growth stage for the enterprise which would result in sales growth, market share, higher profitability and brand image?

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**Table 1. Subjective Measures of Performance of URO enterprise**

Criteria	No consideration 1	Slight consideration 2	Some emphasis 3	Substantial emphasis 4	Great level of emphasis 5
1. Sales growth				√	
2. Return on sales			√		
3. Cash flow			√		
4. Return on investment		√			
5. Net profits			√		
6. Return on assets		√			
7. Growth in market share				√	
8. Growth in net worth of enterprise			√		

However, Vijay's satisfaction levels, as Owner Manager ,with present performance are as follows:

**Table 2. Satisfaction level Measures of Performance**

Criteria	No consideration 1	Slight consideration 2	Some emphasis 3	Substantial emphasis 4	Great level of emphasis 5
1. Sales growth	√				
2. Return on sales		√			
3. Cash flow		√			
4. Return on investment		√			
5. Net profits			√		
6. Return on assets		√			
7. Growth in market share		√			
8. Growth in network of enterprise	√				

(Note: An Overall performance index could be worked out combining the scores of the above two matrices to assess the performance level of the unit )

## A Story of Maggi

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### Abstract

*Maggi, the favorite 'two minute' noodle of India was embroiled in a controversy in June 2015, when some of its samples were found to contain high level of lead and monosodium glutamate which was responsible for various health problems, causing headache, nausea and chest pain. Maggi had been a chart leader in the instant noodle market of India since three decade. Its competitors such as Top ramen and Horlicks foodles could not even manage to match its popularity and growing sales in India. Maggi was also known for its unique advertising campaigns such as "khushiyon ki recipe ", two minutes and meri Maggi, which implied people to share their experience rewarding their favorite snack. Over the year Maggi had been ruling the Indian taste buds since it was first launched in the year 1983 in India, at a time when Chinese cuisine was still not that popular in the country, but the people's favorite snack grabbed eyeballs when a ban was imposed on Maggi Noodle's in India and Nestle India had to recall its Maggi samples from all parts of the country. In such a scenario, it was a daunting question that in what way would the Maggi noodles stage a comeback in the Indian market and into the Indian palate once again?*

**Key Words- Maggi, brand image, noodle industry**

### Introduction

This Research study is about the Nestlé's Maggi and its brand story, throwing some light on how Maggi brand was built, magic faded and it also disappeared and now it is planning to come back.

Maggi is a 100 year old brand (Nestle) comprising of instant soups, stocks, bouillons, ketchup, sauces, seasonings, and instant noodles. It became a pioneer of industrial food production, aiming at the improvement of the nutrition of Indian families. Over a period of time the scope of Maggi has been extended from a predominantly dehydrated cooking aid brand towards a general savory food brand including many type of readymade meals and frozen food. This in the line with the fact that people all over the world are cooking less and less from scratch.

Maggi noodles was launched in India in the early 1980. Carlo M Donati the present chairman and managing director of nestle India Ltd., brought the instant noodles brand to India in the early 1980"s. During that time there was no direct competition from the ready to eat snack segment which includes snacks like samosa, biscuits, peanuts, etc. The competition also came from the home made snacks like pakoras or sandwiches. So there were no specific buyers for snacks. Moreover both competitors had certain drawback in comparison. Snacks like samosa were usually purchased from outside and food prepared outside was generally considered unhygienic and homemade snacks had the disadvantage of extended preparation time at home.

Maggi was positioned as the only hygienic homemade snack despite it faced difficulties with their sales during the initial phase. The sole reason being the positioning of the product with the wrong target group .quickly they repositioned it towards the kid segment with various tools of sales promotion like colour pencil, sketch pens, fun books etc. which worked wonders for the brand. The time line in the development of Maggi is presented in Table 1.

### Brand building of Maggi

The story began in 1866, when the first European condensed milk factory was opened in Cham, Switzerland, by the Anglo-Swiss Condensed Milk Company. In Vevey, Switzerland, founder Henri NESTLE, a German pharmacist, launched his



Farine lactée, a combination of cow's milk, wheat flour and sugar, saving the life of a neighbor's child. Nutrition has been the cornerstone of their company ever since.

"Henri Nestle, himself an immigrant from Germany, was instrumental in turning his Company towards international expansion from the very start. Henri NESTLE embodied many of the key attitudes and values that form part and parcel of Nestle's corporate culture such as: pragmatism, flexibility, the willingness to learn, an open mind and respect for other people and cultures.

NESTLE is the world's leading Nutrition, Health and Wellness Company. The mission of Nestle was "Good Food, Good Life" in order to provide consumers with the best tasting, most nutritious choices in a wide range of food and beverage categories and eating occasions, from morning to night. They employ around 2, 80,000 people and have factories or operations in almost all the countries in the world. NESTLE sales for the year 2009 was 108 billion dollars. Exhibit 1 furnishes information on Global Demand of Instant Noodles.

