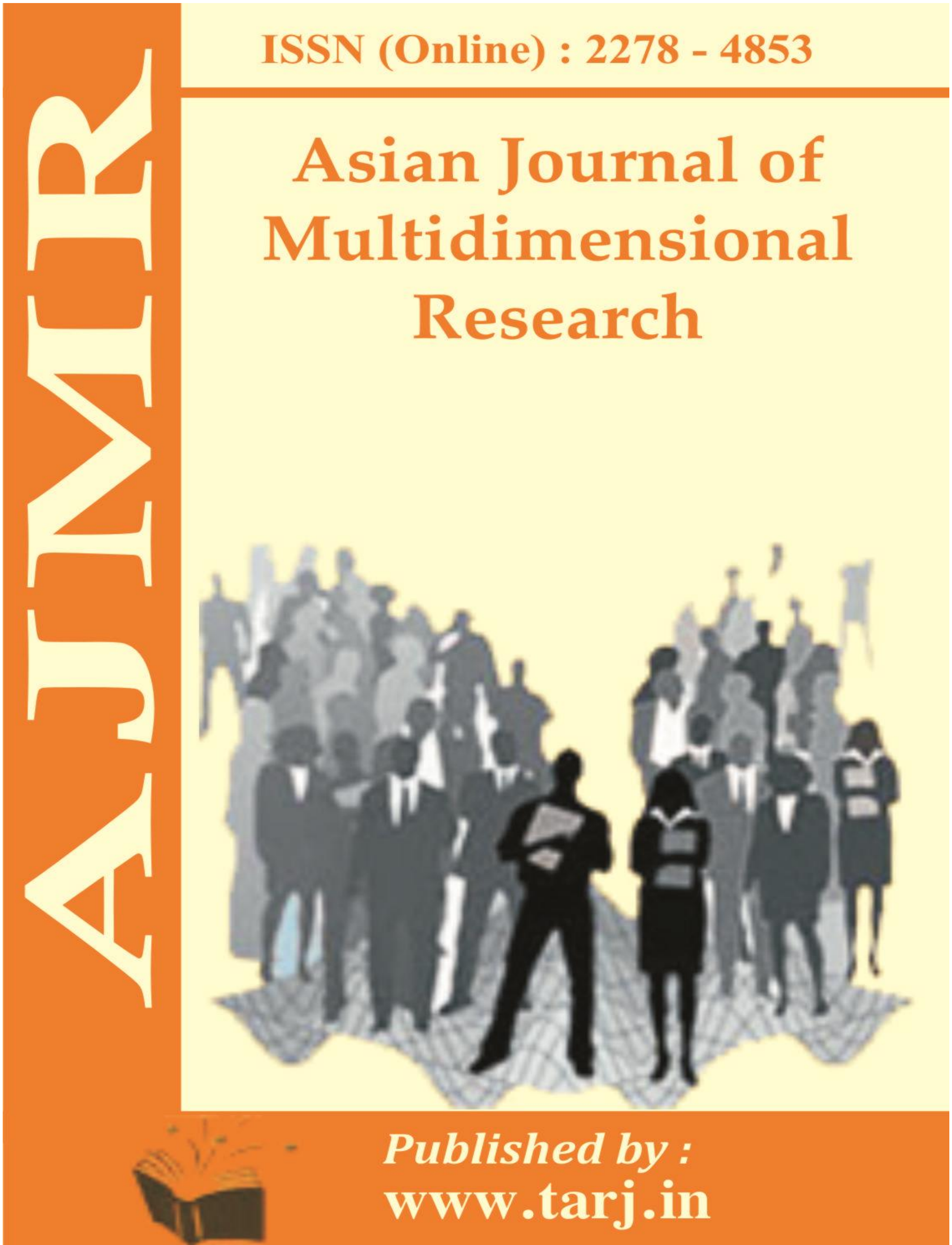
AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853



AJMR ISSN (online) : 2278-4853

Editor-in-Chief : Dr. Esha Jain

Impact Factor	:	SJIF 2021 = 7.699
Frequency	:	Monthly
Country	:	India
Language	:	English
Start Year	:	2012

Published by : www.tarj.in

Indexed/ Listed at : Ulrich's Periodicals Directory, ProQuest, U.S.A.

E-mail id: tarjjournals@gmail.com

VISION

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

A Publication of TRANS Asian Research Journals

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

A Publication of TRANS Asian Research Journals

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

PERCEPTION OF NURSES REGARDING THEIR ROLE IN A HOSPITAL

Dr. Navpreet Singh Sidhu*

*Associate Professor,
Punjab College of Technical Education,
Ludhiana, Punjab, INDIA

ABSTRACT

Perception is a process by which individuals organize and interpret their sensory impressions in order to give meaning to their environment. A motivated person is ready to act. How the motivated person actually acts is influenced by his or her perception of the situation. Perception depends not only upon the physical stimuli, but also on the stimuli's relation to the surroundings field and on the condition within the individual. People's behavior is based on their perception of what reality is, not on reality itself. Perception is understood as the act of seeing what is there to be seen which is influenced by the individual, the object and the situation. Perception is the process by which an individual selects, organizes, and interprets the information inputs to create a meaningful picture of the world. In simple terms, perception is why the same universe is viewed differently by different people. The perception is measured by instruments considering role efficacy. Researches show that persons with high role efficacy seem to experience less role stress, anxiety and work related tension The present study was undertaken with an aim of understanding and comparing the role efficacy of nurses at various levels in a famous hospital in Ludhiana, Punjab (India). All the 120 nurses and 35 head nurses in this hospital were studied for the role efficacy they experience. The outcome of this process is discussed in this paper.

KEYWORDS: *Perception, Sensory Impressions, Physical Stimuli, Role Efficay, Role Stress.*

INTRODUCTION

Perception is a process by which individuals organize and interpret their sensory impressions in order to give meaning to their environment. A motivated person is ready to act. How the motivated person actually acts is influenced by his or her perception of the situation. Perception depends not only upon the physical stimuli, but also on the stimuli's relation to the surroundings field and on the condition within the individual. People's behavior is based on their perception of what reality is, not on reality itself. Perception is understood as the act of seeing what is there to be seen which is influenced by the individual, the object and the situation. Perception is the process by which an individual selects, organizes, and interprets the information inputs to create a meaningful picture of the world. In simple terms, perception is why the same universe is viewed differently by different people.

Perception process consists of three stages: Selection, Organization and Interpretation. Selection is the first stage in the perception process in which the stimuli is selected through the senses: sight, sound, smell, taste and touch. Organization is the second stage in which the stimuli (information) are mentally arranged so that a sense can be formed of the stimuli or it can be understood. Interpretation is the third stage in the perception process in which the meaning is attached to the stimuli.

Interpretations are subjective and are based on values, needs, beliefs, experiences, expectations, involvement, self-concept and other personal factors.

A hospital is a health care institution providing patient treatment by specialized staff and equipment. Hospitals are largely staffed by professional physicians, surgeons, and nurses. It is an institution for the treatment, care and cure of the sick and wounded, for the study of disease, and for the training of physicians, nurses, and allied health care personnel. Hospitals are usually funded by the public sector, by health organizations (for profit or nonprofit), health insurance companies, or charities, including direct charitable donations. Historically, hospitals were often founded and funded by religious orders or charitable individuals and leaders. Today, hospitals are largely staffed by professional physicians, surgeons, and nurses, whereas in the past, this work was usually performed by the founding religious orders or by volunteers. Thus, a hospital can be defined as a building in which the sick, injured, or infirm are received and treated; a public or private institution founded for reception and cure, or for the refuge, of persons diseased in body or mind, or disabled, infirm, or dependent, and in which they are treated either at their own expense, or more often by charity in whole or in part; a tent, building, or other place where the sick or wounded of an army cared for.

The Health team that provides treatment to the patients in a hospital consists of doctors on the curative side and nurses on the care side. Of the two, the role performance of the nurse is crucial since she is responsible for not only providing comprehensive nursing care to the patients but also associated functionally with the doctor in the recovery of the patient (Suryamani, 1989). Nurses provide extensive help to physicians caring for patients recovering from an accident or illness. They fill various roles to ensure hospitals are running smoothly on a daily basis. The nurse's professional goals are concerned with the promotion of health and the prevention of disease as well as the treatment of illness. The efficiency of the performance of nurses depends on their perception regarding their role in the hospital.

REVIEW OF LITERATURE

Godinez et al. (1999) performed a qualitative study that looked at the role transition from student to nurse during the first 3 weeks of an orientation. Data were collected from 27 orientees and preceptors. The learning activities of the graduate nurse were analyzed through feedback sheets. Five themes emerged from the data: (a) real nurse work, (b) guidance, (c) transitional process, (d) institutional context, and (e) interpersonal dynamics. With guidance, participants were able to successfully manage complex patient care and stay organized. It concluded that the transition from a student to nurse was a dynamic and interactive process that required support and guidance from the preceptor, as a result of which, they would be able to successfully manage complex patient care and stay organized.

Evans (2001) looked at the concerns and expectations that new nurses faced during the beginning of their careers, and pointed out that unlike other professions, newly qualified nurses are expected to “take on the world” the day they find out that they passed their state board exams. Evans interviewed nine new nurses from across London through a focus group approach. Results revealed that new nurses go through a process of separation, transition, and integration during their journey toward becoming a competent nurse. During the process of separation, students reported that their schooling provided security, but they now felt uncertain about their future. Transition marked a period of what the participants described as a reality shock. They spent years preparing and thought they were ready for their new role, but then were "shocked' to find out that they were not. Integration into the profession was considered to be a vital part of the transition. Students described the need for support and integration of the social and professional roles.

Bjorkstrom et al. (2006) completed a longitudinal survey to explore the meaning of being a good nurse. The researchers used a questionnaire to ask Swedish informants to describe their perception of what it means to be a good nurse and what it means to be a bad nurse. Data were collected from nursing students at the beginning of their nursing school, just before graduation, and 3 to 5 years after becoming a new nurse. Initially, 164 nursing students participated in the study, and by the end there were 64 informants who had participated at all data collection times. Four categories emerged out of this research: (a) "to do good for others," (b) "to be competent and skilled," (c) "to have professional courage and pride," and (d) "to seek professional development". As informants' professional experience and awareness increased, their meaning of being a good nurse became more complex.

Ware (2008) used grounded theory methodology to examine the process of the concept of self as a professional nurse in nursing students. Participants were 15 baccalaureate nursing students enrolled at the beginning of their final semester. Data were generated by asking questions related to how the students pictured themselves assuming the role of the nurse at the beginning of their program, and how they pictured the role of the nurse when they were nearing graduation. The students developed a more holistic view of nursing and felt that the nurse does not only focus on the physical needs of a client, but also the emotional, psychological, and social needs.

NEED OF THE STUDY

Enormous research has been done in foreign countries as well as in India on perception of the nurses regarding their role in hospitals. But only a few have been conducted on the perception of nurses regarding their role in hospitals in Punjab, India. Hence, the present study was taken up at a famous hospital in the district of Ludhiana in Punjab (India).

OBJECTIVES

1. To study the perception of the nurses regarding their role in a hospital in Ludhiana, Punjab (India).
2. To compare the perceptions of the nurses and the head-nurses regarding their role in the said hospital.

RESEARCH METHODOLOGY

For the present study both exploratory and conclusive research methods were used. The conclusive research method here is descriptive in nature and the research design is single cross-sectional. In this study primary data has been collected through survey method. The research was conducted with the help of a structured interview schedule based on Nursing Role Efficacy Scale (A) (Pareek, 1997). The original instrument has already been tested for reliability and validity and proposes the following dimensions:

1) Integration
2) Proactivity

3) Creativity
4) Confrontation
5) Centrality
6) Influence
7) Personal Growth
8) Inter-role Linkage
9) Helping Relationship
10) Superordination

In the present case the target population consists of the nurses working in different hospitals in Punjab (India). The unit (Kotler, 1997) in the study includes a famous hospital in District Ludhiana in Punjab (India) while the elements are the nurses working there. All the 35 Head-Nurses and the 120 Nurses have been covered in the study.

The respondents were personally administered the questionnaire and primary data was collected. The questionnaire consisted of two parts, namely, Part-A and Part-B. Part-A of the questionnaire consisted of solicited information about the profile of respondents like their age, designation etc. Part-B consisted of 30 questions based on Role Efficacy as proposed jointly by Mr. Udai Pareek and Ms. Surabhi Purohit. This questionnaire consisted of 3 statements each related to the ten dimensions of Nursing Role Efficacy and the respondent had to answer on a five point Likert scale (Malhotra and Dash, 2010) in all the thirty statements.

Analysis of data has been done by constructing suitable tables and by using other statistical techniques like mean, standard deviation, and f-test for variances.

Percentage method was used to analyze Part-A of the questionnaire. The percentage of respondents was calculated for each category of respondent's profile. Part-B consisted of 30 questions. The answer sheet for this questionnaire was used for scoring. Each question had five options and the respondent had to tick on one of them.

TABLE 1- SCORES FOR DIFFERENT ANSWER CHOICES

	Score
Strongly Disagree	1
Disagree	2
Neither Agree nor Disagree	3
Agree	4
Strongly Agree	5

HYPOTHESIS OF THE STUDY

The data was analyzed using the following null hypothesis (Bajpai, 2010).

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

HYPOTHESIS

1. Ho: There is no significant difference between the variances in scores of the different dimensions of role efficacy for the Nurses and the Head-Nurses.

   H_1: There is a significant difference between the variances in scores of the different dimensions of role efficacy for the Nurses and the Head-Nurses.

Formula used:

$$F = \frac{s_1^2}{s_2^2}$$

where:

s_1^2 = Variance of sample 1

s_2^2 = Variance of sample 2

n_1 = Size of sample 1

n_2 = Size of sample 2

df= v_1 = n_1 -1= Degree of freedom for numerator

df= v_2 = n_2 -1= Degree of freedom for denominator

LIMITATIONS OF THE STUDY

To understand the research findings in their right perspective, it is necessary that limitations of the study be mentioned. The present study may have suffered from the following limitations.

i) Size of the sample selected for research may perhaps be considered as small, hence; the result of this study might not be fully reliable for generalization for the whole country.

ii) Since the questionnaire is comparatively lengthy and the nurses normally busy, there are chances that information obtained in some cases might have deviated from actual.

iii) The respondents were asked to give their practical views and not the ideology, but the personal biases of the respondents might have affected the results.

RESULTS AND DISCUSSION

The outcome of number of respondents has been categorized in categories such as age, educational qualifications, total work experience, and levels of occupation.

AGE

Age is the first and a very important factor to analyze the perception of the nurses regarding their role in different hospitals. In this study the age of respondents has been divided into four categories.

Table 2 indicates that the largest group for respondents belonged to below 30 (54.84 percent) while the smallest group is for 50 and above (02.59 percent) year categories.

Almost all the nurses belonged to the age group of below 40 years of age with a majority of them being below 30 years of age.

In the Head-Nurses category, more than sixty percent have an age between 40 and 50 years.

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

TABLE 2 - FREQUENCY DISTRIBUTION OF NURSES IN TERMS OF AGE

Age (Years)	No. of Respondents		Total
	Nurses	Head Nurses	
Below 30	85 (70.83)	-	85 (54.84)
30-40	34 (28.33)	8 (22.86)	42 (27.09)
40-50	1 (0.84)	23 (65.71)	24 (15.48)
50 & above	-	4 (11.43)	4 (02.59)
Total	120 (100)	35 (100)	155 (100)

Note: The figures in brackets indicate the percentages.

EDUCATIONAL BACKGROUND

Educational background is a very important factor, which affects the behaviour of an individual to a very large extent. Table 3 indicates a majority of respondents (nearly 60%) were found to be having an educational level of under-graduation.

Furthermore, among the nurses, around three-fourth were undergraduates while the rest were graduates. Among Head-Nurses, over 90 percent of the respondents were graduates (the rest being postgraduates).

TABLE 3- FREQUENCY DISTRIBUTION OF NURSES IN TERMS OF EDUCATIONAL QUALIFICATION

Educational Qualification	No. of Respondents		Total
	Nurses	Head Nurses	
Undergraduate	92 (76.67)	-	92 (59.35)
Graduate	28 (23.33)	32 (91.43)	60 (38.71)
Postgraduate	-	03 (8.57)	03 (1.94)
Total	120 (100)	35 (100)	155 (100)

Note: The figures in brackets indicate the percentages.

TOTAL WORK EXPERIENCE

The next important factor under study was the total work experience of the nurses. On the basis of the total work experience the executives were classified into four categories, i.e.

i) Less than 5 years,

ii) Between 5 and 10 years,

iii) Between 10 and 15 years,

iv) Above 15 years.

Table 4 shows that the largest group of the staff members has an experience below five years followed by those having an experience of above 15 years.

In case of nurses more than half had an experience of less than 5 years and the rest being divided in the other categories.

At the Head-Nurse level, a majority had an experience of over 15 years followed by between 10 and 15 and between 5 and 10 years.

TABLE 4- FREQUENCY DISTRIBUTION OF NURSES IN TERMS OF TOTAL WORK EXPERIENCE

TotalWork Experience (Years)	No. of Respondents		Total
	Nurses	Head Nurses	
Less than 5	62 (51.67)	-	62 (40)
5-10	23 (19.17)	02 (20)	25 (16.13)
10-15	19 (15.83)	08 (22.86)	27 (17.42)
Above 15	16 (13.33)	20 (57.14)	36 (26.45)
Total	120 (100)	35 (100)	155 (100)

Note: The figures in brackets indicate the percentages.

LEVEL OF OCCUPATION

Table 5 shows that the number of junior nurses is more than seventy percent of the total respondents.

TABLE 5 – FREQUENCY DISTRIBUTION OF NURSES IN TERMS OF LEVEL OF OCCUPATION

Level of Occupation	No. of Respondents	Percentage
Nurses	120	77.42
Head-Nurses	35	22.58
Total	155	100

ANALYSIS OF ROLE EFFICACY OF NURSES

1. RANKING OF THE DIFFERENT DIMENSIONS OF ROLE EFFICACY FOR NURSING EMPLOYEES

Table 6 shows that the top three dimensions of role efficacy in order for nurses are Inter-Role Linkage, Helping Relationship and Super-ordination while for head nurses are Super-ordination, Helping Relationship and Inter-Role Linkage.

TABLE 6 – RANKING OF THE DIMENSIONS OF ROLE EFFICACY BASED ON THE MEAN SCORES

Rank	Style	
	Nurses	**Head-Nurses**
1.	Inter-Role Linkage	Super-ordination
2.	Helping Relationship	Helping Relationship
3.	Super-ordination	Inter-Role Linkage
4.	Centrality	Centrality
5.	Personal Growth	Personal Growth
6.	Integration	Integration
7.	Confrontation	Confrontation
8.	Proactivity	Proactivity
9.	Creativity	Influence
10.	Influence	Creativity

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

2. TWO-SAMPLE ANALYSIS RESULTS

HYPOTHESIS

Ho: There is no significant difference between the variances in scores of the different dimensions of role efficacy for the Nurses and the Head-Nurses.

H_1: There is a significant difference between the variances in scores of the different dimensions of role efficacy for the Nurses and the Head-Nurses.

(Variable 1: Nurses, Variable 2: Head-Nurses)

1) INTEGRATION

F-TEST TWO-SAMPLE FOR VARIANCES

	Variable 1	Variable 2
Mean	12.34166667	13.45714286
Variance	2.025140056	0.843697479
Observations	120	35
df	119	34
F	2.400315405	
F Critical two-tail (Lower)	0.602349161	
F Critical two-tail (Upper)	1.660166667	

Result: Since the calculated value is more than the critical value, so, reject H_o

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

2) PROACTIVITY

F-TEST TWO-SAMPLE FOR VARIANCES

	Variable 1	Variable 2
Mean	9.783333333	12.51428571
Variance	4.759383754	2.080672269
Observations	120	35
df	119	34
F	2.287425956	
F Critical two-tail (Lower)	0.602349161	
F Critical two-tail (Upper)	1.660166667	

Result: Since the calculated value is more than the critical value, so, reject H_o

3) CREATIVITY

F-TEST TWO-SAMPLE FOR VARIANCES

	Variable 1	Variable 2
Mean	6.783333333	7.685714286
Variance	3.750980392	4.692436975
Observations	120	35
df	119	34
F	0.79936724	
F Critical two-tail (Lower)	0.602349161	
F Critical two-tail (Upper)	1.660166667	

Result: Since the calculated value is less than the critical value, so, do not reject H_o

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

4) CONFRONTATION

F-TEST TWO-SAMPLE FOR VARIANCES

	Variable 1	**Variable 2**
Mean	10.95	13.22857143
Variance	2.585714286	1.063865546
Observations	120	35
df	119	34
F	2.430489731	
F Critical two-tail (Lower)	0.602349161	
F Critical two-tail (Upper)	1.660166667	

Result**:** Since the calculated value is more than the critical value, so, reject H_o

5) CENTRALITY

F-TEST TWO-SAMPLE FOR VARIANCES

	Variable 1	**Variable 2**
Mean	13.175	13.8
Variance	1.053151261	0.458823529
Observations	120	35
df	119	34
F	2.29532967	
F Critical two-tail (Lower)	0.602349161	
F Critical two-tail (Upper)	1.660166667	

Result: Since the calculated value is more than the critical value, so, reject H_o

6) INFLUENCE

F-TEST TWO-SAMPLE FOR VARIANCES

	Variable 1	**Variable 2**
Mean	6.183333333	9.228571429
Variance	7.243417367	4.593277311
Observations	120	35
df	119	34
F	1.576960605	
F Critical two-tail (Lower)	0.602349161	
F Critical two-tail (Upper)	1.660166667	

Result: Since the calculated value is less than the critical value, so, do not reject H_o

7) PERSONAL GROWTH

F-TEST TWO-SAMPLE FOR VARIANCES

	Variable 1	**Variable 2**
Mean	12.61666667	13.74285714
Variance	2.087114846	0.72605042
Observations	120	35
df	119	34
F	2.874614198	
F Critical two-tail (Lower)	0.602349161	
F Critical two-tail (Upper)	1.660166667	

Result: Since the calculated value is more than the critical value, so, reject H_o

8) INTER-ROLE LINKAGE

F-TEST TWO-SAMPLE FOR VARIANCES

	Variable 1	**Variable 2**
Mean	13.6	14.08571429
Variance	0.460504202	0.433613445
Observations	120	35
df	119	34
F	1.062015504	
F Critical two-tail (Lower)	0.602349161	
F Critical two-tail (Upper)	1.660166667	

Result: Since the calculated value is less than the critical value, so, do not reject H_o

9) HELPING RELATIONSHIP

F-TEST TWO-SAMPLE FOR VARIANCES

	Variable 1	**Variable 2**
Mean	13.425	14.34285714
Variance	0.616176471	0.349579832
Observations	120	35
df	119	34
F	1.762620192	
F Critical two-tail (Lower)	0.602349161	
F Critical two-tail (Upper)	1.660166667	

Result: Since the calculated value is more than the critical value, so, reject H_o

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

10) SUPER-ORDINATION

F-TEST TWO-SAMPLE FOR VARIANCES

	Variable 1	Variable 2
Mean	13.33333333	14.54285714
Variance	0.661064426	0.255462185
Observations	120	35
df	119	34
F	2.587719298	
F Critical two-tail (Lower)	0.602349161	
F Critical two-tail (Upper)	1.660166667	

Result: Since the calculated value is more than the critical value, so, reject H_o

CONCLUSIONS

As is evident from the discussion, the dimensions of role efficacy with high scores for the nursing employees are in a different order; the top three dimensions for nurses being Inter-Role Linkage, Helping Relationship and Super-ordination whereas for head nurses the dimensions being Super-ordination, Helping Relationship and Inter-Role Linkage. The mean scores for Influence and Creativity is quite low which is not a healthy trend.

The results of the f-test for variances in scores for different dimensions show that there is a significant difference for variances for all the dimensions for nurses and head nurses except for Creativity and Influence and the mean scores are low in case of nurses as compared to head nurses.

RECOMMENDATIONS

1. The mean scores for the dimensions of Influence and Creativity for both nurses and head nurses are quite low so; it is required that suitable training be provided to the nurses to remove the misconception that their work does not allow them creative actions and that their job does not influence a large section of society.
2. The mean scores of all the dimensions are low for nurses as compared to the mean scores for head nurses. An attempt for changing the same should be made.
3. The variances in scores are more pronounced for nurses as compared to head nurses in all but one dimension and trainings need to be done to reduce them.

REFERENCES

1. Bajpai, N. (2010), “Business Statistics.” Pearson, 342-346.

2. Björkström, M., Johansson, I., & Athlin, E. (2006), “Is the humanistic view of the nurse role still alive--in spite of an academic education?” Journal of Advanced Nursing, Vol. 54 (4), 502-510.

3. Evans, K. (2001), “Expectations of newly qualified nurses.” Nursing Standard, Vol. 15(41), 33-38.

4. Godinez, G., Schweiger, J., Gruver, J., & Ryan, P. (1999), “Role transition from graduate to staff nurse: A qualitative analysis.” Journal for Nurses in Staff Development, Vol. 15(3), 97-110.

5. Kotler, P. (1997), “Marketing Management Analysis, Planning, Implementation, and Control.” Prentice Hall of India, 117-123.

6. Malhotra, N.K., & Dash, S. (2009), “Marketing Research: An Applied Orientation.” Prentice Hall of India, 76-91, 274-275.

7. Pareek, U. (1997), “Training Instruments For Human Resource Development.” Tata Mcgraw-Hill Publishing Company Limited, 586-590.

8. Suryamani, E. (1989), “The 'ideal' and 'real' role of a nurse in the hospital: doctors' perception.” [Online] Available http://www.ncbi.nlm.nih.gov/pubmed/2798182 April 13, 2013.

9. Ware, S. (2008), “Developing a self-concept of nurse in baccalaureate nursing students.” International Journal of Nursing Education, Vol. 5 (1), 1-17.

A Publication of TRANS Asian Research Journals

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

IMPLEMENTATION OF MG-NREGA IN RURAL WEST BENGAL: A CASE STUDY OF SONAMUKHI BLOCK, BANKURA DISTRICT, W.B.

Dr. Bipul De*; Dr. Sebak Jana**

*Assistant Professor
Sonamukhi College,
Bankura.
**Assistant Professor
Vidyasagar University,
Midnapore.

ABSTRACT

The National Rural Employment Guarantee Act, 2005 (NREGA) guarantees 100 days of wage employment in a financial year to any rural household whose adult members are willing to participate in unskilled manual work. The initial 200 districts chosen for implementation of the National Rural Employment Guarantee Act (NREGA) were the most backward districts of this country. Bankura district in West Bengal was selected at it's first phase. The current literature has observed the low awareness of the beneficiaries as well as some institutional gaps in the implementation of such scheme. Our study tries to review the current status of implementation of NREGA in Sonamukhi block of Bankura district, West Bengal and to identify emerging strengths and weaknesses for wider dialogue for improvements. 100 households have been chosen from ten villages/gram sangsads on stratified random sampling basis. The respondents have been asked through open ended questionnaire on several aspects of MGNREGA. Our study observes some irregularities in the implementation procedure and the lack of awareness about the rights. Still the beneficiaries believe that if effectively implemented, NREGA will be a more effective instrument for reducing poverty.

KEYWORDS: *NREGA, Implementation, Awareness, Opinion, Rural, Employment*
Acknowledgement: Financial Support from UGC, in a Minor Research Project, for conducting the survey is acknowledged.

---

1. INTRODUCTION

India has more than three decades of experience in implementing different Employment Generation Programmes. These programmes have their origin during the Great Depression days when western countries used these as counter cyclical policy instruments. Several countries of the developing world have also used Public Work Programmes to deal with droughts and famines. Over time these schemes have evolved into employment creation and poverty alleviation programmes. These programmes have been used and advocated for alleviating both chronic and transient poverty in the South Asian context for a long time (Hirway, Saluja and Yadav, 2008). In India, NREGA came into force in 200 districts on 2 February 2006 and was then extended to an additional 130 districts in the financial year 2007-08. Before NREGA, time to time, different wage employment programmes were introduced in the country. The NREGA ranks first among the most powerful initiatives ever undertaken for transformation of rural livelihoods in India (Ghosh, 2009). In many ways the

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

NREGA is a replication of earlier schemes with a legal guarantee. The most critical difference now is that people's entitlement, by law, the employment is mandated through NREGA. While other programmes are allocation-based, NREGA is demand-driven (Dreze, 2008).

2. LITERATURE REVIEW

The Act has been universalized w.e.f. 1st April 2008 and now covers the entire country. The programme has been renamed as Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) since October 2009 (Datta and Sharma 2010). It became operational in West Bengal from February 2006. In the first phase NREGA was implemented in 10 districts (South 24 Parganas, Bankura, Birbhum, Dakhhin and Uttar Dinajpur, Jalpaiguri, Maldah, Murshidabad, Paschim Midnapur and Purulia) followed by another 7 districts in the second phase (North 24 Parganas, Burdwan, Coochbihar, Darjelling, Hooghly, Puaba Midnapur, and Nadia) from 1st April 2007 and one more district in third phase from 1st April 2008 (Howrah).

Recent literatures observe the need as well as problems of implementation of NREGA through field investigation in different areas. Since its inception, NREGA has a good impact in many respects in rural India (Pankaj and Thanka 2010). Patnaik (2005) identifies the need for providing employment guarantee but Bhatia and Dreeze (2006) observes the low awareness of the beneficiaries about the demand driven job. They have also identified the institutional gap as a major stumbling block in the implementation of NREGA. Chathukulam and Gireesan (2006) observe a range of problems and irregularities emerged in relation to wage payments. Shah (2007) has identified few other implementation problems in worksite facilities, productive assets, social audit etc. De and Dasgupta (2009) observes poor governance in the implementation of NREGA in rural West Bengal. The study reveals that despite the fact that all the 18 districts in the state have been covered under the NREGA, West Bengal clearly seems to lag behind other states in terms of actual job provision or the average number of days provided with job per family. According to Mukherjee and Ghosh (2009), while Madhya Pradesh (MP) has provided 9.96 per cent of the total job card holders with 100 days of employment and Rajasthan has provided 10.33 per cent, West Bengal has provided a meager 0.24 per cent with 100 days employment. De and Jana(2011) attempts to rank all the blocks of West Bengal on the basis of some performance indicators through Combined PCA (Principal Component Analysis) Index. The result shows the performance of Bankura district at Block level NREGA implementation is better compared to other districts. On this backdrop, we have chosen the Sonamukhi block of Bankura district as our survey area, a backward district of rural West Bengal (WBHDR, 2004), to observe different aspects of the implementation of NREGA in the light of field investigation.

3. OBJECTIVES OF THE STUDY

The present study on evaluation of the NREGA Scheme is intended to assess the impact of the scheme on the targeted beneficiaries. The basic objectives of the study are:

(i) To review the current status of implementation of NREGA in Sonamukhi block of Bankura district, West Bengal and

(ii) To identify the emerging strengths and weaknesses for wider dialogue for improvements

4. THE SURVEY AREA AND THE METHODOLOGY OF THE STUDY

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

The initial 200 districts chosen for implementation of the National Rural Employment Guarantee Act (NREGA) were the most backward districts of this country. Bankura district in West Bengal was selected for the implementation of such programme at it's first phase. We have chosen a backward block named Sonamukhi of Bankura District (DHDR, 2007) for our primary survey. Widespread poverty is a major feature of this block. The socio economic indicators are generally below the state as well as district average. The literacy rate is lower than the state and district average. Also, the proportion of SC/ST population in most of these areas is higher than in other areas. In administrative lexicon, backward districts or remote/underdeveloped areas are identified on the basis of a set of criteria – low agricultural productivity, high incidence of poverty, high concentration of scheduled castes/tribes, areas which suffer from isolation in demographic terms, etc. This identification process then leads to planning for development of these backward areas. According to 2001 census, the percentage of SC population in Sonamukhi block was 44.96 as against the district level, 31.87; the percentage of BPL families was 48.47 as against the district level, 42.48; the overall literacy rate in Sonamukhi block was quite low as 57.7 compared to the district level, 63.8; the infant mortality rate and maternal mortality rate both are high as 25.41 and 31.45, higher than the district average (DSH, 2008). This block is primarily agricultural and the percentage of agricultural labourers in the total rural working population is higher than the state average indicating the large-scale landlessness combined with lack of effective employment opportunities in the non-agricultural sector. The result is lower incomes for a large section of the rural population contributing towards the backwardness of these blocks apart from agro–climatic and physiographic conditions. Sonamukhi block consists of rural areas with 10 gram panchayats, viz. Dhanshimla, Dhulai, Dihipara, Hamirhati, Kochdihi, Manikbajar, Panchal, Piyerbera, Purba Nabasan and Radhamohonpur.

For collection of data from the sample households, a well structured questionnaire was canvassed. Using a detailed and structured questionnaire, the survey was carried out in second and third quarter of 2011-12 fiscal year. The schedule primarily comprised of closed questions though a few open ended questions also existed to record the opinions and suggestions of the people. The topics covered in the questionnaire are summarized as follows: general information about the socio economic characteristics of household (especially about the head of the household). The other topics are household income and expenditure profiles; annual employment days including NREGA days, own rural employment days, daily wage base days, other type of employment days etc. This data was collected from ten villages/gram sangsads (Birendrapur, Kusumkanali, Jashra, Rapatganj, Rampur, Ratanpur, Tiura, Pathormora, Kalyanpur, Muslo) from Hamirhati and Kochdihi Gram Panchayats of Sonamukhi Block through stratified random sampling. After stratification a total of 100 (50 from each gram panchayat) households were randomly chosen.

5. RESULTS AND DISCUSSIONS

This section deals with household details such as their socio-economic background. A priori information on the socio-economic characteristics of the study area are analyzed from the data as it is found in the field survey for a better understanding of the nature of the population. It is necessary to have an idea about the caste wise, religion wise and marital status wise composition of the respondents; their level of indebtedness and assets; their occupational pattern, annual employment days and average expenditure patterns etc.

General information of household, especially about the head of the household reveals that the ages of the heads of the surveyed households ranged from 25 to 80 years with a mean 44.53 and 10.62 standard deviation. The average education level (year of schooling) of the head of the surveyed households is 2.3 with 3.4 standard deviation. It ranged from illiteracy to higher secondary level (i.e. from 0 to 12). The family size of the surveyed household ranged from 1 to 6. The average family size is 4.26. A comprehensive picture will be obtained from the following tables.

A. CASTE WISE COMPOSITION OF THE RESPONDENTS

According to Census, 2001, the percentage of SC and ST population in Sonamukhi block was 41.96% and 3.56%. Table-1 gives the breakup of our respondents in different social groups such as SC, ST, OBC, Minority and General category beneficiaries. The data has been gathered from 100 households of which SC communities are of 32 percent, the ST communities are 20 percent. The share of OBC, Minority and General are 17 percent, 12 percent and 19 percent respectively.

TABLE-1: CASTE WISE COMPOSITION OF THE RESPONDENTS (NO. OF HOUSEHOLDS)

GP	SC	ST	OBC	Minority	General	Total
Hamirhati	18 (36)	14 (28)	7 (14)	0	11 (22)	50 (100)
Kochdihi	14 (28)	6 (12)	10 (20)	12 (24)	8 (16)	50 (100)
Total	32	20	17	12	19	100

Source: Field Survey; Note: figures within the brackets are showing the percentage.

B. RELIGION AND MARITAL STATUS OF THE RESPONDENTS

The household survey revealed (Refer to Table-2) that 66 percent respondents belonged to the Hindu community of which 72 percent were from Hamirhati GP and 60 percent respondent were from Kochdihi GP. No Muslim respondent was found in Hamirhati GP and we have 28 percent of them in Kochdihi GP. Respondent from ‘others’ was 20 percent as a whole. We also assessed the marital status of the heads of the respondent households and the available options included: single, married, divorced, separated, and widowed. Results indicate that most of the heads (90 percent) of the surveyed households were married; about 5 percent of them noted that they were single and widowed.

TABLE-2: RELIGION WISE AND MARITAL STATUS WISE DECOMPOSITION OF THE RESPONDENTS

GP/Status	Religion				Marital Status			
GP	Hindu	Muslim	Others	Total	Married	Unmarried	Widow	Total
Hamirhati	36 (72)	0	14 (28)	50 (100)	43 (86)	4 (8)	3 (6)	50 (100)
Kochdihi	30 (60)	14 (28)	6 (12)	50 (100)	47 (94)	1 (2)	2 (4)	50 (100)
Total	66	14	20	100	90	5	5	100

Source: Field Survey; Note: figures within the brackets are showing the percentage.