NESTLE's relationship with India dates back to 1912, when it began trading as The NESTLE Anglo-Swiss Condensed Milk Company (Export) Limited, importing and selling finished products in the Indian market. After India's independence in 1947, the economic policies of the Indian Government emphasized the need for local production. NESTLE responded to India's aspirations by forming a company in India and set up its first factory in 1961 at Moga, Punjab, where the Government wanted NESTLE to develop the milk economy. Progress in Moga required the introduction of NESTLE's Agricultural Services to educate, advice and help the farmer in a variety of aspects. From increasing the milk yield of their cows through improved dairy farming methods, to irrigation, scientific crop management practices and helping with the procurement of bank loans. NESTLE set up milk collection Centre's that would not only ensure prompt collection and pay fair prices, but also instill amongst the community, a confidence in the dairy business. Progress involved the creation of prosperity on an on-going and sustainable basis that has resulted in not just the transformation of Moga into a prosperous and vibrant milk district today, but a thriving hub of industrial activity, as well.

NESTLE has been a partner in India's growth for over nine decades and has built a very special relationship of trust and commitment with the people of India. The Company's activities in India have facilitated direct and indirect employment and provides livelihood to about one million people including farmers, suppliers of packaging materials, services and other goods.

The Company continuously focuses its efforts to better understand the changing lifestyles of India and anticipate consumer needs in order to provide Taste, Nutrition, Health and Wellness through its product offerings. The culture of innovation and renovation within the Company and access to the NESTLE Group's proprietary technology/Brands expertise and the extensive centralized Research and Development facilities gives it a distinct advantage in these efforts. It helps the Company to create value that can be sustained over the long term by offering consumers a wide variety of high quality, safe food products at affordable prices.

NESTLE India manufactures products of truly international quality under internationally famous brand names such as NESCAFÉ, MAGGI, MILKYBAR, KIT KAT, BAR-ONE, MILKMAID and NESTEA and in recent years the Company has also introduced products of daily consumption and use such as NESTLE Milk, NESTLE SLIM Milk, NESTLE Dahi and NESTLE Jeera Raita. Table 2 furnishes information on Nestle's market share in India & Maggi's competitors.

NESTLE India is a responsible organization and facilitates initiatives that help to improve the quality of life in the communities where it operates. After more than a century old association with the country, today, NESTLE India has presence across India with 8 manufacturing facilities and 4 branch offices. NESTLE India set up its first manufacturing facility at Moga (Punjab) in 1961 followed by its manufacturing facilities at Choadi (Tamilnadu) in 1967, Nanjangud (Karnataka) in 1989, Samalikha (Haryana) in 1933, Ponda (Goa) in 1955, and ,Pantnagar (Uttarakand) in 2006. In 2012, Nestle India set up its 8th manufacturing facility at Tahliwal (Himachal Pradesh). The 4 branch office located at Delhi, Mumbai, Chennai and Kolkata help facilitate the sales and marketing activities. The NESTLE India's head office is located in Gurgaon, Haryana. Exhibit 2 provides Locations of Nestle's Manufacturing Plants in India.

### Fall of Maggi in India

Maggi is a name which no one Indian household could say have not heard about. It has become top most eaten noodle in India. Nestle started it in 1987 with the famous tagline 2 minutes noodles which still remains the same. In India Maggi has a market share of around 60% and stand undisputed for so many years.



It all started in the year 2014 by an officer at V K Pandey based at Barbanki, who took the first step against Nestle Maggi noodles for allegedly flouting food safety norms. It all started when traces of lead and Monosodium Glutamate (MSG) were found in excess than permissible limits in Maggi. The Food Safety Regulators in Uttar Pradesh, found that samples of Maggi noodles contained excess of MSG. The tests revealed that Maggi contained around 17 parts per million (PPM) of lead as against the permissible limit of 0.01 PPM. With the discovery of excess of lead many state banned Maggi and all its related products. The states include Delhi, Kerala, Punjab, Haryana, and Madhya Pradesh. Bollywood stars who endorsed the product were also booked under law for promoting it. Exhibit 3 furnishes information on Upsurge in negative sentiment on twitter.

### **How does consuming lead and MSG affect the body?**

Excess of lead in take could damage the nervous system and cause brain disorders. Monosodium Glutamate (MSG) is naturally present in various food items such as mushrooms, tomatoes, Parmesan cheese and soy sauce. It has a unique taste which is different from salty, sweet, sour or bitter. The taste is described as 'meaty' and termed as Umami. Excess consumption of MSG promotes sluggishness in the body. It may also cause headache, nausea, increased thirst and a twitching sensation in the mouth. In some cases one may feel numbness, skin rashes and excessive sweating too.