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

C. OWNERSHIP OF DIFFERENT ASSETS, LEVEL OF INDEBTEDNESS AND BENEFICIARIES OF THE GOVERNMENT SCHEMES

We have gathered data on the surveyed households' ownership of several purchased items including TV, radio, bicycle, mobile phone and animals like cow, goat and others. The results show (Refer to Table-3a) that out of 100 households surveyed; only 3 and 13 of the surveyed households owned TV in Hamirhati and Kochdihi, only 3 and 4 households owned radio in Hamirhati and Kochdihi, 81 percent owned bicycle and 44 percent owned mobile phones. 45 percent and 39 percent have cow and goat. This result has shown a dearth of assets among the surveyed families in the study area.

TABLE-3A: LIVESTOCK AND ASSETS OF THE RESPONDENTS (NO. OF HOUSEHOLDS)

Livestock and Assets	Hamirhati	Kochdihi	Total
1. Cow	23	22	45
2. Goat	22	17	39
3. Other	18	23	41
4. TV	3	13	16
5. Radio	3	4	7
6. Mobile	23	21	44
7. Cycle	37	44	81

Source: Field Survey

We have also evaluated the level of indebtedness, type of dwelling of the households as well as whether or not the surveyed households enjoyed any government schemes like Indira Abas Yojana, Antyodaya Yojana, Free Electricity, Annapurna Yojana. The result indicates (Refer to Table-3b) that 56 percent households of our study depend on money lender and 39 percent on others like neighbours, relatives and especially on local shop owners. Local banks can access only 3 percent of them. Most of surveyed households (62 percent) have kancha house made by mud hut and 37 percent have mixed house. Out of 100 households only 18 got benefit from IAY, 5 from Annapurna and 22 from Antyodaya Yojana whereas 13 have been availing the free electricity connection.

TABLE-3B: LEVEL OF INDEBTEDNESS AND GOVERNMENT BENEFICIARIES (NO OF HOUSEHOLDS)

Items		Hamirhati	Kochdihi	Total
Level of indebtedness	i. Money lender	31	25	56
	ii. Bank	1	2	3
	iii. Others	18	21	39
Nature of Houses	i. Kancha	39	23	62
	ii. Paka	1	0	1
	iii. Mixed	10	27	37
From Village to Main Road	Distance (in KM)	2.3	3.5	2.9

Beneficiaries of Govt. Schemes	i.	Indira Abas Yojana (IAY)	6	12	18
	ii.	Annapurna Yojana	5	0	5
	iii.	Free electricity	0	13	13
	iv.	Antyodaya Yojana	11	11	22
Source: Field Survey					

D. OCCUPATIONAL PATTERN OF THE RESPONDENTS

A common classification of the occupational pattern is to distinguish between earners as agricultural labourer, cultivator, household industry worker and other workers (Ghosh, Satpathy and Kapur, 2008). In our survey 61 percent households have been found as daily labour and 23 percent as cultivator. Out of 100 households surveyed 67 households are observed to be of BPL category (Refer to Table-4).

TABLE-4: OCCUPATIONAL PATTERN OF THE RESPONDENTS (NO. OF HOUSEHOLDS)

GP	Daily labour	Cultivation	Other	Total	Econ status (BPL)
Hamirhati	33	9	8	50	35
Kochdihi	28	14	8	50	32
Total	61	23	16	100	67
Source: Field Survey					

E. ANNUAL EMPLOYMENT DAYS PER HOUSEHOLD

Based on the responses from our survey, a clear idea can be obtained about the annual employment days of the household from NREGA and Non-NREGA sources. Table-5 shows that on average, sample households generated only 14 days of work from NREGA and the bulk of work generated from Non-NREGA work. So the scheme could not serve as a social safety net by providing a source of employment when the other alternatives were limited. The study reveals that the NREGA employment days per household in our surveyed area varied from 0 to 40 days with the mean value 14.22 and 8.51 standard deviation. Now it is surprising that out of 100 days the average NREGA employment days in our surveyed block is only 14.22 (Refer to Table-5), It was revealed by the concerned panchayats that the problem of finance and generation of work are the most serious limitations in the implementation of NREGA. The own agricultural employment days ranged from 0 to100 with 5.72 mean and 12.82 SD. Since the opportunity of working in own agricultural land is less they depend on wage labour employment on a daily basis. It ranged from 0 to 300 with 143.16 mean and 80.50 SD. Our study also reveals that the NREGA employment days per household in Kochdihi is only 9.2 and in Hamirhati it is 17.5. The available information also identifies that in Hamirhati the households remain unemployed for more than 200 days and in Kochdihi more than 220 days in a year, showing the need for effective utilisation of the programme.

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

TABLE-5: ANNUAL EMPLOYMENT DAYS PER HOUSEHOLD					
GP	**NREGA**	**OWN AGRICULTURAL EMPLOYMENT (DAYS)**	**WAGE LABOUR EMPLOYMENT**	**OTHER TYPE OF EMPLOYMENT**	**TOTAL**
Hamirhati	18.92	5.10	148.12	47.66	219.80
Kochdihi	9.52	6.34	138.20	83.30	237.36
Total	14.22	5.72	143.16	65.42	228.58
Source: Field Survey					

F. AVERAGE EXPENDITURE OF THE RESPONDENTS

Household income is an important economic variable, but at household level it is rather difficult to assess the family income in the absence of accurate information. It has been observed during survey that there is huge discrepancy between income earned, saving and consumption of a particular household. For this only the expenditure level of households was retained for the sake of analysis. Three major expenditures- on food, on education and on health were included. The descriptive statistics of the parameters revealed that the total expenditure per month ranged from Rs. 1200 to Rs. 6800 in our surveyed block. The mean and standard deviation were Rs. 2959.50 (Refer to Table-6) and 1125.42. The average expenditure on food per month was Rs. 2327, ranged from Rs. 1000 to Rs. 4500 with standard deviation 822. The mean expenditure on education per month is Rs. 154.80 with standard deviation 164.44; it ranged from zero expenditure to Rs. 800. The average expenditure on health per month is Rs. 260 with standard deviation Rs. 131.80 ranged from Rs. 100 to Rs. 1000. The average saving per month is Rs. 217.70 with 182.39 standard deviation ranged from Rs. 20 to Rs. 1500.

TABLE-6 : AVERAGE EXPENDITURE (IN RS.) PER MONTH					
GP	**Food**	**Education**	**Health**	**Savings**	**Expenditure**
Hamirhati	2098.00	137.00	257.00	181.40	2673.40
kochdihi	2556.00	172.60	263.00	254.00	3245.60
Total	2327.00	154.80	260.00	217.70	2959.50
Source: Field Survey,					

6. FINDINGS OF THE STUDY

The individuals needing unskilled work for survival must be aware of the NREGA, the eligibility requirements for work, the procedure for registration, getting a job card, wage rates etc (ISS, 2008). In this section, we have presented opinion of all job card holders on issues such as job card,

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

application of work, the length of the period for applying an obtaining the job and allowances or worksite facilities.

A. ISSUES RELATED TO JOB CARD AND WORK RELATED INFORMATION

Opinion of all job card holders is collected on issues such as- money spent for the job card, procedure of getting the job card, whether they have faced any problem in receiving the job card like delay, transparency etc. Table-7 shows that 95 percent of the surveyed beneficiaries revealed that the job cards were issued to them within 15 days after application. Majority of households expressed that they got their job cards without waiting for much time and without money spent. Most beneficiaries got their job cards through GP. Majority of the rural households agreed that there is a transparent mechanism followed for issue of job cards. All of them, except 7, go to bank or P.O. to collect the payment.

TABLE-7: JOB CARD AND WORK RELATED INFORMATION (NO. OF RESPONDENTS SAY YES)

Information	Hamirhati	Kochdihi	Total
1. Money spent for the job card	10	3	13
2. Late to get the job card	32	17	49
3. Got the job card on time (within 15 days) after registration	50	45	95
4. Got the job card from GP	50	50	100
5. The Mechanism is transparent	45	46	91
6. Payment is made through Bank or P.O.	49	44	93

Source: Field Survey

B. ISSUES RELATED TO JOB

This section captured very important aspect of procedures and rules vis-à-vis guidelines of NREGA followed by the officials at GP level by way of views expressed by the beneficiaries. There are several guidelines to be followed by GP officials such as allotment of work in response to an application for work, allotment of work on time, time-lag between application for work and allotment of work redressal of grievances and complaints etc. Table-8 reveals the views of all the beneficiaries in the above aspects. In Hamirhati and Kochdihi, there is no such provision of application for work and all the beneficiaries are employed without any application, simply violating the guideline of NREGA. No irregularities can be found in both the GPs but in both cases people actually demanded more jobs than what they actually did. It shows the need of job due to the unavailability of any alternative occupation. According to the guidelines of the scheme, within a maximum period of 15 days of applying for job in writing, wage employment has to be provided (GOI, 2006). However, the response of the beneficiaries who got the wage employment speaks the other way. Seventy six percent of the households from Hamirhati expressed that they did not get the work within the stipulated 15 days time of demand for work. Another crucial aspect is the time-lag between application and issue of job. The information about the job they got either from GP or from neighbour. Both the GPs are showing their efficacy in this aspect but the use of notice board in both GPs are in question. In all the GPs, during the survey, hoardings of the programmes and details were observed and the execution was properly visible. An attempt was made to enquire whether there are any general nature of grievances or complaints regarding works allocation, registration procedures, and job card allocation etc. It is very interesting to observe that not a single complaint was lodged in Hamirhati GP and only 2 in Kochdihi GP regarding the allocation of job. The reasons should be explored in a different way. The surveyed households were not felt easy to complaint against the panchayat. The job card entry is done in front of the respondents in Hamirhati GP whereas in Kochdihi the procedure is different.

TABLE-8 : JOB RELATED INFORMATION (NO. OF RESPONDENTS SAY YES)

Information	Hamirhati	Kochdihi	Total
1. Employed in response to an application for work	0	0	0
2. Find evidence of any Irregularity	0	2	2
3. Willing to get more jobs than actually did	35	48	83
4. Allotment of work on time	0	0	0
5. Time lag between application and allotment	38	NA	NA
6. Information about job was known form G.P.	33	24	57
7. Information about job was known from Notice Board	8	4	12
8. Information about job was known from neighbour	27	40	67
9. No of complaint related to NREGA work	0	2	2
10. Job card entry done in front of the respondents	29	8	37

Source: Field Survey

C. ISSUES RELATED TO ALLOWANCE AND OTHER FACILITIES

The Act under NREGA stipulates to provide basic facilities such as crèche, first aid, drinking water and shade for workers at the work site. There are several guidelines to be followed by GP officials such as facilities at worksite, delay in providing employment within stipulated time and unemployment allowance etc (Jha, Raghav and Shankar, 2008). An attempt was made (Refer to Table–9) to enquire the extent of such facilities provided to the wagers at the work site. Only 46 percent of the households did find those facilities at the work site for drinking water and shade but there are no such arrangements for crèche and first aid. All of them informed that they were not paid any unemployment allowance. They did not applied for the unemployment allowances and it is the responsibility of the GPs to let them know about the provision of the application for unemployment allowances. But the table reveals that they do not even know about the existence of such a provision. These are showing the inefficacy of GPs to run NREGA in a successful manner.

TABLE-9: ALLOWANCE AND FACILITIES AVAILABLE IN WORKSITE (NO. OF RESPONDENTS SAY YES)

Facilities and Allowances	Hamirhati	Kochdihi	Total
1. Maintenance of the worksite facilities – drinking water, shade	31	15	46

2. Maintenance of the worksite facilities – crèche, first aid	0	0	0
3. Got any unemployment allowances	0	0	0
4. Applied for unemployment allowances	0	0	0
5. Provision of the application for unemployment allowances was not known	50	50	100
Source: Field Survey			

7. PROBLEMS AND PROSPECTS OF MGNREGA

MG-NREGA is the most significant scheme to uplift the overall quality of life of rural households from the extreme poverty. Thus people should aware about the scheme so that they can reap the full benefit of the programme (Ambasta, Shankar and Shah, 2008) and they should identify the problems and prospects of the scheme for their own interest so that they can participate in planning and monitoring of the scheme.

OPINION OF THE RESPONDENTS ABOUT THE PROBLEMS AND PROSPECTS

In this section we have attempted to present the opinion about the impact of the scheme on various important attributes which contribute to the enhancement of quality of life such as food security, fight against poverty and indebtedness, greater economic independence of women, to arrest out-migration etc.Table-10 depicts the opinions of respondents/beneficiaries in this regard. Only 26 percent of them agree on the view that the programme enhances food security and 47 percent believe that the programme can not provide some protection against extreme poverty. It is very encouraging that more than 48 percent are of the view that it can reduce distress migration, 32 percent think that rural indebtedness can be reduced by this programme. 59 percent are in favour of the programme because they think that the programme has offered greater economic independence to women. 61 percent respondent believes that the programme can generate better purchasing power but almost 81 percent believe the programme is responsible for the higher local wage rate and cost. It is also seen that 82 percent of the respondents are of the view that the scope of children to go to school has been improved by the programme. But all of them are aware about the corruption of NREGA work; they also believe that the quality of NREGA work is not satisfactory. In spite of that 57 percent and 58 percent respondent believe that there is an improvement in roads and communications i.e. rural connectivity and water level, because the programme has a greater stress on the conservation of water bodies.

TABLE-10 : OPINION OF THE RESPONDENTS (PERCENTAGE OF HOUSEHOLDS) REGARDING THE PROBLEMS AND PROSPECTS OF NREGA

Sl no	Opinion	Strongly Agree	Agree	Indifferent	Disagree	Strongly Disagree	Total
1	NREGA enhances food security	4	22	19	32	23	100
2	NREGA provided some protection against extreme poverty	9	30	14	31	16	100

3	NREGA helped to reduce the distress migration	16	32	13	23	16	100
4	NREGA helped to reduce indebtedness	2	30	25	34	9	100
5	NREGA gave greater economic independence to women	10	49	16	10	15	100
6	NREGA generated better purchasing power in the local economy	10	51	20	12	7	100
7	NREGA has increased the local wage rate	39	42	7	4	8	100
8	NREGA has improved the scope of the children to go to school	43	39	7	4	7	100
9	The quality of NREGA work is satisfactory	4	27	13	33	23	100
10	Zero corruption exists in NREGA work	2	8	11	30	49	100
11	Improvement in roads and communication due to NREGA work	27	30	2	21	20	100
12	NREGA work has improved the water level	16	42	3	21	18	100

Source: Field Survey

8. CONCLUDING OBSERVATIONS AND RECOMMENDATIONS

The 200 backward districts was chosen because of their special problems for the implementation of NREGA at the initial stage. They are the least developed areas of the country comprising mostly marginal farmers and forest dwellers. In many of these districts poverty has increased despite consistent focus of several poverty eradication programmes. Governance has little or no presence in most of these districts. The NREGA with the aim to reduce poverty is thus desirable for these districts. The NREGA can target development using huge demand for casual jobs. In West Bengal, districts like Purulia, Bankura, Birbhum, Jhargram have huge potential as far as the scheme was concerned because of availability of land which suited the types of job provided under the scheme. Land, especially non-irrigable land was a basic requirement to provide jobs under this scheme. But the picture emerging from this brief investigation is not very encouraging. The functioning of NREGA in the study area is not satisfactory. A majority of the households have reported that they are willing to get more jobs than what they are presently getting. Even after six years of implementation of NREGA in the state our study reveals that people know very little about the law and different facilities there. While the basic programme awareness is universal, knowledge about their rights is not as widespread. The study also reveals peoples dissatisfaction about the impact of NREGA on their livelihood and the quality of the work done under this scheme. Nevertheless, they strongly believe that the programme can be a great agent for socio-economic upliftment by providing livelihood security to the poorest of the poor in rural West Bengal. So GPs and officials should be more innovative to prepare their 'shelf' and to create more jobs. Given the limited capacity of agriculture to absorb additional labour force, the development of rural non-farm sector should be the priority.

9. LIMITATIONS OF THE STUDY AND SCOPE OF FURTHER RESEARCH

The results are based on the random sample drawn from a backward district in West Bengal which may not be true for other places. Also the analysis is based on the variables for which we had been able to collect data.

REFERENCES

1. Ambasta, P, P S V Shankar and M Shah (2008): 'Two Years of NREGA: The Road Ahead', Economic & Political Weekly, February 23.
2. Bela Bhatia and Jean Dreze (2006), 'Employment Guarantee in Jharkhand: Ground Results', EPW, Vol XLI, No 29, July 22, 2006.
3. Chathukulam, Jos and K Gireesan (2006): 'Political Economy of Pre-Launch Preparedness of NREGA in Kerala', paper prepared for National Seminar on Panchayat Raj Institutions after 73rd Amendment Constitution: A New Deal for Rural India on August 19-20 at Tirupati, organised by AGRASRI.
4. Datta S. and V. Sharma (2010), State of India's Livelihood Report 2010, Sage, New Delhi.
5. De, B. and B. Dasgupta (2009),' 'Governance and Employment Generation in Rural Areas: A Case Study on NREGA in selected districts of West Bengal', The India Economy Review 2009, volume-6, September 2009.
6. De, B. and S. Jana (2011),'An Analysis of Block Level Performance of NREGA in West Bengal', Journal of Economics, Vidyasagar University, volume-XV, 2010,
7. District Human Development Report: Bankura, 2007, HDRCC, Development and Planning Department, Government of West Bengal, April 2007
8. District Statistical Handbook: Bankura (2008), Bureau of Applied Economics and Statistics, Government of West Bengal, 2008
9. Drèze, J (2008): 'Employment Guarantee: Beyond Propaganda', The Hindu, January 11.
10. Ghosh J (2009), "Equity and Inclusion through public expenditure: the potential of the NREGA", Progoti.
11. Ghosh S., Trishna Satpathy and Aasha Kapur (2008), "National Rural Employment Guarantee Scheme", Alternative Economic Survey, India 2007-08, p-223.
12. Government of India (2006): 'NREGA: Operational Guidelines 2006', Ministry of Rural Development, New Delhi, also available at www.nrega.nic.in Hirway, Indira (2008): 'Plan for Long Term', The Indian Express, February 2.
13. Hirway, I., Saluja, M. R. and Yadav, B. (2008), 'Analysing Multiplier Impact of NREGA Works through Village SAM Modelling', Paper presented at a seminar on NREGA in India: Impacts and Implementation Experienced by Institute for Human Development and Centre de Science Humanities, 16-17 September, IIC, New Delhi

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

14. ISS (2008), "Concept Note on NREGA", Prepared on the Occasion of National Conference on NREGA and Panchayats organized by Institute of Social Sciences(ISS), New Delhi, October 14-15 .

15. Jha, Raghbendra, Raghav Gaiha and Shylashri Shankar (2008): 'Reviewing the National Rural Employment Guarantee Programme', March 15.

16. Mahapatra, R, N Sakhuja, S Das and S Singh (2008): 'The National Rural Employment Guarantee Act (NREGA): Opportunities and Challenges', CSE Policy Paper, available at http://www.cseindia.org/programme/nrml/pdf/NREGA_Policy _Paper_2008.pdf

17. Menon, S (2008), "Right to Information Act and NREGA: Reflection on Rajasthan", MPRA Paper No:7351.

18. Mukherjee, S and S. Ghosh (2009), "What Determines the Success of NREGA at the Panchayat Level? A case study of Birbhum District in West Bengal", The Indian Journal of Labor Economics, vol. 52, No. 1, 2009.

19. Pankaj Ashok and Rukmini Thakka (2010), "Empowerment of NREGA on Women Workers: A Case Study in Four Districts", Economic and Political Weekly, July 24.

20. Patnaik, Prabhat (2005), 'On the Need for Providing Employment Guarantee', EPW, January 15, 2005

21. Shah, M. (2007), 'Employment Guarantee, Civil Society and Indian Democracy', EPW, November 17, 2007

22. West Bengal Human Development Report, 2004, Development and Planning Department, Government of West Bengal, May 2004.

A Publication of TRANS Asian Research Journals

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

ASSESSING SINGLE AUTHOR'S RESEARCH CONTRIBUTIONS IN ARTIFICIAL INTELLIGENCE: A COMPREHENSIVE ANALYSIS

Dr. Saravanan. T*

*Assistant Professor,
Department of Library & Information Science,
Annamalai University,
Tamilnadu, India.

ABSTRACT

The aim of the present study is to measure the single author's journal articles contributions on Artificial Intelligence for the selected countries namely USA, UK, Germany and Japan. The period of coverage is 4 years spanning between 2003-2006. The analysis method referred as "relative to an identified distribution[1]" has been adopted to carry out the present study. Analysis helps to measure the significance of differences among the groups. The year wise comparisons also have been made to capture the single author research output on the same discipline. Study has been focused on single author contribution on AI towards journal sources only and didn't cover any other joint authors and other sources.

KEYWORDS: *Computer Science; Artificial Intelligence; journals; single author; USA; UK; Germany; Japan.*

INTRODUCTION

It is now widely recognized that scholarly productivity, as measured by number of publications produced is the general phenomenon. In general, publications happen to be single authored or co-authored or multiauthored. Publications are on the increase in case of collaborative publications while single authorship pattern is on the decline as revealed in many studies. Most authors contributing to a particular body of literature contribute less while the number of authors who are highly productive is very small indeed as Lotka's law reveals. Potter[6] admitted that Lotka's distribution holds only under certain limited conditions and not all data collected on authorship in a field conform exactly to the inverse square relationship. The contradiction is that if 60 per cent of the authors contribute a single paper in a specific subject field, they are not likely to be one-paper authors, but may contribute further papers in different fields. Anyhow, if most authors contribute only one paper to a field, it is assumed that they are not active in that field for a long time. "This phenomenon of transience in authorship has been looked at by a number of investigators including Hawkins[3] and Price and Suha Gusey[7]." Such onetime authors with one publication are identified as transients.

LITERATURE REVIEW

Virgo applied correlation procedures to compare a group of expert's judgements of a number of articles with the frequency with which the same article was cited. Schubert et al used Regression model to perform analysis between stated research quality and citation counts. Jeppe Nicolaisen applied chi-square model to trace the relationship between peer evaluations reflected in scholarly book reviews and citation frequencies of reviewed books.

OBJECTIVES

The aim of this study is to measure the single author's contributions on Artificial Intelligence towards Journal Sources for the selected countries during the period 2003 -2006. They are;

1. To trace single author's journal articles contributions in Artificial Intelligence for the specific periods towards the countries namely USA, UK, Germany and Japan.
2. To trace and compare the means of single author's research contributions in Artificial Intelligence between the identified years.

HYPOTHESES

The study encompasses enough hypotheses in order to complete the assigned task. They are;

H_1 -Single author's research contributions in Artificial Intelligence during the selected years follow a normal distribution.

H_2 -There would be no statistically significant differences among the single author's research contributions between the countries and years.

H_3 -There would be no statistically significant differences between the single author's research contributions with respect to pair wise comparisons for the period 2003 vs. 2004, 2005 & 2006.

H_4 - There would be no statistically significant differences between the single author's research contributions with respect to pair wise comparisons for the period 2004 vs. 2003, 2005 & 2006.

H_5 - There would be no statistically significant differences between the single author's research contributions with respect to pair wise comparisons for the period 2005 vs. 2003, 2004 & 2006.

H_6 - There would be no statistically significant differences between the single author's research contributions with respect to pair wise comparisons for the period 2006 vs. 2003, 2004 & 2005.

EDGE

This investigation takes into account single author research publications on AI from the selected countries namely USA, UK, Germany and Japan as found enumerated in the INSPEC database, a product from IEEE. In Total 894 records have been traced for the purpose of further analysis. Study encompasses the single author's research output from the Journals only during the period 2003-2006 and didn't include other years, documents and countries.

EXPERIMENTAL DESIGN

To test the significance between groups of years and the selected countries the analysis namely "Relative to an identified distribution" has been adopted. This analysis was proposed by Bross4 and briefed by William G Miller[5] in OpenStat©. The analysis begins with the identification of a population to serve as a standard or reference group. For the reference group, we estimate that the proportion of all cases with a value on the underlying continuum is falling at or below the midpoint of each interval, that is, each interval's relative to an identified distribution. The final values are the relative to an identified distribution associated with the various categories. The relative to an

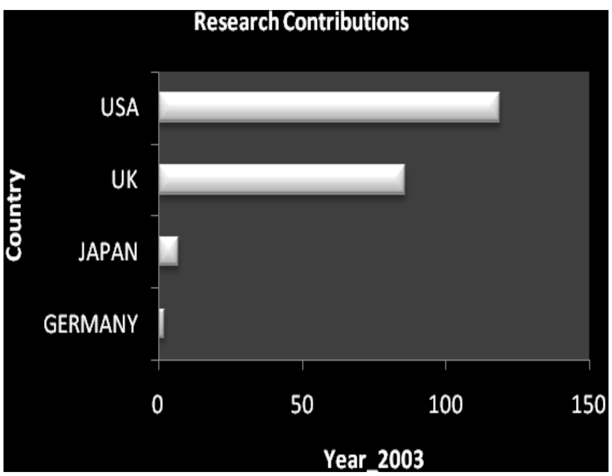
AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

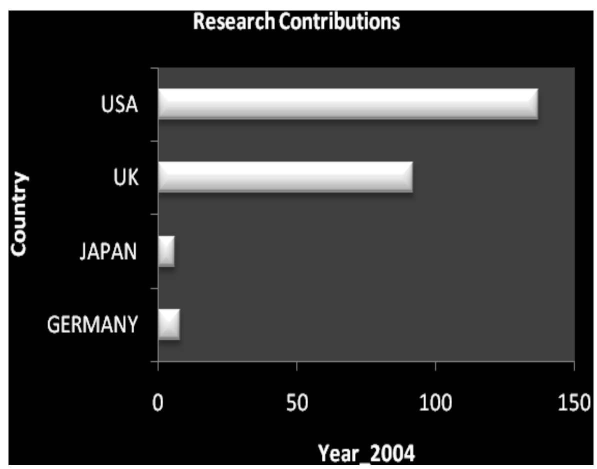
identified distribution for a category, then, is nothing but the proportion of all subjects from the reference group falling in the lower ranking categories, plus half the proportion falling in the given category. Given the distribution of any other group over the same categories, the mean relative to an identified distribution for that group may be calculated. The resulting mean value is interpretable as a probability. The mean relative to an identified distribution for a group is the probability that a randomly-selected case from it will get better score than a randomly-selected case from the standard group. In addition to that Shapiro-Wilk and Jarque-Bera JB tests were applied to trace the normal distribution.

DISCUSSIONS: Sample Definition & Dispersion (Chi-square Analysis Results/ Nos. = 894)

TABLE 1: OBSERVED FREQUENCIES

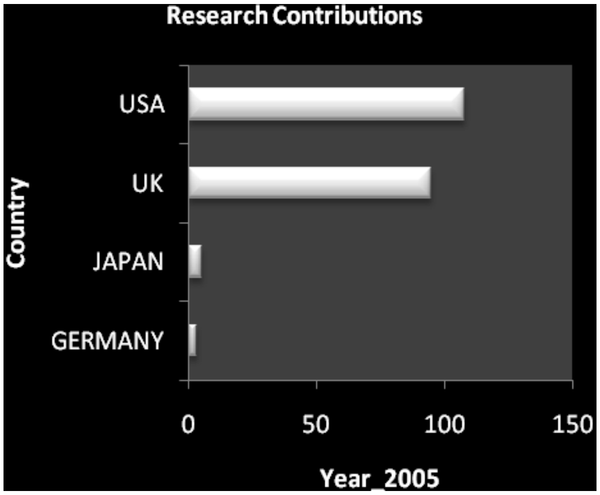
Country	2003	2004	2005	2006	Total
USA	119	137	108	128	492
UK	86	92	95	89	362
GERMANY	2	8	3	3	16
JAPAN	7	6	5	6	24
Total	214	243	211	226	894

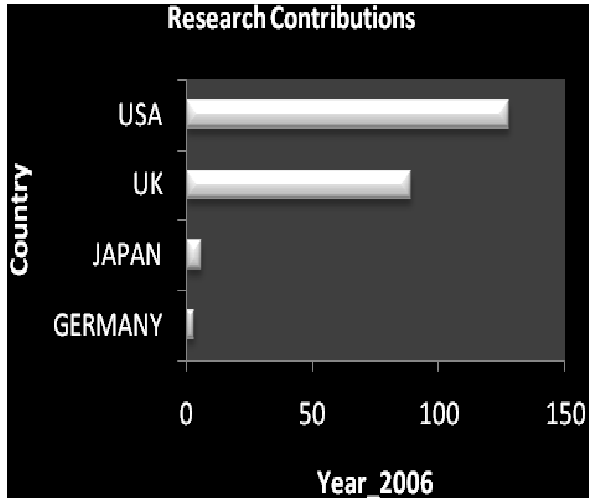




SCREEN SHOT 1: RESEARCH OUTPUT IN 2003 **SCREEN SHOT 2: RESEARCH OUTPUT IN 2004**

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853





SCREEN SHOT 3: RESEARCH OUTPUT IN 2005 SCREEN SHOT 4: RESEARCH OUTPUT IN 2006

TABLE 1.1: EXPECTED FREQUENCIES

Country	2003	2004	2005	2006
USA	117.772	133.732	116.121	124.376
UK	86.653	98.396	85.438	91.512
GERMANY	3.830	4.349	3.776	4.045
JAPAN	5.745	6.523	5.664	6.067

TABLE 1.2: ROW PROPORTIONS

Country	2003	2004	2005	2006	Total
USA	0.242	0.278	0.220	0.260	1.000
UK	0.238	0.254	0.262	0.246	1.000
GERMANY	0.125	0.500	0.188	0.188	1.000
JAPAN	0.292	0.250	0.208	0.250	1.000
Total	0.239	0.272	0.236	0.253	1.000

TABLE 1.3: COLUMN PROPORTIONS

Country	2003	2004	2005	2006	Total
USA	0.556	0.564	0.512	0.566	0.550
UK	0.402	0.379	0.450	0.394	0.405
GERMANY	0.009	0.033	0.014	0.013	0.018
JAPAN	0.033	0.025	0.024	0.027	0.027
Total	1.000	1.000	1.000	1.000	1.000

TABLE 1.4: CHI-SQUARED VALUE FOR CELLS

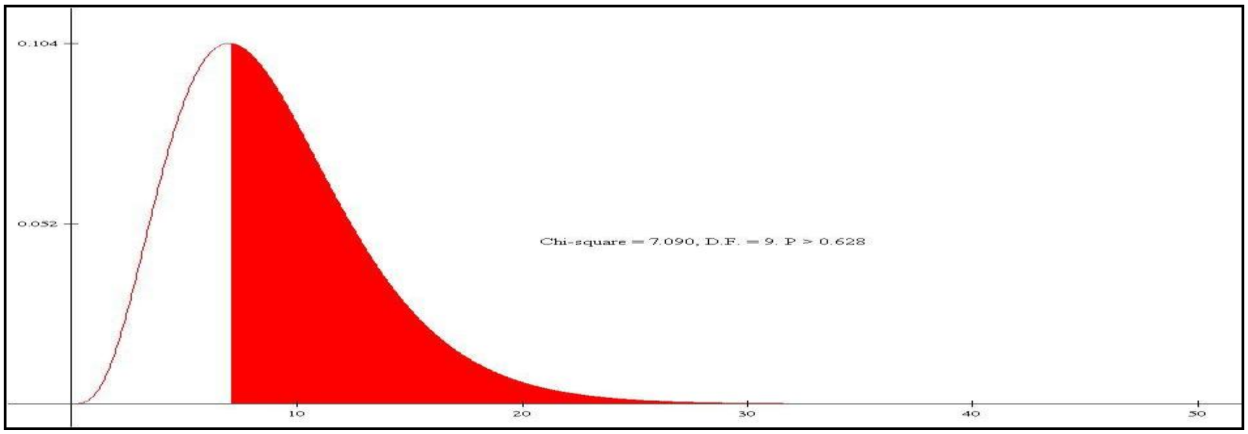
Country	2003	2004	2005	2006
USA	0.013	0.080	0.568	0.106
UK	0.005	0.416	1.070	0.069
GERMANY	0.874	3.065	0.160	0.270
JAPAN	0.274	0.042	0.078	0.001

TABLE 1.5: STATISTIC TEST RESULTS

Test	Statistic	D.F.	P
Chi-square	7.090	9	P> 0.628
Likelihood Ratio	6.671		P> 0.6713
Phi correlation	0.0891		

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

Pearson Correlation r	-0.0046		
Mantel-Haenstzel Test of Linear Association	0.019		P> 0.8910
Coefficient of contingency	0.089		
Cramer's V	0.051		



SCREEN SHOT 5: CHI DISTRIBUTION FOR ALL CLASSES

Of the selected countries USA has maximum research output (492) followed by UK with 362 records and the remaining countries (Germany & Japan) have secured less than 25 records. The dispersions of records according to the countries across the years are given in Table 1 whereas their basic statistic measures are given in the annexure-i. Frequency distributions could be clearly observed from the screen shots 1-4. Data classification depicts that the country USA has the highest count 137 during the year 2004. This indicates 0.278 proportion for the research contributions from USA (Table 1.2) and the proportion for the research contributions in the year 2004 is identified as 0.564 (Table 1.3). Maximum records for the country UK is traced as 95 for the year 2005. This represents 0.262 proportion for the research contributions from UK (Table 1.2) and 0.450 proportion for the research contributions during the year 2005 (Table 1.3). The country Germany has 8 contributions in its credit during the year 2004. This shows 0.500 Proportion for the research contributions from Germany (Table 1.2) while the proportion for the research contributions during the year 2004 is found with 0.033 (Table 1.3). Single authors from the country Japan have contributed 7 papers in the year 2003. This represents 0.292 proportion for the research contributions from Japan (Table 1.2) and 0.033 proportion for the research contributions during the year 2003 (Table 1.3). The Likelihood ratio is traced as 6.671 with p>0.6713. The Mantel-Haenstzel test has the statistic value 0.019 with p>0.8910, indicating that the observed difference between countries and years is not statistically significant. The above results reflect that there would not be a possible significance statistically identified between the countries*years and based on these enough evidences, I can claim support to the structured Hypothesis 2 against the alternative. Screen Shot 5 clearly explores the status of hypothesis 2 for better understanding. However, the Pearson Correlation value indicates the low negative linear relationship between the groups.

ANALYSIS FOR STANDARD 2003

Detailed Analysis for Standard 2003 would be observed from the given calculations.