There is mainly a technicality issue between Nestle and India's food authority, Food Standards and Safety Authority of India(FSSAI). Both Nestle and FSSAI agree that the level of lead found in single packet lies within the permissible limit but the issue is about the tastemaker. Tastemaker is the seasoning that is added to the noodles and FSSAI argues that it breaches 2.5 parts per million permissible limits when tasted. In Defense Nestle argues that tastemaker is never meant to be eaten alone and instruction on Maggi packets also states the same, therefore the two should be taken as single product instead of considering tastemaker as a single one. Though Maggi noodles are pulled off shelves in India there are other nations that have passed it in testing and consider them safe. Canada and Singapore have tested them and pronounced them safe. Table 3 furnishes the details of Food standards and safety Authority of India (FSSAI) Enforcement.

Then there was the issue of MSG (monosodium glutamate) which was found in noodles despite Nestle claiming they have not used any. Glutamate or glutamic acid occurs naturally in our body and naturally in various foods such as cheese, walnuts, tomatoes and mushrooms. The taste enhancer has become important part of the diet of the Asian people but in recent year people of the west are creating lot of scare-mongering connected to it. The only ill effect that was, when a scientific study was carried out on a rat that too when enormous quantities of the substance were injected, such large amount could damage or cause ill effect to anyone and also cause adverse reaction. There are various other substances such as cinnamon which cause ill effects even at low level when it is consumed in Indian households. Ban of Maggi have helped brands such as Yippee Noodles and Bambino a lot a huge increase in their shares signifies this fact. Currently the current share ITC Yippee is around 18-20% and could rise even more.

### **Implications on employee morale, legal and health**

The ban on nestle Maggi brand and its recall have affected close to 1500 direct employees of the company involved in the production of the instant noodles. Nestle is relocated some of these employees to manufacture other items like dairy products, ketchup and infant nutrition. Most of the employees, who have been jobless since Maggi production was suspended on June 5th 2015, are now being involved in team building and other HR activities.

### **Effect of registration/licensing**

Each packet of Maggi contained the FSSAI license number along with its logo. Does this not give an impression to the consumer that this food business operator is under the purview of the food safety authorities? Can consumers not assume that food safety authorities would have taken due inspection to ensure the quality?

During the whole Maggi episode, not even once did the FSSAI came out with a statement explaining how violations were allowed to take place at such a large scale. Forget about the explanation, even a future course of action has not yet been announced. This may mean that FSSAI is going to cancel Nestlé's license or it may mean that after a few months everyone will forget about it and Nestle will carry out its business as usual or with some improvement.

### **Non-identification of the source**

Nestle never came out with a list of particular units where violations took place. Such a declaration would have



helped them in restricting food recall to the Maggi manufactured in only such units and saved them to a great extent. At the same time, in the absence of any such declaration, inference can be drawn against them that violations took place at all units.

### Food recall procedure

Nestle stopped manufacturing Maggi noodles from June 5, 2015 when an order of recall was issued by the Food Safety and Standards Authority of India on its production, storage, sales and export. The company had to incinerate more than 30,000 tonnes of stocks at 11 cement plants across country.

In the past weeks, print and electronic media has been flooded with news of the recall and it is being projected as one of the largest recalls ever. It may surprise readers to know that FSSAI has not implemented any food recall procedure to date. The draft regulations in this regard were circulated for public discussion only 2-3 days prior to this Maggi fiasco. In the absence of these regulations how will FSSAI ensure the proper recall of the sub-standard Maggi packets? They might have to rely solely upon the declaration made by Nestle, which has already been widely published. Let's hope they do not rely solely on media reports, and instead try and verify the data themselves.

### Labelling violations

One of the reasons for banning Maggi was because "No Added MSG" was mentioned on the packet label. As per the FSSAI, this is mis-leading and they have relied upon a document of the US Food and Drug Administration to support their argument. We appreciate the hard work that the FSSAI officials have put in to make a case against Nestle. However, it would have been appreciated more, had the guidelines been issued by FSSAI in advance. On the one hand, FSSAI maintains a view that what is permitted under Codex Alimentarius and other countries cannot be ipso fact regarded allowed in India, and on the other hand they themselves rely on foreign literature to make a case against a food business operator working in India.

FSSAI has been lethargic and inefficient in the past and it can be for many reasons including financial constraints and untrained manpower. Now they have started to pick up, however, they first need to put their house in order and then can expect everyone to follow them. Despite this, there is lot more to improve. We hope that FSSAI soon starts quoting their own advisories in their orders rather than relying upon that of another country.

### Repositioning strategy

We all miss Maggi. We all miss "cooking" Maggi in our own signature styles. It never took us "two minutes", but no one ever complained. Since the Maggi ban, a generation has been craving for its favorite instant noodle. And it's good to know the feeling is reciprocated. Social media has been brimming with love letters to Maggi since the ban and Maggi has finally responded. Maggi India came up with a new advertisement professing its love for the country, saying We Miss You Too.

In a very minimalistic and simple ad, Maggi voices the query inside everyone's head: "Kab wapas aayega yaar? (When will it be back?)". Yes, most people have cooked Maggi in the middle of the night; while some woke up hungry, others were watching midnight football and thought it made a great midnight snack. The 52-second advert has struck a nostalgic chord with most of India's youngsters. Maggi India Twitter page has been responding to queries from consumers and has reciprocated to Maggi lovers' reaction to the ban. Overwhelmed by your love & we hope to bring back your favorite MAGGI noodles as soon as possible.