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

TABLE 2: FREQUENCIES OBSERVED

Country	2003	2004	2005	2006
USA	119	137	108	128
UK	86	92	95	89
GERMANY	2	8	3	3
JAPAN	7	6	5	6

TABLE 2.1: COLUMN PROPORTIONS OBSERVED

Country	2003	2004	2005	2006
USA	0.556	0.564	0.512	0.566
UK	0.402	0.379	0.45	0.394
GERMANY	0.009	0.033	0.014	0.013
JAPAN	0.033	0.025	0.024	0.027

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

TABLE 2.2: CALCULATIONS FOR 2003

Country	2003	2004	2005	2006
USA	0.556	0.278	0.000	0.278
UK	0.402	0.201	0.556	0.757
GERMANY	0.009	0.005	0.958	0.963
JAPAN	0.033	0.016	0.967	0.984

TABLE 2.3: CALCULATIONS FOR 2004

Country	2003	2004	2005	2006
USA	0.564	0.282	0.000	0.282
UK	0.379	0.189	0.564	0.753
GERMANY	0.033	0.016	0.942	0.959
JAPAN	0.025	0.012	0.975	0.988

TABLE 2.4: CALCULATIONS FOR 2005

Country	2003	2004	2005	2006
USA	0.512	0.256	0.000	0.256
UK	0.45	0.225	0.512	0.737
GERMANY	0.014	0.007	0.962	0.969
JAPAN	0.024	0.012	0.976	0.988

TABLE 2.5: CALCULATIONS FOR 2006

Country	2003	2004	2005	2006
USA	0.566	0.283	0.000	0.283
UK	0.394	0.197	0.566	0.763
GERMANY	0.013	0.007	0.96	0.967
JAPAN	0.027	0.013	0.973	0.987

TABLE 2.6: CALCULATIONS FOR ALL VARIABLES-RELATIVE TO AN IDENTIFIED DISTRIBUTION

Country	2003	2004	2005	2006
USA	0.278	0.282	0.256	0.283
UK	0.757	0.753	0.737	0.763
GERMANY	0.963	0.959	0.969	0.967
JAPAN	0.984	0.988	0.988	0.987

TABLE 2.7: MEAN USING THE REFERENCE VALUES

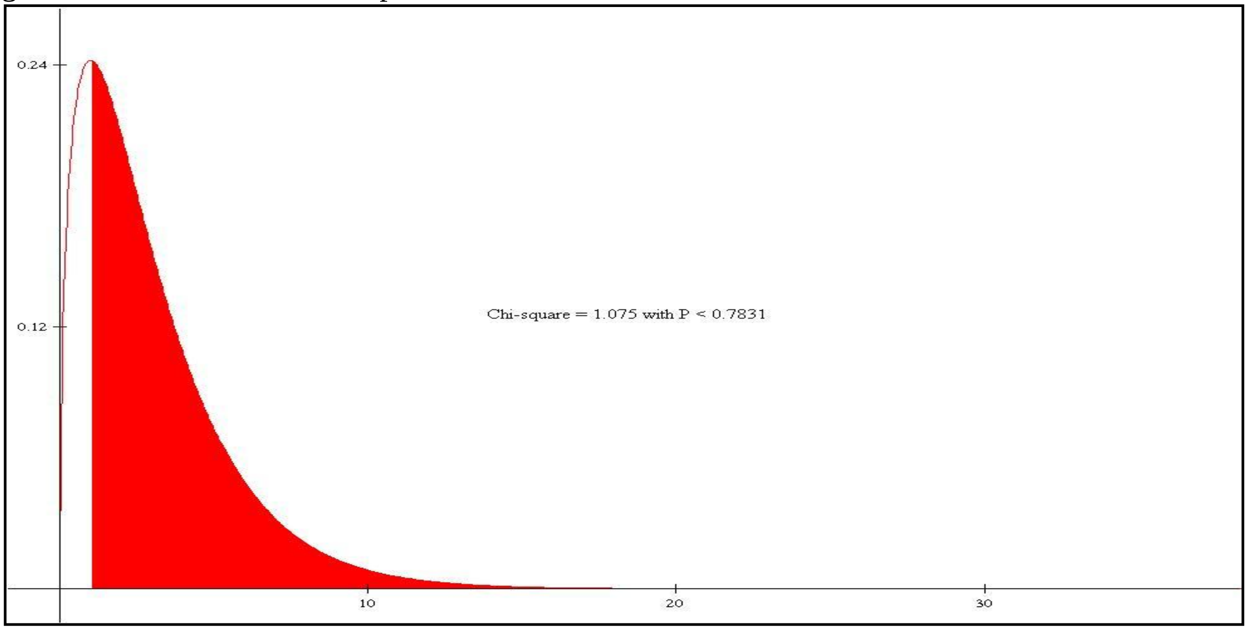
Variables	2003	2004	2005	2006
	0.5	0.499	0.52	0.494

TABLE 2.8: Z CRITICAL RATIOS

Variables	2003	2004	2005	2006
	0.000	-0.025	0.719	-0.201

Overall mean for "Relative to an identified distribution" in non-reference groups = 0.5042

Chi squared = 1.075 with probability < 0.7831
Significance level used for comparisons = 2.394



SCREEN SHOT 6: CHI DISTRIBUTION FOR STANDARD 2003

STATISTICS TEST RESULTS

The comparison between 2004 vs 2003 is identified as not significant.

The comparison between 2005 vs 2003 is identified as not significant.

The comparison between 2006 vs 2003 is identified as not significant.

Analysis for the reference period 2003 shows the frequency dispersions and proportions towards the Tables 2 & 2.1. Tables 2.2-2.5 explore the calculation details for the observed years. Calculations for all the variables may be traced via table 2.6. The z critical scores for the years 2004-2006 are traced as -0.025, 0.719 and -0.201. Year 2005 is found with the highest mean 0.520 (Table 2.7) followed by 2004 and 2006 in that order. The above results reflect that there would not be a possible significance statistically identified between the years wise output and based on these evidences, I can claim support to the structured Hypothesis 3 against the alternative. The visualization is given via the Screen Shot 6 in order to capture the status of hypothesis 3. It is inferred that single authors' research contributions in AI do not differ in the pairs comparisons.

ANALYSIS FOR STANDARD 2004

Detailed Analysis for Standard 2004 would be observed from the given calculations.

TABLE 3: FREQUENCIES OBSERVED **TABLE 3.1: COLUMN PROPORTIONS OBSERVED**

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

Country	2003	2004	2005	2006
USA	119	137	108	128
UK	86	92	95	89
GERMANY	2	8	3	3
JAPAN	7	6	5	6

TABLE 3.2: CALCULATIONS FOR 2003

TABLE 3.3: CALCULATIONS FOR 2004

Country	2003	2004	2005	2006
USA	0.556	0.278	0.000	0.278
UK	0.402	0.201	0.556	0.757
GERMANY	0.009	0.005	0.958	0.963
JAPAN	0.033	0.016	0.967	0.984

Country	2003	2004	2005	2006
USA	0.556	0.564	0.512	0.566
UK	0.402	0.379	0.45	0.394
GERMANY	0.009	0.033	0.014	0.013
JAPAN	0.033	0.025	0.024	0.027

Country	2003	2004	2005	2006
USA	0.564	0.282	0.000	0.282
UK	0.379	0.189	0.564	0.753
GERMANY	0.033	0.016	0.942	0.959
JAPAN	0.025	0.012	0.975	0.988

TABLE 3.4: CALCULATIONS FOR 2005

TABLE 3.5: CALCULATIONS

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

Country	2003	2004	2005	2006
USA	0.512	0.256	0.000	0.256
UK	0.45	0.225	0.512	0.737
GERMANY	0.014	0.007	0.962	0.969
JAPAN	0.024	0.012	0.976	0.988

FOR 2006

Country	2003	2004	2005	2006
USA	0.566	0.283	0.000	0.283
UK	0.394	0.197	0.566	0.763
GERMANY	0.013	0.007	0.96	0.967
JAPAN	0.027	0.013	0.973	0.987

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

TABLE 3.6: CALCULATIONS FOR ALL VARIABLES- RELATIVE TO AN IDENTIFIED DISTRIBUTION

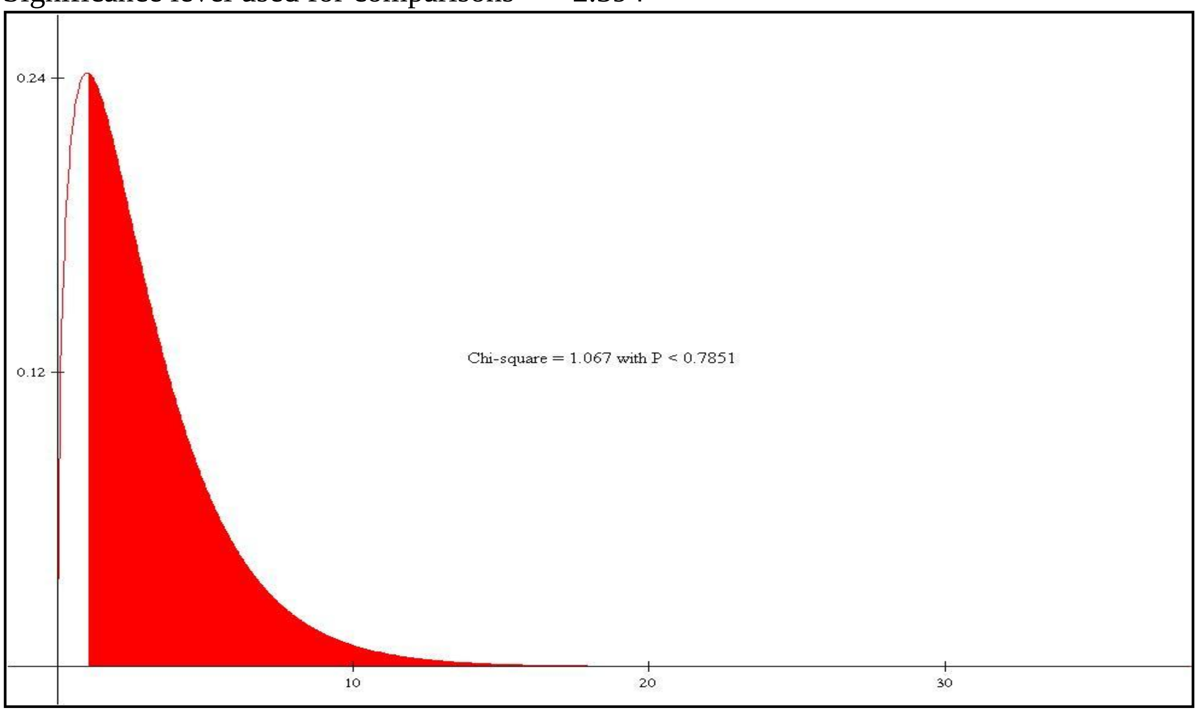
Country	2003	2004	2005	2006
USA	0.278	0.282	0.256	0.283
UK	0.757	0.753	0.737	0.763
GERMANY	0.963	0.959	0.969	0.967
JAPAN	0.984	0.988	0.988	0.987

TABLE 3.7: MEAN USING THE REFERENCE VALUES TABLE 3.8: Z CRITICAL RATIOS

Variables	2003	2004	2005	2006
	0.501	0.500	0.520	0.495

Variables	2003	2004	2005	2006
	0.025	0	0.751	-0.181

Overall mean for "Relative to an identified distribution" in non-reference groups = 0.5052
Chi squared = 1.067 with probability < 0.7851
Significance level used for comparisons = 2.394



Screen Shot 7: Chi Distribution for standard 2004

STATISTICS TEST RESULTS

The comparison between 2003 vs 2004 is identified as not significant.

The comparison between 2005 vs 2004 is identified as not significant.

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

The comparison between 2006 vs 2004 is identified as not significant.

Analysis for the reference period 2004 shows the frequency dispersions and proportions towards the Tables 3 & 3.1. Tables 3.2-3.5 explore the calculation details for the observed years. Calculations for all the variables may be traced via table 3.6. The z critical scores for the years 2003, 2005 & 2006 are traced as 0.025, 0.751 and -0.181. Year 2005 is found with the highest mean 0.520 (Table 3.7) followed by 2003 and 2006 in that order. The above results reflect that there would not be a possible significance statistically identified between the years wise output and based on these evidences, I can claim support to the structured Hypothesis 4 against the alternative. The visualization is given via the Screen Shot 7 in order to capture the status of hypothesis 4. It is inferred that single authors' research contributions in AI do not differ in the pairs comparisons.

ANALYSIS FOR STANDARD 2005

Detailed Analysis for Standard 2005 would be observed from the given calculations.

TABLE 4: FREQUENCIES OBSERVED

Country	2003	2004	2005	2006
USA	119	137	108	128
UK	86	92	95	89
GERMANY	2	8	3	3
JAPAN	7	6	5	6

TABLE 4.1: COLUMN PROPORTIONS OBSERVED

Country	2003	2004	2005	2006
USA	0.556	0.564	0.512	0.566
UK	0.402	0.379	0.450	0.394
GERMANY	0.009	0.033	0.014	0.013
JAPAN	0.033	0.025	0.024	0.027

TABLE 4.2: CALCULATIONS FOR 2003

Country	2003	2004	2005	2006
USA	0.556	0.278	0.000	0.278
UK	0.402	0.201	0.556	0.757
GERMANY	0.009	0.005	0.958	0.963
JAPAN	0.033	0.016	0.967	0.984

TABLE 4.3: CALCULATIONS FOR 2004

Country	2003	2004	2005	2006
USA	0.564	0.282	0.000	0.282
UK	0.379	0.189	0.564	0.753
GERMANY	0.033	0.016	0.942	0.959
JAPAN	0.025	0.012	0.975	0.988

TABLE 4.4: CALCULATIONS FOR 2005

TABLE 4.5: CALCULATIONS FOR 2006

Country	2003	2004	2005	2006
USA	0.512	0.256	0.000	0.256
UK	0.450	0.225	0.512	0.737
GERMANY	0.014	0.007	0.962	0.969
JAPAN	0.024	0.012	0.976	0.988

Country	2003	2004	2005	2006
USA	0.566	0.283	0.000	0.283
UK	0.394	0.197	0.566	0.763
GERMANY	0.013	0.007	0.960	0.967
JAPAN	0.027	0.013	0.973	0.987

TABLE 4.6: CALCULATIONS FOR ALL VARIABLES- RELATIVE TO AN IDENTIFIED DISTRIBUTION

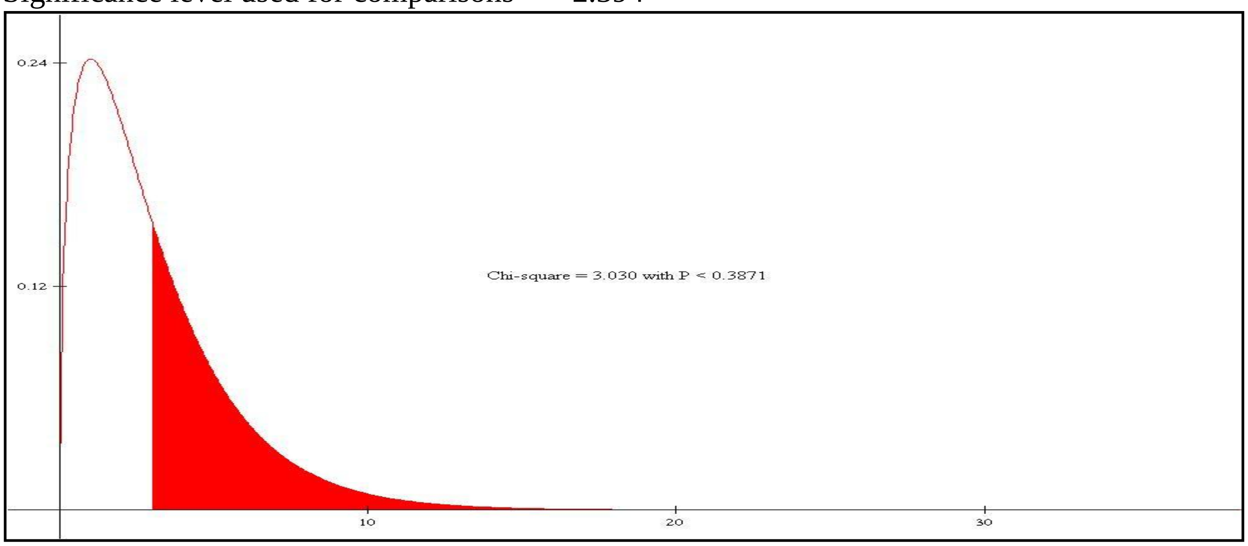
Country	2003	2004	2005	2006
USA	0.278	0.282	0.256	0.283
UK	0.757	0.753	0.737	0.763
GERMANY	0.963	0.959	0.969	0.967
JAPAN	0.984	0.988	0.988	0.987

TABLE 4.7: MEAN USING THE REFERENCE VALUES TABLE 4.8: Z CRITICAL RATIOS

Variables	2003	2004	2005	2006
	0.480	0.480	0.500	0.474

Variables	2003	2004	2005	2006
	-0.719	-0.751	0.000	-0.931

Overall mean for “Relative to an identified distribution” in non-reference groups = 0.4779
Chi squared = 3.030 with probability < 0.3871
Significance level used for comparisons = 2.394



SCREEN SHOT 8: CHI DISTRIBUTION FOR STANDARD 2005

STATISTICS TEST RESULTS

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

The comparison between 2003 vs 2005 is identified as not significant.

The comparison between 2004 vs 2005 is identified as not significant.

The comparison between 2006 vs 2005 is identified as not significant.

Analysis for the reference period 2005 shows the frequency dispersions and proportions towards the Tables 4 & 4.1. Tables 4.2-4.5 explore the calculation details for the observed years. Calculations for all the variables may be traced via table 4.6. The calculated z critical scores for the years 2003, 2004 & 2006 are respectively -0.719, -0.751 and -0.931. The years 2003 and 2004 are found with the equal mean 0.480 (Table 4.7) and the year 2006 has received the last position. The above results reflect that there would not be a possible significance statistically identified between the years wise output and based on these evidences, I can claim support to the structured Hypothesis 5 against the alternative. The visualization is given via the Screen Shot 8 in order to capture the status of hypothesis 5. It is inferred that single authors' research contributions in AI do not differ in the pairs comparisons.

ANALYSIS FOR STANDARD 2006

Detailed Analysis for Standard 2006 would be observed from the given calculations.