On 25th July 2015 Nestle has brought in a new managing Director, Suresh Narayanan to focus on promoting Maggi noodles. On 14th August 2015, Bombay High Court quashed the Maggi ban and ordered fresh tests. Immediately after the Bombay High Court order, the company came up with "missyoumaggi" teaser advertisements on Youtube, followed by a campaign on television and digital media highlighting the trust Nestle had enjoyed in India for over 100 years. Nestle India has said it plans to bring back Maggi in the market by end of 2015 and Maggi lovers can't wait.

### Findings

1. Maggi had become a part of every kitchen in India and it has satisfied many hungry people and their taste buds. It was unfortunate what happened to Maggi because of negligence in quality control and it ended up with bad consequences such as loss of image and the magic got disappeared, Maggi worth of rupees in crores was



burnt, stock of more than 4.5 crores was recalled, it built a fear in every mothers eye and people got scared to have it, it affected the whole industry as every noodle manufacturer is incurring losses, employee morale was thrashed and many employees left nestle.

2. The issue faced by Nestle falls under the realm of trust and Reputation. For a brand two things are of critical importance - trust & reputation it enjoys with its customers. This issue damaged both trust and reputation of Maggi brand.
3. Nestle response to the controversy has been tepid. An official statement said, "We do not add Monosodium Glutamate (MSG) to Maggi Noodles. We use raw materials that may contain naturally occurring Glutamate which could be confused with commercially produced MSG. Glutamate is safe and is found in everyday and high protein foods including tomatoes, peas, paneer, onions, milk". The company is facing a legal battle in the court of law.
4. In absence of a strong defense from Nestle a perception will gain credence in customer's mind that it has taken a surreptitious route to 'add' glutamate - to overcome legal hurdles - instead of adding it directly they have used raw materials & ingredients which contains glutamate. Legally they cannot be prosecuted & presence of these elements will enhance the flavour which will get customers to consume more.
5. In addition, more collateral damage is likely to be caused to Nestle - perceptions will gain ground in customer's mind that as Nestle is not sure of what it does & therefore every claim it makes should be taken with a pinch of salt and to achieve its business objective it can adopt surreptitious means keeping its interest ahead of customers.
6. The result is customer will stop trusting the brand & its reputation will may be tarnished. Sooner than later it will impact their business.

## Conclusion

The Maggi controversy has shattered many hearts, Maggi was not merely a product or a brand in India, Indian consumer who is not unused to suspect food standards, feels a deep sense of betrayal by one of the most trusted food brand in India. The Maggi controversy has exposed the pathetic condition of India's processed and packaged food industry. There's no denying that food safety regulations leave a lot to be desired. Despite establishment of the Food Safety and Standards Authority of India in 2006 and subsequent promulgation of the Food Safety and Standards Regulations, 2011, implementation of rules is haphazard and erratic.

Food safety demands adequate oversight and inspection at each step of the food production and supply chain. However, such a principle is rarely followed in India. The government should completely overhaul the Food Safety and Standards Authority of India (FSSAI) and state authorities. In fact, most of the states do not even have the accredited laboratories.

Nestle India, the company has disclosed having spent Rs 445 crore on Advertising and sales promotion last year while the expenses towards quality testing was less than 5 per cent of such amounts that itself explains everything, the company needs to be more forthcoming in communicating actively and transparently to the public. Since Nestlé sells similar products across the world, it means complying with numerous international food safety standards. Therefore, Maggi and other packaged food products must of course be held accountable for violating guidelines.

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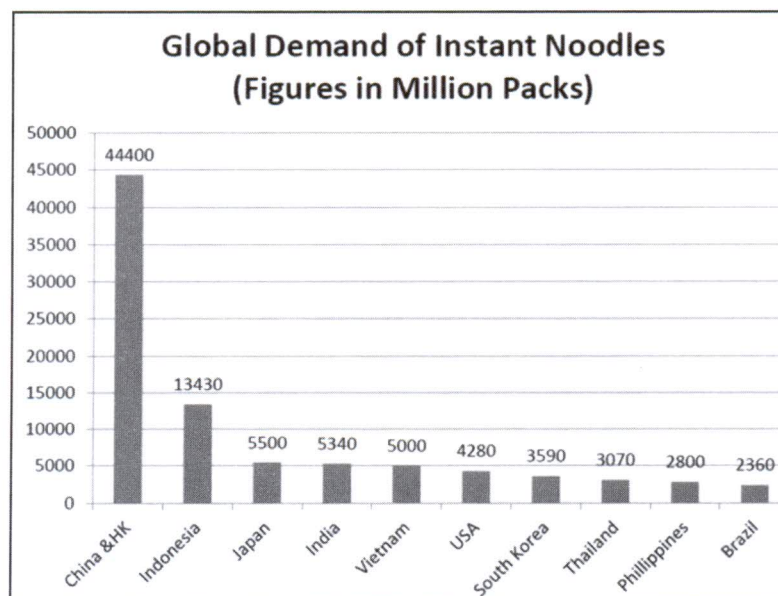
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**Table 1. The Time Line in the Development of Maggi**

Date	Happenings
Apr 7, 2015	MSG confirmed in Maggi; lead content more than allowed
May 30, 2015	UP FDA files case against Nestle India
Jun 1-4, 2015	Gujrat, Uttarakhand, Tamil Nadu, Delhi, UP and J&K ban Maggi
Jun 5, 2015	Nestle withdraws Maggi noodles from India; FSSAI issues countrywide 'order of recall', stops production, distribution and export
Jul 25, 2015	Suresh Narayanan replaces Etienne Benet as Nestle India head
Aug 13, 2015	Bombay HC strikes down ban on Maggi, orders retesting in 3 NABL-accredited labs
Oct 16, 2015	Three labs clear Maggi noodles; all 90 samples found safe.

Source: Business Standard 17th Oct 2015

**Exhibit 1. Global Demand of Instant Noodles**



Source: World's Instant Noodles Association

**Table 2. Nestlé's Market Share in India & Maggi's competitors**

MAGGI'S	COMPETITORS	NESTLE'S MARKET SHARE IN INDIA		
		CATEGORY	MARKET SHARE in %	RANK
Horlicks Foodles	GSK Consumer			
Knorr	HUL	Infant Milk Cereals	96	1
Sunfeast Yippee	ITC	Noodles	80.2	1
Top Ramen	Indo Nissin	Wafers And Whites	68.5	1
<b>Maggi Brand Products</b> <ul style="list-style-type: none"> <li>● Instant noodles</li> <li>● Instant Pasta</li> <li>● Ketchup and Sauce</li> <li>● Instant Masala</li> <li>● Soups</li> </ul>		Pasta	65.7	1
		Instant Coffee	51.8	1
		Tea Cream	49.9	1
		Infant Milk Nutrition	41	2
		Ketchup	26.9	1
		Overall Chocolate	18.8	2

Source: Edelweiss research

**Exhibit 2. Locations of Manufacturing Plants in India (Nestle)**

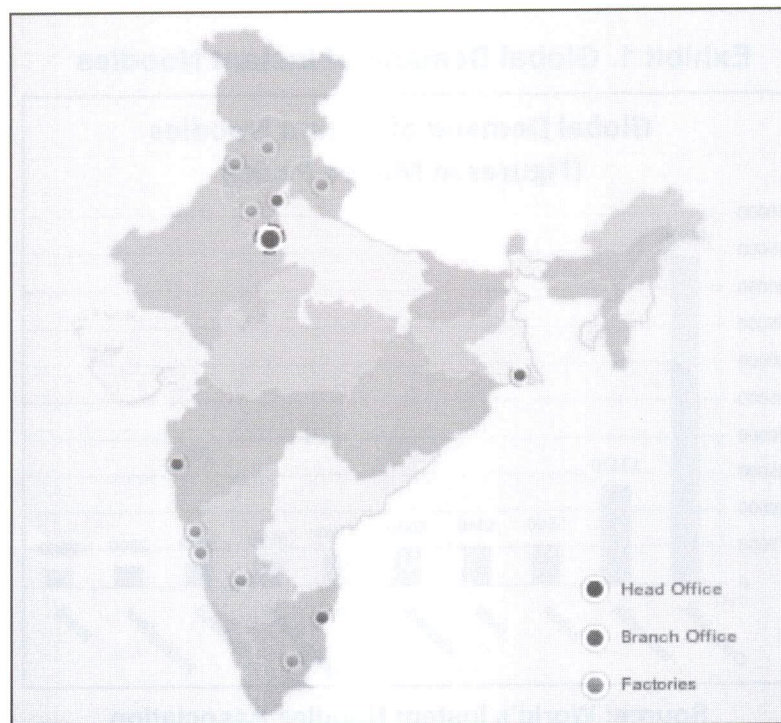
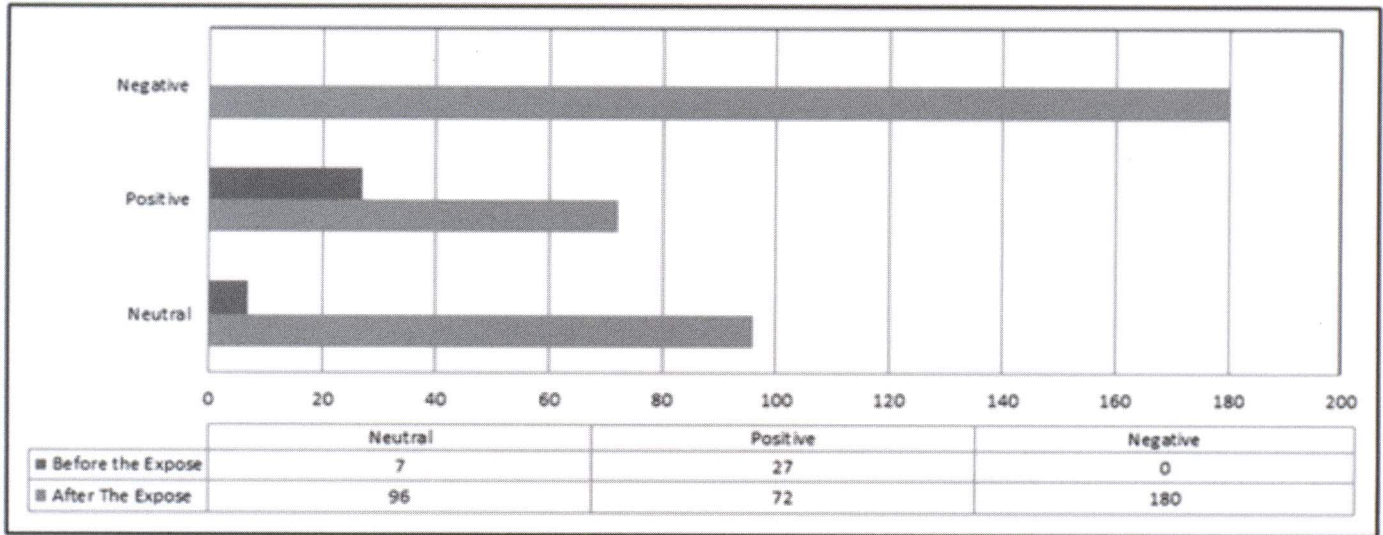