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

TABLE 5: FREQUENCIES OBSERVED OBSERVED

Country	2003	2004	2005	2006
USA	119	137	108	128
UK	86	92	95	89
GERMANY	2	8	3	3
JAPAN	7	6	5	6

TABLE 5.1: COLUMN PROPORTIONS

Country	2003	2004	2005	2006
USA	0.556	0.564	0.512	0.566
UK	0.402	0.379	0.450	0.394
GERMANY	0.009	0.033	0.014	0.013
JAPAN	0.033	0.025	0.024	0.027

TABLE 5.2: CALCULATIONS FOR 2003

Country	2003	2004	2005	2006
USA	0.556	0.278	0.000	0.278
UK	0.402	0.201	0.556	0.757
GERMANY	0.009	0.005	0.958	0.963
JAPAN	0.033	0.016	0.967	0.984

TABLE 5.3: CALCULATIONS FOR 2004

Country	2003	2004	2005	2006
USA	0.564	0.282	0.000	0.282
UK	0.379	0.189	0.564	0.753
GERMANY	0.033	0.016	0.942	0.959
JAPAN	0.025	0.012	0.975	0.988

TABLE 5.4: CALCULATIONS FOR 2005

Country	2003	2004	2005	2006
USA	0.512	0.256	0.000	0.256
UK	0.450	0.225	0.512	0.737
GERMANY	0.014	0.007	0.962	0.969
JAPAN	0.024	0.012	0.976	0.988

TABLE 5.5: CALCULATIONS FOR 2006

Country	2003	2004	2005	2006
USA	0.566	0.283	0.000	0.283
UK	0.394	0.197	0.566	0.763
GERMANY	0.013	0.007	0.96	0.967
JAPAN	0.027	0.013	0.973	0.987

TABLE 5.6: CALCULATIONS FOR ALL VARIABLES- RELATIVE TO AN IDENTIFIED DISTRIBUTION

Country	2003	2004	2005	2006
USA	0.278	0.282	0.256	0.283
UK	0.757	0.753	0.737	0.763
GERMANY	0.963	0.959	0.969	0.967
JAPAN	0.984	0.988	0.988	0.987

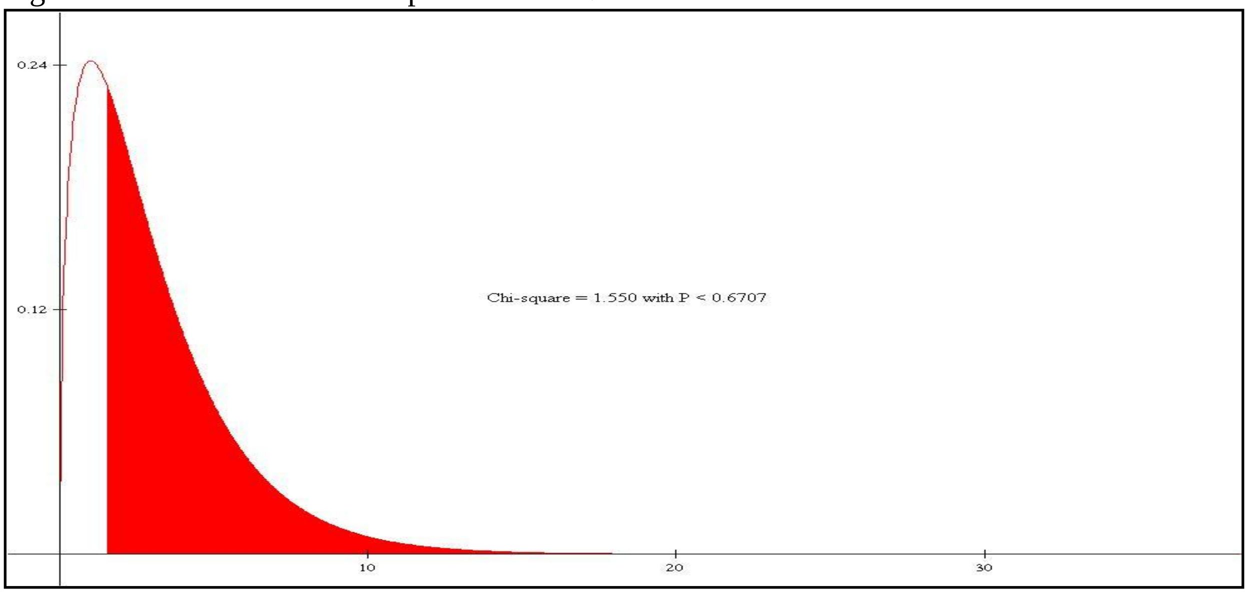
TABLE 5.7: MEAN USING THE REFERENCE VALUES

TABLE 5.8: Z CRITICAL RATIOS

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

Variables	2003	2004	2005	2006	Variables	2003	2004	2005	2006
	0.506	0.505	0.526	0.5		0.201	0.181	0.931	0.000

Overall mean for "Relative to an identified distribution" in non-reference groups = 0.5117
Chi squared = 1.550 with probability < 0.6707
Significance level used for comparisons = 2.394



SCREEN SHOT 8: CHI DISTRIBUTION FOR STANDARD 2006

STATISTICS TEST RESULTS

The comparison between 2003 vs 2006 is identified as not significant.

The comparison between 2004 vs 2006 is identified as not significant.

The comparison between 2005 vs 2006 is identified as not significant.

Analysis for the reference period 2006 shows the frequency dispersions and proportions towards the Tables 5 & 5.1. Tables 5.2-5.5 explore the calculation details for the observed years. Calculations for all the variables may be traced via table 5.6. The calculated z critical scores for the years 2003-2005 are respectively 0.201, 0.181 and 0.931. Year 2005 is found with the highest mean 0.526 (Table 5.7) followed by 2003 and 2004 in that order. The above results reflect that there would not be a possible significance statistically identified between the above comparisons and based on these evidences, I would claim support to the structured Hypothesis 6 against the alternative. The visualization is given via the Screen Shot 8 in order to capture the status of hypothesis 6. It is inferred that single authors' research contributions in AI do not differ in the pairs comparisons.

TABLE 6: TEST RESULTS FOR NORMAL PROBABILITY

Test	**USA**	**UK**	**GERMANY**	**JAPAN**
Shapiro-Wilk W	0.9938	0.9929	0.7729	0.9447
P	0.9761	0.9719	0.06185	0.683

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

Jarque-Bera JB	0.2969	0.3083	0.8204	0.1667
P	0.862	0.8572	0.6635	0.92
p(Monte Carlo)	0.8401	0.8269	0.0691	1

TABLE 7: HYPOTHESIS (H_1) TEST RESULTS

Country	Status
USA	Accepted
UK	Accepted
GERMANY	Not Accepted
JAPAN	Accepted

TABLE 8: HYPOTHESES (H_2- H_6) TEST RESULTS

Hypotheses	Statistic Value	Status
H_2	7.090	Not Accepted
H_3	1.075	Not Accepted
H_4	1.067	Not Accepted
H_5	3.030	Not Accepted
H_6	1.550	Not Accepted

DETERMINATIONS

The central tendencies, dispersions for the countries and the years may be observed from the annexure-i. The normal distribution test results indicate that the single author's research contributions in Artificial Intelligence have followed a normal distribution for the countries USA, UK and Japan that led me to support the first hypothesis against the alternative. In contrary the country Germany didn't show the normal distribution, which would be the reason for not accepting the first hypothesis for this country in favour of the alternative. The 3D visualization that are (Screen Shots 9-12) given in the annexure-ii would help for greater understanding about the status of structured first hypothesis. It is inferred that single author contribution during the period 2003-2006 has been found as not significant as the secured chi-square value is 7.090 with d.f. 9 (p. > value = 0.628), which is the reason for claiming support to the second hypothesis. Table 1.4 explores the chi-squared value for cells that represents the relationship between the countries research contribution for the study period. It is inferred that the countries USA and UK are associated with the year 2005 as their cell values have been traced as 0.568, 1.070. The country Germany is associated with the year 2004, where it shows the cell value 3.065. The relationship of the country Japan is identified with the year 2003 as the cell value is 0.274. In the analysis for standard 2003 the overall mean in non-reference groups is identified as 0.5042. The Chi-Square value is identified as 1.075 ($p < 0.7831$) and z critical ratios show the negative scores for the years 2004 and 2006 as they have secured less mean compared to the non-reference groups. Comparisons test clearly indicates that there would be no possibilities to reject the third hypothesis in favour of the alternative. In the analysis for standard 2004 the overall mean in non-reference groups is identified as 0.5052. The Chi-Square value is identified as 1.067 ($p < 0.7851$) and z critical ratios shows the negative score for the year 2006 as it has secured less mean compared to the non-reference groups. Comparisons Test clearly indicates that there would be no possibilities to reject the fourth hypothesis. In the analysis for standard 2005 the overall mean in non-reference groups is identified as 0.4779. The Chi-Square value is identified as 3.030 ($p < 0.3871$) and z critical ratios shows the negative scores for the years 2003, 2004 and 2006 as they have secured less mean compared to the non-reference groups. Comparisons Test clearly indicates that there would be no possibilities to reject the fifth hypothesis. In the analysis for standard 2006 the overall mean in non-reference groups is identified as 0.5117. The Chi-Square value is identified as 1.550 ($p < 0.6707$) and other comparisons clearly indicate that there would not be a possible reasons to reject the sixth hypothesis in favour of alternative. Hence, single author's contributions in artificial intelligence for the identified countries during the period 2003-2006 are not statistically differed. However, this estimate would vary over repeated samples of data. LIS researchers may step forward to conduct further research in order to measure the knowledge productivity in any other fields with various attributes.

REFERENCES

1. Fleiss, F; N.W. Chilton; S. Wallenstein. (1979). Analysis in Dental Studies. Journal of Dental Research. 58, 2080-2084.
2. Garfield, E.(1980). Essays of an Information Scientist. 4, 586-591
3. Hawkins, D. (1978). The Literature of noble gas compounds. Journal of Chem. Inform. Comp. Sci. 18,190-9.
4. Jeppe Nicolaisen.(2002). The J shaped distribution of citedness. Journal of Documentation. 58(4), 383-95.
5. Miller, W. G.(2009). Non-Parametric Statistics. Openstat Reference Manual.
6. Potter, W.G.(1981). Introduction to Bibliometrics. Library Trends. 30,5-7.
7. Price, D.; Gursey, S. (1976). Studies in Scientometrics 1. Transience and continuance in scientific authorship. International Forum on Information and Documentation. 1(2). 17-24.
8. Schubert,A. et al.(1984). Quantitative analysis of a visible tip of the peer review iceberg: book reviews in chemistry. Scientometrics. 6(6), 433-43.
9. Virgo,J.A.(1977).A Statistical Procedure for evaluating the importance of science papers. The Library Quarterly. 47(4), 415-30.

ANNEXURE-I

TABLE-I: YEAR WISE STATISTIC TEST RESULTS

Measures	2003	2004	2005	2006
Mean	53.5	60.75	52.75	56.5
Standard Error	29.09896905	32	28	31
Median	46.5	50	50	48
StdDev.	58.19793811	65	57	62
Variance	3387	4190	3198	3860
Kurtosis	-4.425065916	-4	-6	-4
Skewness	0.264493445	0	0	0
Range	117	131	105	125

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

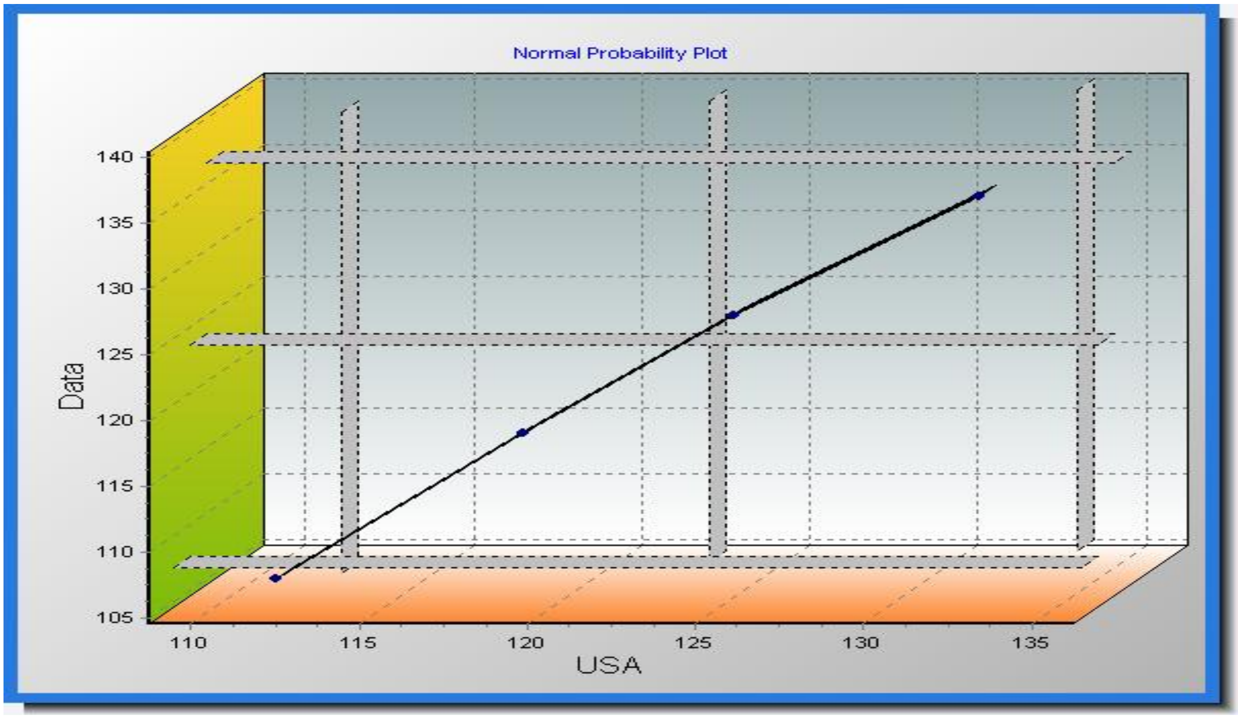
Minimum	2	6	3	3
Maximum	119	137	108	128
Sum	214	243	211	226
Count	4	4	4	4
95% CI for the Mean from	-39.105	-42.253	-37.229	-42.365
to	146.105	163.753	142.729	155.365

TABLE-II: COUNTRY WISE STATISTIC TEST RESULTS

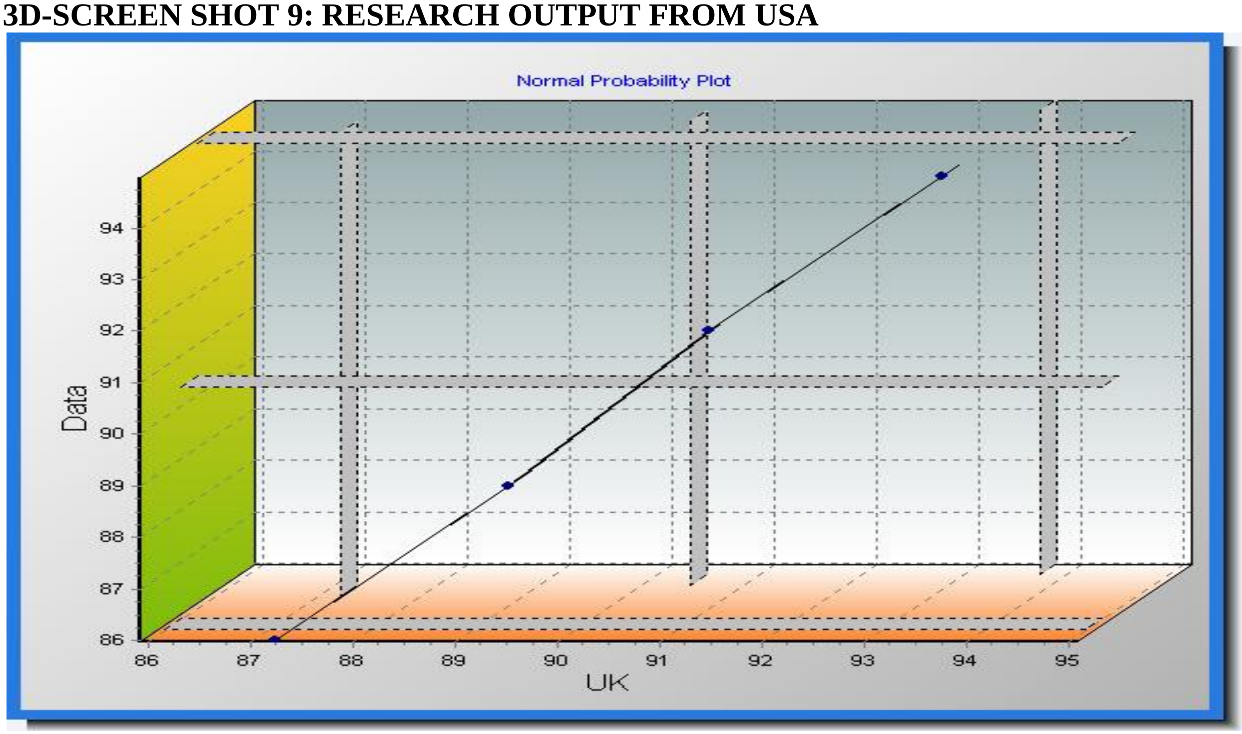
Measures	**USA**	**UK**	**GERMANY**	**JAPAN**
Mean	123	90.5	4	6
Standard Error	6.204836823	1.936491673	1.3540064	0.40824829
Median	123.5	90.5	3	6
StdDev.	12.40967365	3.872983346	2.7080128	0.816496581
Variance	154	15	7.333	0.6667
Kurtosis	-0.861275089	-1.2	3.48347107	1.5
Skewness	-0.198839433	1.36E-20	1.81280196	0
Range	29	9	6	2
Minimum	108	86	2	5
Maximum	137	95	8	7
Sum	492	362	16	24
Count	4	4	4	4
95% CI for the Mean from	103.25344	84.33721923	-0.3090527	4.700771736
to	142.74656	96.66278077	8.30905267	7.299228264