Exhibit 3. Upsurge in negative sentiment on twitter



The bright side for the brand is that positive comments also saw a significant 3x increase. The negatives were largely from influencers who amplified the negative sentiment, and might not reflect the consumer sentiment directly.

Table 3. Food Standards and Safety Authority of India (FSSAI) Enforcement

Year	Samples Examined	Non-Conforming	Prosecution Launched	Convictions/ Penalties	Penalties (Rs Cr)
2011-12	64,593	8,247	6,845	764	NA
2012-13	69,949	10,380	5,840	3,175	5.2
2013-14	72,200	13,571	10,235	3,845	7.3
2014-15	49,290	8,469	7,098	2,701	6.9

Source : FSSAI

# BOOK REVIEW

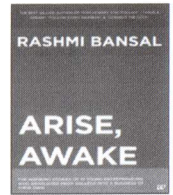


## Arise, Awake

The inspiring stories of 10 young entrepreneurs who graduated from college into a business of their own

**Maruti N. Sadavar**

Training & Placement Officer, KLS IMER, Belagavi



Rashmi Bansal (2015) Arise, Awake - The inspiring stories of 10 young entrepreneurs who graduated from college into a business of their own Westland Ltd, India, Pages 190, ISBN 978/93/84030/87/2 MRP: || 200.00

### Author's Profile

Rashmi Bansal is a writer, entrepreneur and youth expert. She is the author of 6 bestselling books on entrepreneurship: Stay Hungry Stay Foolish, Connect the Dots, I Have a dream, Poor Little Rich Slum, Follow Every Rainbow and Take Me Home, which have sold more than a million copies and been translated into 10 languages. Rashmi is the founder of Bloody Good Book ([www.bloodygoodbook.com](http://www.bloodygoodbook.com)), a platform to discover and e-publish budding authors. She is also a motivational speaker and mentor to students and young entrepreneurs. Rashmi is an economics graduate from Sophia College, Mumbai, and an MBA from IIM Ahmedabad. Her USP is bringing real success stories into reality while reading it and feel the entrepreneurship in each book with one theme

### Overview of the Book

Arise, Awake is the story of 10 young entrepreneurs who started a business while studying in college, or right after graduation. Turning their backs on lucrative placements, to pursue dreams of their own. The 10 startups profiled in her book are Practo Technologies, Magicrete, Sacred Moments, Bewakoof Brands, Innovese Technologies, Inopen Technologies, Bhukkad, Ganpati Facilities, Fraud Express and Dosamatic.

Rashmi classified student entrepreneurs into three types: rankers (toppers), repeaters (who failed initially but succeeded later) and rebels with a cause (mavericks who did weird but wonderful things). The 190-page book ends with contact information of the entrepreneurs, and a list of student business plan competitions such as Eureka (IIT Bombay), Empresario (IIT Kharagpur), Global Social Venture Challenge - HSB, UC Berkely, First Dot(NEN-Tata) and The TiE International Business Plan Competition. Many will say - wait till you graduate. I say - why waste time? Right now you are free - to experiment, to walk on different paths...