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

ANNEXURE-II

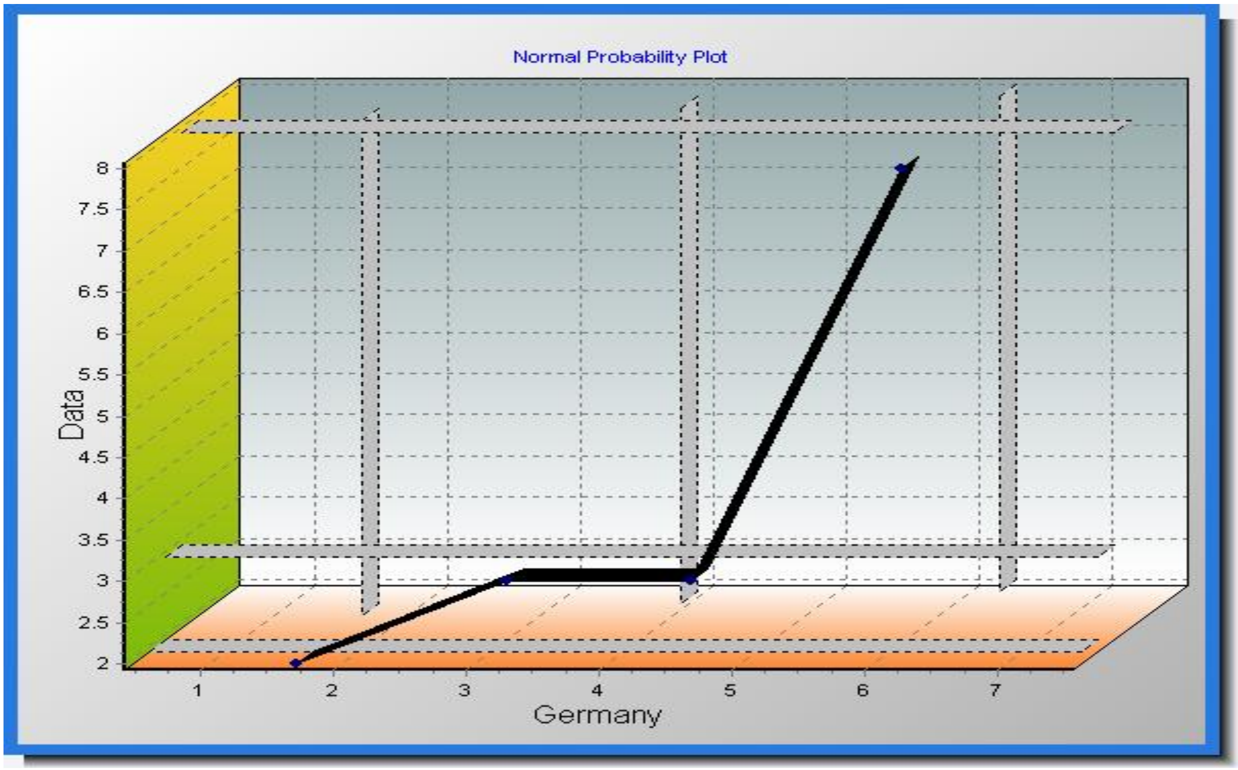


3D-SCREEN SHOT 9: RESEARCH OUTPUT FROM USA

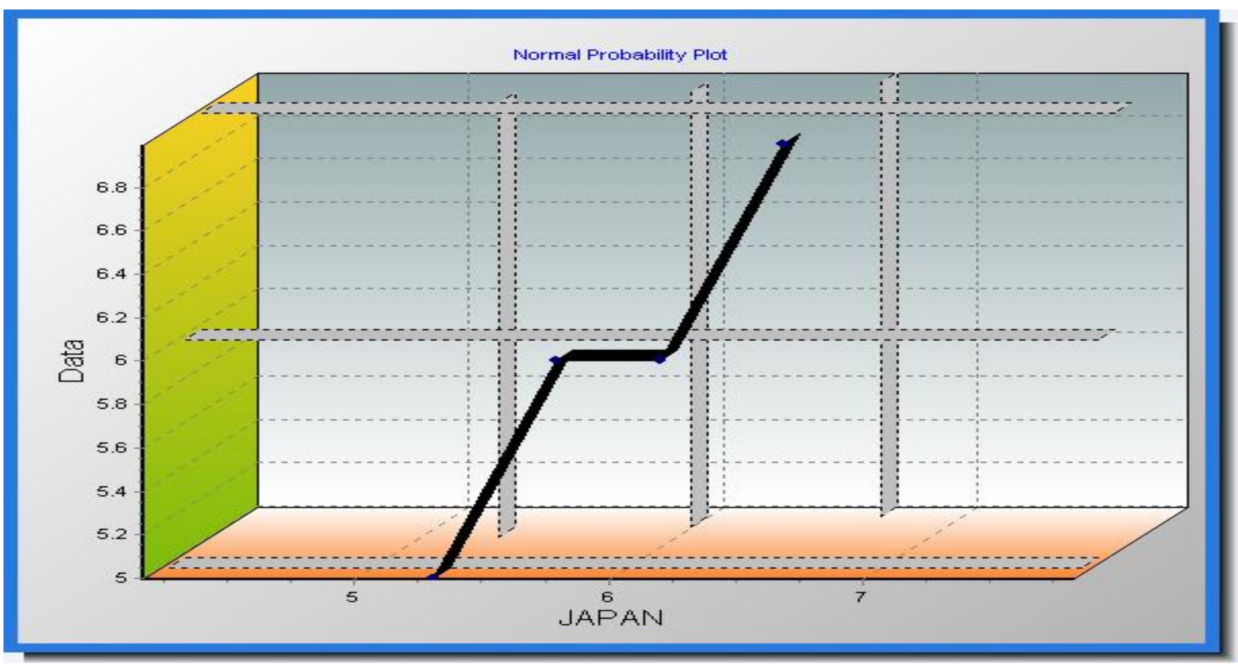


3D-SCREEN SHOT 10: RESEARCH OUTPUT FROM UK

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853



3D-SCREEN SHOT 11: RESEARCH OUTPUT FROM GERMANY



3D-SCREEN SHOT 12: RESEARCH OUTPUT FROM JAPAN

A Publication of TRANS Asian Research Journals

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

ROBERT LOUIS STEVENSON'S "TREASURE ISLAND" AS AN ADVENTURE NOVEL

Dr. Parul Popat*; Dr. Kaushal Kotadia**

*Assistant Professor,
Department of Communication Skills and English,
Government Engineering College,
Gandhinagar, Gujarat, India.
**Assistant Professor,
Department of English,
Nalini Arvind and TV Patel Arts College,
Vallabh Vidyanagar, Gujarat, India.

ABSTRACT

Published first in 1881, Stevenson's novel Treasure Island goes beyond its time and genre. The narrative of the story with its various situations directly talks to the reader about the moral values that need to be nurtured in a growing child. Treasure Island is not a book with a message. It is an adventure tale. Yet like some other adventure tales, Stevenson's classic novel is the story of a quest. The story records a series of incidents that brings about personality changes in the life of Jim Hawkins. Treasure Island is a gripping adventure story. It records the physical voyage and emotional development of the protagonist, Jim Hawkins. He grows from an irresponsible, immature lad to a mature, sociable youth. The voyage transforms Jim. The theme of adventure/quest is seen throughout the story. From the beginning itself, the novel introduces the theme of adventure. Treasure Island has a variety of ingredients common to quest stories.

KEYWORDS: *adventure story, courage, foreshadowing, poetic justice, responsibility.*

INTRODUCTION

Robert Louis Stevenson (13 November 1850 – 3 December 1894) was a Scottish novelist, poet, essayist and travel writer. Through his works, he has contributed several classics to the world of children's literature. His best-known books include Treasure Island, Kidnapped, and Strange Case of Dr Jekyll and Mr Hyde. He was the son of an engineer. He studied engineering and then law at the University of Edinburgh. Since childhood, Stevenson liked literature. Eventually, he took up writing seriously and soon became one of the first ranks of contemporary writers by the excellence of his style. Treasure Island (1883) is his first major success. It tells the tale of piracy, buried treasure and adventure.

Stevenson's novel Treasure Island goes beyond its time and genre. Treasure Island was once described as a "boys' book". It was originally titled as, "The Sea Cook: A Story for Boys". Stevenson himself said in designing the idea of the story that, "It was to be a story for boys; no need of psychology or fine writing". However, it appeals not to boys alone but to anyone who likes exciting, believable, non-stop action and colorful characters in a foreign setting. The narrative of the story with its various situations directly talks to the reader about the moral values that need to be nurtured in a growing child.

Treasure Island is an exciting adventure story, filled with morals that need to be nurtured in a growing child. The author narrates these through the protagonist, Jim Hawkins, who is an immature, naturally curious and adventurous young boy. The book opens in a seaside inn named Admiral Benbow Inn, where the protagonist, Jim Hawkins is writing down his experience about his voyage to Treasure Island.

Part I consists of the first six chapters. It narrates the story from the first danger with the arrival of the captain. There is a series of strange occurrences at the inn. They include his mysterious behavior, arrival of the Black Dog, fight between the captain and the Black Dog, the captain’s illness, his father’s death, visit of Old Pew, sudden death of the captain, attack by the pirates, Jim’s bravery and his presence of mind to the moment when the main characters decide to sail to Treasure Island in search of treasure. Part I also shows how Jim Hawkins is forced to grow up rapidly and begin to chart his own course in life. The transformation in the character of Jim begins with the first part only.

The first chapter wastes no time in introducing the element of suspense and danger that characterizes the novel as a whole. Jim's life at the Admiral Benbow inn is uneventful until the captain arrives. However, from then on, there are hints that more dangerous things are about to happen. On the very first page, for example, it is learnt that the captain has a scar on his cheek caused by a saber cut. This suggests the violent life he has led. The element of danger is also conveyed by the frightening stories the captain tells. Interest and suspense increase when it becomes clear that the captain wishes to avoid any seamen that pass by the inn. His particular interest in the seaman with one leg also creates suspense. This is, of course, a foreshadowing of the appearance of Long John Silver, and the thought of such a man gives Jim nightmares. More interest is created by Jim's mention of the big box that the captain keeps upstairs, that no one has seen open. It makes the reader wonder what is in it. Stevenson's technique, here, is a model of how to tell a good story and make the reader want to keep turning the pages.

In chapters II and III, the menacing appearance of Black Dog and the blind man, as well as the death of Jim's father, add to the feeling that life for Jim Hawkins will never be the same again. This leads to the beginning of transformation in the character of Jim. Jim is soon forced to make his own way in life. The death of his father leaves him without the guidance of an older man. Soon he meets many other men, representing a variety of beliefs, professions and ethical values.

But in Chapter III, it is clear that Jim is still a child. When the captain dies, the first thing he does is a call to his mother and burst into tears. When they go for help in Chapter IV, it is Jim's mother who does the talking. Nevertheless, later in that chapter, Jim takes charge when his mother faints.

In Chapter V, Jim shows his sense of responsibility when he tells Mr. Dance that he would like to convey to safety the packet he saved from the captain's chest. This action leads to Jim's meeting with the squire and his opportunity to go on the first great adventure of his life. From being a young boy living with his parents he has become a person with responsibilities of his own.

In short, the opening of the novel introduces the major characters. The opening even foreshadows the coming events in the novel. Various themes of the novel like coming of the age of the hero, theme of quest, conflict between good and evil is also introduced. Thus, from the beginning only the novelist succeeds in grabbing the attention of the readers.

Treasure Island is not a book with a message. It is an adventure tale. Yet like some other adventure tales, Stevenson's classic novel is the story of a quest.

Treasure Island has a variety of ingredients common to adventure stories. They are as follows;

1. The hero is young and innocent in the beginning.
2. The circumstances make him take a difficult journey.
3. This journey is to a strange and dangerous place.
4. The hero is in search of something valuable.
5. On his way, he encounters one or more guardians as well as people that may try to keep him from gaining his object.
6. He has to pass many tests in order to achieve his target.
7. However, he does all that successfully.
8. The hero is forced to test his courage, intelligence, strength.
9. He even comes across previous seekers who failed the tests.
10. The successful hero passes each test.
11. In the process getting the treasure, he gains wisdom or self-knowledge.

Jim is the narrator of Treasure Island. He is the mastermind in its most important plot twists. Jim is clearly the central character in the novel. He is probably around twelve or thirteen years old. He is the quiet and obedient son of the owner of an inn near Bristol, England. With the passage of time, Jim’s character changes dramatically. He shows increasing cleverness, courage, maturity, and perspective. In the first chapter, Jim is an easily frightened boy who is closely associated with his home and family. He runs to his mother for protection when the old seaman Pew scares him. After the death of his father, his life changes. Jim starts to think for himself and takes initiative. Jim makes mistakes but he learns from them. This shows that that he is maturing. He grows up quickly during the trip to the Treasure Island. He starts as the cabin boy but eventually names himself the new captain after he reclaims the ship from the pirates. Jim’s story is, therefore, not merely a fanciful adventure tale but also a narrative about growing up. The character of Jim is very inspiring one. He is not arrogant. His success makes him modest. He also takes full responsibility for his errors rather than finding excuses for them. He is honest and sincere.

Jim Hawkins' quest for Flint's treasure fits the pattern of an adventure novel admirably. This is probably the reason Treasure Island is so popular. Thus, Treasure Island is an adventure tale meant for children. It is also the story of one boy’s coming of age. At the outset of the novel, Jim is a timid child, but by the end, he has matured incredibly. He has outwitted pirates, taken over a ship and saved innumerable lives.

Treasure Island maintains a strongly moral tone throughout. It is not, therefore, surprising that good triumphs and the good and bad characters receive the rewards they deserve. All the pirates, with the exception of Silver, meet a bad end. They either are killed or marooned on the island. The survivors who return to Bristol get their rewards, and use them as per their characters. Ben Gunn quickly wastes all the money he is given. He is contrasted with the good man Gray, who showed loyalty to the right cause and puts his share of the treasure to good use.

If good and bad receive their appropriate rewards, it is problematic of what to do with Silver. He is undoubtedly a "bad" character. He is a pirate and a murderer, a cruel man who seeks only his own advantage and will do anything to get what he wants. Yet he seems genuinely to like Jim Hawkins and protects him from the other pirates. This shows him in a much better light and softens the reader's judgment of him. He is not quite a lovable rogue so he can be given the punishment of hanging. However, Silver is not shown getting much profit so he is allowed to go free before the ship reaches Bristol. He is allowed to go with some very small part of the treasure that he manages to steal.

It can be said that poetic justice is observed in the novel. Good is rewarded whereas bad is punished. This is mainly because this is an adventure’s novel. Stevenson wanted to pass a good message for children.

The plot of Treasure Island is simple and follows a linear pattern. The writer uses first person narrative technique to narrate the story. The narrator is Jim Hawkins. Through him, Stevenson describes the troubles of the sea voyage to Treasure Island.

The story records a series of incidents that brings about personality changes in the life of Jim Hawkins. The change starts after an old seaman named Billy Bones comes to stay at his father’s Inn, the Admiral Benbow. Jim soon becomes a proud possessor of the original map to Treasure Island. Along with Dr. Livesey and Squire Trelawney, Jim undertakes the journey to the island with a proper crew comprising a Captain, cook, boatswain, coxswain and sailors. Jim overhears a conspiracy being planned while he is concealed in the apple barrel. Like the incident in the apple barrel, Jim is exposed to a series of exciting discoveries of people and places. This includes the incident of meeting Ben Gunn; his urge to first cut the Hispaniola free and then to capture it. His hopeless state in the sea; his fight with Israel Hands and his capture in the enemy’s camp.

Many techniques have been used by the author to develop the adventurous plot. They are as follows:

- **THE ELEMENT OF MYSTERY AND SUSPENSE IN THE NOVEL**

The tone of the novel from the beginning is mysterious and dark. Jim's father is weak and the reader soon receives the news of his death. Billy Bones is looking for someone, the unknown contents of the treasure chest, all adds to the mystery surrounding the novel. The setting adds to the mood. The place is also a secluded inn. It is cut off from hope of human intervention or human guidance

At the end of Chapter X, Stevenson reveals his frequent technique of ending a chapter on a note of suspense and anticipation. From his place in the apple barrel, Jim has just realized that Silver is leaning against the barrel. Soon he realizes that the lives of all the honest men aboard depend upon him alone. There the chapter ends. Anyone who has read that much would tempt to continue further.

This technique of ending on a "cliff-hanger" may be related to the fact that Treasure Island was originally published in serial form. Thus, it was important to end each episode in a way that would make readers eager for the next installment.

- **NARRATIVE TECHNIQUE IN THE NOVEL**

Significantly, the first chapter sets the background for many of the stylistic elements that Robert Louis Stevenson later explores in Treasure Island. First, Stevenson's narrative style is notable. The first paragraph is a good example of Stevenson's narrative technique. Its first sentence plunges the reader directly into the action. The reader learns that the story is to be told by one of the participants in an adventure. The adventure is about buried treasure, some of which still remains on the island where it was concealed.

> SQUIRE TRELAWNEY, Dr. Livesey, and the rest of these gentlemen having asked me to write down the whole particulars about Treasure Island, from the beginning to the end, keeping nothing back but the bearings of the island, and that only because there is still treasure not yet lifted, I take up my pen in the year of grace 17 and go back to the time when my father kept the Admiral Benbow inn and the brown old seaman with the sabre cut first took up his lodging under our roof.

CHAPTER 1: THE OLD SEA-DOG AT THE ADMIRAL BENBOW

The adventurers are gentlemen who hope to benefit from their discovery. Their enemies in the hunt are pirates. By the end of the first chapter, all the elements of the subsequent action are established. Stevenson's narrative technique is significant because of the first person narrative. In this book, the majority of action is to be seen through the eyes of a small boy, innocent and childlike.

- **TECHNIQUE OF FORESHADOWING**

Robert Louis Stevenson is a master of using foreshadowing in order to increase the suspense of the novel. Several clues are dropped to indicate the reader that treachery is ahead of the adventure seekers. Readers can infer that Flint's desperate crew has realized that Trelawney has the treasure map, since the squire has not kept it secret. In addition, readers can guess that the sailor with one leg, Long John Silver, is probably the same one-legged seaman that Billy Bones worried about.

Another foreshadowing element is added to the plot when Trelawney informs the others that Long John Silver probably wants to sign on as a cook to get away from his wife "of color." This comment can also be viewed as a sign that Long John Silver is actually a pirate. In those days, pirates often had their headquarters in the islands of the Caribbean, which had a large black population and often married the women of the islands.

To increase the suspense, Stevenson uses foreshadowing. This is again seen in Smollets' apprehension about the crew and the fitness of the pirates. He says that the crew is too soft and that too many people know about the location of the treasure. This foreshadowing creates suspense.

- **CHANGE IN THE NARRATIVE TECHNIQUE**

In a break from the rest of the novel, when Jim leaves the ship with the pirates, Dr Livesey narrates the story. This shift was necessary in order to ensure that a first-hand account can be told of the events that Jim was not a witness to, because he was on land.

It is also interesting to contrast the two different narration techniques. First, Jim's technique allows the reader to gain much more insight into the feelings and emotions that he feels. On the other hand, Livesey's account is very factual and contains plenty of detail. His narration does not let the reader know what he is thinking or feeling. A good example of this is Livesey response when he believes that Jim has been killed. The only thing that he does is report that "Jim Hawkins is dead" and then simply moves on.

The plot develops systematic with the protagonist and his experiences. To bring completeness to the plot, the author brings in the doctor to narrate his experiences with the crew and the pirates when Jim is stranded on the island.

An interesting point to note is that when the number of characters is increasing and the plot is getting complex, Bill dies of heart attack, leaving us with ample amount of questions like who is the blind man. Why did he visit Bill? What was the business that took place between the dead and the blind man? What was the paper that the blind man gave to the Captain?

The climax of the story is Jim's capture in the enemy's camp and Silver's downfall as the Captain of the pirates when it is learnt that the treasure has already been unearthed. The pace and power of the plot does not slacken even in the last chapter, when the Captain decides to maroon the three pirates on the island. Silver's escape from the Hispaniola in the finishing paragraphs of the book keep the reader constantly glued to the pages of Treasure Island. Thus, we may conclude that the serialized nature of the book does not lessen its interest-value in any way. In fact, it allows suspense to be maintained. That is the main strength of Treasure Island.