### Review

Rankers are those who cracked the toughest entrance exams in the country. And then took on new challenges. Challenges for which there is no 'coaching class'. Repeaters are those dudes who tried - and failed - but had the will to try again. Because nothing that is worth anything comes easily. And giving up is not an option. Rebels with a cause are those mavericks strayed away from the beaten path into weird and wonderful places. Because who you are is more than a 'placement'. Each startup story ends with a page of advice from the founders for other aspiring entrepreneurs.

### I. Rankers:

#### 1. Life is a Beach:

It was the tenth out of the 10 ideas they had to start a new business, and it clicked. The startup, born in the final year of college, is now a ? 20 crore company, serving 10,000 doctors across India. Practo aims to be the one stop destination for patients to find their doctors, research about them and book online appointments. Practo Technologies was founded by Shashank ND and Abhinav Lal in their final year in NIT Suratkal, and it is a Rs 20 crore company serving 10,000 doctors across India. The campus entrepreneurship cell Eforea organized panels and events like the Ignition summit. The duo dreamt up ideas like software for marriage halls, and then hit upon the patient reminder service for doctors delivered via mobiles. They were nominated by Morpheus,

received funding from Sequoia, and expanded operations to Singapore.

### **Advice to young entrepreneurs:**

In India, if you want a successful company, you have to give at least 75% of your time to sales. When I say sales, I mean 'face to face' meetings. Look at Justdial, Naukri or Zomato - they have made money through feet on street. Starting a business in college is the best way to use your time. Stick to your vision like "I am going to solve this problem", everything else is secondary.

### **2. You Can Do Magic:**

Magicrete co-founder Sourabh Bansal and his IIT-IIM team Puneet Mittal (CA) & Sidharth Bansal (IIT Delhi, IIM Lucknow) began in his father's quicklime manufacturing line, and spotted an opportunity in Autoclaved Aerated Concrete (AAC) blocks. They worked out the metrics of its construction advantages as compared to bricks, imported machinery from China, secured bank loans, and partnered with developers for contracts. Today, Magicrete is a ₹150 crore company which is changing the face of construction across the country. Sourabh says the idea came about when the founding team realized the opportunity that the construction industry presents.

### **Advice to young entrepreneurs:**

Think Big. Put in all efforts, keep on innovating and striving toward your goal. Take the plunge early. And you need to have a roadmap for the first 2-3 years. Always run a tight and lean ship, don't burden the business with unnecessary costs, overheads etc.

### **3. Gift of the Gab:**

Prakash Mundhra entered a business-plan competition, just for fun. He excited campus with a ready-to-launch business. Eight years on, he is the CEO of ₹4.5 crore company and has no regrets. Sacred Moments was founded by Prakash Mundhra who hatched the idea during business competitions when he was at SCMHRD in Pune. His involvement in college book circles and regular visits to the library led him to read about Zee TV's business idea show, 'Business Baazigar,' where he made it to the Top Ten. The idea looked small and not many were sure about the business model. Mundhra, on the other hand, was adamant. He knew that all he had to do is give the idea a shape and invest Rs.6 lakh and time of six months along with a positive attitude to start the venture. His ₹4.5 crore company now offers puja kits and corporate gifting to Indians and NRIs.

### **Advice to young entrepreneurs:**

Don't hesitate to get into business directly after B-School or College, especially if your work area is such that corporate experience would not matter much.

## **II. Repeaters:**

### **4. Two Idiots:**

Bewakoof Brands was founded by IIT Bombay students Prabhkiran Singh and Siddharth Munot, who first began with selling a lassi outside their campus and then moved on to printing T-shirts and other merchandise with a 'funky irreverent' streak (the 'Ghanta Engineering' T-shirts were hugely popular at the Mood Indigo festival). They raised funding from a Gujarati angel investor, and ploughed ahead despite criticism that this was not high-tech enough for IIT students. The 'lassiwallah' now runs a ₹5 crore youth - focused online business.

### **Advice to young entrepreneurs:**

Work hard persistently. You have to go out and you have to act, there is no other way to learn, no other way to be successful.

### **5. Locha-E-Business Ho Gaya:**

Two friends came up with a cool idea and found a way to make it a business. Innovese Technologies was a



shining star in the startup sky, until interpersonal issues tore the company apart. But there's much you can learn - from their experience. Innovese Technologies was founded as a web hosting service by three BITS Pilani students Ankit gupta, Neeraj Agarwal & Dhruv Sogani who also created YoCaptcha, an interactive branding product based on Captcha. Another project of theirs was the social network Slambook, and they received funding from the Technology Business Incubator. They eventually sold the company to German multinational Gruner+Jahr, but one of the co-founders decided to split from the team and pursue a separate career.

#### **Advice to young entrepreneurs:**

I would advise college startups to sign a 'co-founder agreement'. This would be very useful in future. Believe in what you are doing, the desire to take a particular idea to the level where me, myself and the larger society is going to be proud of it.

#### **6. Awara Paagal Deewana:**

An internship at IIT Bombay changed the course of Rupesh Shah's life. A self-taught programmer, marketer and 'people person', his company, InOpen Technologies, now teaches computer science to over 5 lakh schoolchildren. InOpen Technologies was founded by Rupesh Shah, who fell in love with open source technology even while he failed some of his exams. He graduated from IET Alwar, but then pursued an internship at IIT Bombay. A professor helped and funded him with a model curriculum for teaching computer science in schools, which used open source software. The startup joined the IIT incubator SINE and raised external funds, and now targets state schools with its innovative teaching approach which can be extended to science education as well.

#### **Advice to young entrepreneurs:**

Enthusiasm and passion are the only keys to success. Identify what you like and focus on that even while you are a student.

### **III. Rebels with a Cause:**

#### **7. The Hunger Game:**

As a third year student at National Law School, Bengaluru, Aruj Garg started a takeaway food joint, to cater to the many 'bhukkads' on the campus. He now plans to take the Bhukkad brand of 'natural fast food' to people everywhere. Bhukkad was founded as a 'natural fast food' chain by Aruj Garg while he was a third-year student at National Law School, Bengaluru. He earned some money during his internship at Akosha, which was founded by his senior. Aruj also learnt the ropes of the food business from a stint at Faaso's. Despite others questioning whether this line was appropriate for a law student, Aruj went ahead and hired a five-star hotel chef to design his menu. His sudden diagnosis with high cholesterol at such an early age led him to discover 'natural' fast food.

#### **Advice to young entrepreneurs:**

The world conspires to help you in your quest of doing something bold and big. Don't forget academics - getting your degree is important. Believe me, it's not that hard to strike a balance.

#### **8. Feels Like Home:**

As an outstation student, Anurag faced accommodation issues when he joined college in Pune. He seized the opportunity to set up a hostel business, Ganapati facilities for the next batch while still a second year MBA student. In its second year, Ganapati Facilities made ₹25 lakh in profit - 5 times the salary he could have got through placement. Ganapati Facilities was founded by Anurag Arora when he was at ICFAI Business School in Pune. The atrocious hostel facilities led him to launch his own hostel for fellow-students, by renting local apartments. Taking good care of the students led to positive referrals and social media endorsements for subsequent batches, and Anurag now plans to approach other colleges as well.

**Advice to young entrepreneurs:**

You have to think of creative ways and means to fund your idea. Entrepreneurship is independence. Think of doing something with a good heart and an intention to help people and success will come to you along the way.

**9. To Catch A Thief:**

During her articleship, Apurva entered the unusual domain of forensic accounting. After working on dozens of cases, at the age of 24, she launched a university -recognized course in the field of fraud-risk assessment. FraudExpress was founded by Apurva Joshi when she was a CA final student in Maharashtra. An internship at the startup IndiaForensic, exposed her to the intriguing world of fraud detection and reporting, and she launched her own startup FraudExpress to offer fraud risk assessment services and a course via Solapur University. The backdrop of the Satyam scam also boosted market awareness about this field.

**Advice to young entrepreneurs:**

When challenges come, you have to accept them. Go, explore and find out for yourself how to do the work. Be daring, be bold, do not be afraid of anyone or anything.

**10. Holy Rava Masala:**

Two young engineers set out to create an automatic dosa machine. 3 years later, they have succeeded in producing the world's first tabletop 'dosa printer' and secured orders from 100 restaurant owners. Dosamatic was founded by Eshwar Vikas and Sudeep Sabat when they were batch mates at SRM Engineering College in Chennai. They caught the startup bug during entrepreneurship cell activities, and explored their fascination as tinkerers at local factories and markets. On a visit to Delhi, they were shocked to discover that dosas cost an astronomical Rs. 130 - and decided to make a dosa machine. They were mentored by the Indian Angel Network, and finally had a sound tabletop product in 2013.

**Advice to young entrepreneurs:**

Start when you are in college, don't think - "I will start something after I passout ". An idea is not enough, you need to develop a prototype. Then you go out and test in the real world. Not just in college where everyone knows you. You need to have lot of patience. It has to be commercial, somebody must be willing to pay for your product.

**Conclusion**

Make the most of the energy and dynamism of the youth years. There is no substitute for hard work, positive thinking and perseverance. Entrepreneurship is not about working just for yourself, but working to solve a problem others face. Practical knowledge is as important as classroom knowledge. Learn as much as possible and take internships. Work with a startup during vacations to understand what it is all about and see if that's the kind of life you want to lead. As a young entrepreneur you have to work extra hard to prove yourself because you have no past track record, money, products or results. But you have no commitments and low expenses so you can experiment more, provided you can accept and learn from failures. College is a great time to shed inhibitions and do unusual things. Many of the entrepreneurs featured in this book say they were inspired by Rahmai Bansal's earlier books, and this book itself is bound to inspire a new wave of startups. The ability to start a business is not defined by age or education. It takes energy and passion, an idea and an internet connection. "Your first 'office' could be your very own room" - Rashmi Bansal



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