In short,

- Initial Situation: Hawkins joins Squire Trelawney and Doctor Livesey in the coastal town of Bristol to prepare for their treasure hunt.
- Conflict: Captain Smollett warns Squire Trelawney that something is wrong with the crew.
- Complication: Jim overhears Long John Silver explaining his evil plan to Dick Johnson and Israel Hands.
- Climax: Squire Trelawney and Captain Smollett ambush Israel Hands and five other sailors on board the ***Hispaniola***; open war breaks out against the pirates.
- Suspense: Jim goes off to steal the ***Hispaniola*** from the pirates while Doctor Livesey and the rest remain on the island to deal directly with Long John Silver.
- Denouement: Jim Hawkins and Long John Silver find the empty treasure pit; Doctor Livesey and his men arrive to save the day.
- Conclusion: The ***Hispaniola*** leaves Treasure Island.

REFERENCES

- http://www.online-literature.com/stevenson/treasureisland/1/
- http://en.wikipedia.org/wiki/Treasure_Island
- http://www.sparknotes.com/lit/treasure/
- http://www.cliffsnotes.com/study_guide/literature/treasure-island.html
- http://www.gradesaver.com/treasure-island/study-guide/character-list/
- http://www.cliffsnotes.com/study_guide/literature/treasure-island/character-analysis/jim-hawkins.html
- http://www.shmoop.com/treasure-island-book/summary.html
- http://www.gradesaver.com/treasure-island/study-guide/section1/
- http://www.jiffynotes.com/TreasureIsland/Chapters7,8,and9.html
- http://www.enotes.com/treasure-island/chapter-summary

A Publication of TRANS Asian Research Journals

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

SOCIO-POLITICAL MATRIX IN THE FICTION AND NON-FICTIONAL WORKS OF ARUNDHATI ROY

Mrs. Usha*

INTRODUCTION

Arundhati Roy is the prominent Indo-Anglian novelist of the recent times who won Booker Prize for her debut novel The God of Small Things in 1997. Roy's subsequent literary output consists mainly of politically oriented non-fiction. Roy was born in 1961 in Shillong in Meghalaya and spent her childhood in Kerala. She left for Delhi at the age of 16 and embarked on a homeless life style. She has concentrated her writing on various social and political issues like Narmada Dam Project, India's nuclear weapons, corrupt power Company Enron's activities in India. In recognition of her advocacy of human rights, Roy was awarded Lannan Cultural Freedom Award in 2002, the Sydney Peace Prize in 2004 and the Sahitya Academy Award in 2006. Roy's fictional and non-fictional writing cannot be kept apart from each other. Her literary and political concerns are the two sides of the same coin. In her debut novel, The God of Small Things, Roy enacts the eternal drama of confrontation between the powerful and powerless. The novel deals with class antagonism and class exploitation, the tyranny and injustice that the untouchable has to suffer, the oppression and exploitation of woman in a male-dominated society and above all, the neglect and humiliation that the dalit and the defenceless have to pass through in a caste-ridden society.

The God of Small Things (1997) is about the confrontation between the small man and the big man. Velutha, an untouchable, is the most representative of the small man. The treatment meted out to him reflects the typical curse of untouchability ingrained in the society. Roy shows that this caste bias surface with the slightest provocation even among the most educated and cultured sections of our society. Apart from class and caste discriminations, Arundhati Roy also seems to lambast the artificiality and duplicity inherent in politics. The political characters described in the novel range from the former Chief Minister of Kerala, Mr. E.M.S. Namboodiripad to a common party worker Velutha. These politicians are not bold enough to challenge communal divides. They do not forget their own economic interests and pay only a lip-service to the public. Velutha's custodial death also exposes the unholy and unwarranted nexus between the police and the politicians. The novel also unveils a vast plethora of details concerning the problems plaguing woman in a male-dominated society. The God of Small things is all about the atrocities against minorities, small things, children and youth, women and untouchable.

Her first collection of essays is the book entitled The Cost of Living, published in 1998. In the most influential essay "The Greater Common Good", Roy points out that more than fifty million people have been displaced by Narmada Dam project. She points out that the Indian Government has produced no studies to verify the difference from the lowest baseline calculation of displaced people, or to quantify agriculture benefits gained from completed Dam Project. In another essay of this collection entitled "The End of Imagination", Roy argues passionately against the dangers of nuclear weapons. After the publication of this essay, over next three and a half year, Roy wrote a series of political essays on a diverse range of momentous subjects: from the illusory benefits of big dams to the downside of corporate globalization and the US government's war against terror. First published in 2001, The Algebra of Infinite Justice brings together all of Arundhati Roy's political writing so far. Two essays in this collections are very influential: "Democracy: Who's she when she's at home", that examines the horrific communal violence in Gujarat and "War Talk: Summer Games with Nuclear Bombs", about the threat of nuclear war in the sub-continent. She explores the politics of writing and the human and environmental costs of development in Power Politics (2001). In this collection of essays, Roy presents an attack on the forces of modern globalization through an exploration of the privatisation of India's power supply and the popular struggle against the economically unviable, ecologically destructive and deeply undemocratic construction of a mega – dam. Power Politics is about power and its disguises and describes India's situation as the one where there is an undeclared civil war is being waged on its subjects in the name of development.

Her next collections of essays are War Talk (2003), Public Power in the Age of Empire (2004) and The Ordinary Person's Guide to Empire (2004). As the United States pushes for war on Iraq, Arundhati Roy addresses the issues of democracy and dissent, racism and empire, war and peace in her collection of essays War Talk (2003). Roy challenges those who equate dissent with being anti-American. She highlights global rise of religious and racial violence. She calls into question the equation of nation and ethnicity. In her collection of essays An Ordinary Person's Guide to Empire (2004), Roy aims to remind us that we hold the essence of power and the foundation of genuine democracy. These essays are a call to arms against the apocalyptic apparatus of the American empire. It offers us sharp theoretical tools for understanding the new American empire – A dangerous paradigm. Roy argues that this empire is entirely distinct from the imperialism of the British or even the New World Order of George Bush, the elder. She examines how resistance movements build power, using examples of non-violent organizing in South Africa, India and the United States. In Public Power in the Age of Empire (2004), Roy examines the limits of democracy in the world today. Roy discusses the reduction of democracy to elections with no meaningful alternatives allowed. She shows how governments that block non-violent dissent in fact encourage terrorism and examines the role of corporate media in marginalizing appositional voices.

Her latest collections of essays are 13th Dec A Reader: The Strange Case of the Attack on the Indian Parliament (2006), Field Notes on Democracy: Listening to Grasshoppers (2009), Walking with the Comrades (2011). 13th Dec A Reader: The Strange Case of the Attack on the Indian Parliament(2006) is a collection of essays on the attack on the Indian Parliament on 13 December 2001.The book offers lay-readers a detailed overview of the gaps in the investigation and the loopholes in the case, particularly against Mohammad Afzal. Roy's introduction to the collection lists 13 disturbing questions that remain unanswered over five years and three court judgements after the incident. Roy calls for an impartial and independent inquiry into the Parliament Attack to reveal the truth about the incident. Field Notes on Democracy: Listening to Grasshoppers (2009) is series of essays which examines the dark side of democracy in contemporary India. It looks closely at how religious majoritarianism and cultural nationalism simmer just under the surface of a country that projects itself as the world's largest democracy. She describes the systematic marginalization of religious and ethnic minorities, the rise of terrorism, and the massive scale of displacement and disposition of the poor by predatory corporation. She also offers a brilliant account of the August 2008 uprising of the people of Kashmir against India's military occupation and an analysis of the November 2008 attacks on Mumbai. In early 2010, Arundhati Roy travelled into the forest of the central India, homeland to millions of indigenous people. The result is the powerful and unprecedented report entitled Walking with the Comrades (2011). Deep in the forests, under the pretence of battling Maoist guerrillas, Indian government is waging a war against its own citizens- a war undocumented by a weak domestic press and fostered by corporations eager to exploit the rare minerals buried in the tribal lands.

The Shape of the Beast (2008) is a collection of fourteen interviews. The book charts Roy's career as a political activist from 1998 to the present. She expresses her own views about the genocide in Gujarat, Maoist rebels, the war in Kashmir, the global war on terror, democracy, justice and non-violent protests. It is also a deeply personal collection that talks about the necessity of talking a stand and the dilemma of guarding the private space necessary for writing in a world that demands intervention.

In short, Arundhtai Roy is not only an accomplished novelist, but also a gifted writer unravelling the politics of globalization, terrorism and other issues gripping today's world. Roy's interlocking network of the ideas, attitudes and ideologies emerge from the contemporary social and the political world.

A Publication of TRANS Asian Research Journals

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

ENVIRONMENTAL EDUCATION: A BRIDGE BETWEEN MAN AND ENVIRONMENT

Dr. Sunita Arya*; Dr. Parveen Rani (Khatri)**

*C.R. College of Education,
Rohtak, India.
**Govt. P.G. College,
Gohana, India.

ABSTRACT

The Environment is both physical and biological concept including living and non-living components. The physical components include land, air and water where as biological components are plants, animals including man, his functions organizations and institutions. Environment and society are closely related and they are interdependent. Social Components are very important to determine the role of educational institutions. The educational process helped in the development of different structures of society on one hand, the quality of environment on the other hand. Education is the creature and creator of Society. The structure of the society is evolved by the process of education. The educational process utilizes the natural environment and its resources. Different social structures depend on the environment and leads to social change and social control which are essential to utilize resources of the environment. The article deals with the present environmental conditions which urged the need for environmental awareness in the form of environmental education. It talks about the various aspects and components related to environmental education, then objectives of the same formulated at the Tbilist conference (UNE SCO, 1997) have been discussed in detail. Lastly it reflect how the education of environment has put a powerful positive impact on the physical, biological, cultural and psychological environment of man which leads to sustainable development of a country (The utmost goal of man kind).

KEYWORDS: *Environment, Resources, Environmental Deterioration, Sustainable development.*

INTRODUCTION

In this present era of rapid urbanization and industrialization, we people are continuously making misuse of our environment, thus creating a lot of environmental problems. The situation of our country is worse from this point of view. More than 70 percent population lives in rural areas and 40 percent population is below the poverty line. A large population has migrated to big cities but they are deprived of necessities such as water, electricity, residence, etc. They live in jhuggi and jhhopri or on roads. They are mostly illiterates and have no idea of environmental awareness. They are polluting environment through their day –to-day activities. Therefore, it is the responsibility of society and nation to provide the environmental education to them.

Environment consists of the sum total of the stimulation that the individual receives from conception until death. It covers all those circumstances which assert their influence on the individual since conception to death. Whatever found around the individual may be covered by the term environment. Environment consists of various types of forces like physical, intellectual, social, moral, economic, political, cultural and emotional forces which affect the life nature, behaviour and the growth, development and maturation of living organisms. This definition was given by Douglass and Holland. The term 'Environment' refers the surrounding of an organism which includes both living and non-living components. Thus environment is viewed in different ways with different angles by different groups of people but it may be safely argued that environment is an inseparable whole and is constituted by the interacting system of physical, biological and cultural elements which are inter-related individually as well as collectively in myriad ways. Physical elements include space, landforms, water bodies which determine the variable character of the human habitat. Biological elements include plants, animals, microorganisms and man whereas cultural include all the economic, social and political elements.

Man's environment consists of natural as well as socio-cultural environment. Man has to improve the quality of his environment, because there is environmental pollution or crisis. It is due to over consumption of natural resources, over population, uneven urbanization and industrialization and unscientific attitude of human beings.

Natural resources have been utilized to meet the demand of better living to such an extent that has caused serious ecological and environmental imbalances. Man's positive participation is the only way to improve environment protection. The best insurance for the environment is a commitment to prevent the deterioration of land, water and air. It requires an introduction of environmental education. This term has been discussed in various national and international seminars who tried to define it. UNESCO Working Committee (1970) defines Environmental education as "the process of recognizing values and clarifying concepts in order to develop skills and attitudes necessary to understand and appreciate the interrelatedness among man, his culture and his bio-physical surroundings. It also entails practice in decision making and self formulation of a code of behaviour about problems and issues concerning environmental quality". Environmental education is a process of providing learning experiences to obtain desirable attitudinal change about man's relationship with his natural and man made surroundings which includes the relation of population, pollution, resource allocation, transportation technology and a broad array of educational approaches to teaching learning about and from the environment with due stress on practical activities and first hand experience. The area of environmental education includes both formal and non-formal education. In the formal education four different but inter-related components are recognized-

1. Awareness of environment
2. Environment and real life situation
3. conservation of resources and
4. Sustainable development of an individual.

These components are related to the four levels of education

1. Primary education – awareness.
2. Secondary education – real life situation.
3. Higher Secondary education – conservation.
4. Higher education – sustainable development

There should be four major areas-

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

1. Environmental Engineering.
2. Conservation and Management.
3. Environment Health and
4. Social Ecology.

The non- formal education caters to adult education, rural youth, tribals, administrators and foundation courses and different services. Thus, education has the very significant areas of environmental education.

OBJECTIVES OF ENVIRONMENTAL EDUCATION

A number of objectives for developing environmental education at all levels in both formal and non-formal levels, were formulated at the Tbilisi Conference (UNESCO, 1977). These are as follows –

1. Awareness i.e. acquire an awareness of an sensitivity to the total environment and its allied problems.
2. Knowledge i.e. gain a variety of experiences and acquire a basic understanding of the environment and its associated problems.
3. Attitude i.e. acquire a set of values and feelings of concern for the environment and the motivation for active participation in environmental improvement and protection.
4. Skill i.e. acquire skills for identifying and solving environmental problems.
5. Evaluation ability i.e. evaluate environmental measures and education programmes in terms of ecological, economic, social, aesthetic and educational factors.
6. Participation i.e. provide an opportunity to be actively involved at all levels in working towards the resolution of environmental problems.

Thus environmental education should be a continuous life- long process, beginning at the pre- school stage level and continuing through all formal and non- formal stages and should be interdisciplinary discipline in making possible a holistic and balanced perspective.

REFERENCES

Botkin, D.B. and Keller, E.A. (1995) : ‘Education Studies’, C.E. Merril Company.

Cloud, P.E. (1969 : ‘Resources and Man,’ W.H, Freeman and Company, San Francisco.

Det Wyler T.R.(1971) : ‘Man’s Impact on Environment, McGraw Hill, New York.

Deshbandhu and G. Berberet (1987) : ‘ Environmental Education for Conservation and Development’ Indian Env. Society, New Delhi.

Dikshit, R.D. (1984) : ‘ Geography and Teaching of The Environment’Poona University.

Furley, P.A.& Newey, W.W. (1983) : ‘Man and the Biosphere’, Butterworths, London.

Gregory, K.J.& Walling, D.E. (1981) : ‘Man and Environment Process,’ Butterworths, London.

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

Khoshoo, T.N. (1984): 'Environmental Concerns and Strategies', Indian Environmental Society.

Sharma R A (2012): 'Environmental Education', Raj Printers Meerut (UP)

Sharma R.A. (1997): 'Environmental Education R. Lall Book Depot, Meerut

Singh, S. and Dube A. (1989) :'Environmental Management', Geography Deptt., Allahabad University.

A Publication of TRANS Asian Research Journals

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

PRODUCT PLACEMENT & ITS EFFECT ON CUSTOMERS WITH SPECIAL REFERENCE TO SOUTH INDIAN MOVIES

Rishikesh Padmanabhan*; Sanjay Kumar Jena**

*Assistant Professor,
Manipal University Global Education Services,
India
**Academic Intern,
Indian Institute of Management,
Bangalore, India.

ABSTRACT

Product placement or brand placement can be seen in a number of media vehicles including Television Serials, Chat shows popular movies etc., which is an advertising format presenting a product through the media for attracting mass customers. The study discusses the influence and impact of product placement in south Indian cinema. In this study, we discuss the different brand placement strategies adopted in movies for promotional purposes in south India and discuss the effectiveness of this type of communications and concentrating on the viewer's recall on the brand and its impact on improving brand image. The study is basically to understand the consumer buying behavior. The study assess product placement in south Indian movies by selecting Kannada, Malayalam, Tamil and Telugu films in to consideration on the basis of its popularity and the diversity in the types of placements and was analysed using a questionnaire and a survey was conducted among a sample of 100 respondents. From the study it was observed that, The importance of movies on masses is evident in south India especially in Andhra Pradesh and Tamilnadu. Consumers feel that the advertisements should be entertaining and the same should be conjoined with the storyline in order to convey the brand message in the best possible way.

KEYWORDS: *Brand Placement, Consumer behaviour, Marketing, Product placement, South Indian cinema.*

INTRODUCTION

Advertising products through a film was primarily known as product placement and this kind of exercise is known in variety of names such as "brand placement", brand integration, brand entertainment, in-film advertising and recently as brand cameo or embedded marketing. From the past researches, it has been identified that product placement effects the repute and impression of the company and not in sales. Product placement is not limited to movies and can extend to television, radios, song lyrics, video games, song lyrics, music videos and plays etc. (Wasko, Phillips and Purdie 1993). In product placement, either the product or the logo is shown or flashed of the concerned product or some of its features may be highlighted.

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

Marketing has been an integral part of business and companies are in search for innovative ideas by considering the changing interests of the consumers, where product placement through movies has been identified as a better way to reach to the target audience to influence them. It seems that this culture had started in early 19th century.

Product placement in movies is a well-known concept in Hollywood and Bollywood, though this exercise is still a developing one in south Indian cinema consisting of Kannada, Malayalam, Tamil and Telugu film industries. Influence of celebrities in establishing a brand is a commonly used trend which was evident even in yester years.

Movies are noticeable medium for entertainment in India, commonly the south Indian cinema is a specialty of lot of things such as colourful outfits, Interesting destinations and singing and dancing sequences (Dwyer & Patel, 2002).The movies does not alone focus the Indian audience, but nonresident Indians.

The movies communicate many a things to the audience such as grooming, fashion and also about latest trends.

The spectators of the south Indian cinema would be considering the movie as a make-believe fact and will be emotionally occupied by the actors and the incidents of the movie especially on dressing, behaving etc. Product placement in south Indian cinema was started in early 2000 in the form of in-film advertisement where the HLL's iconic brand "Bru" was sponsoring film promotions [1] Similarly it also promoted a telugu movie "Prematho Ra" along with a contest in the product package to attract the mass.

In 2012, Emami, the Kolkata base FMCG company had effectively used this strategy in the movie "3" in one of the song sequence along with Audi, Aircel etc, where it was the first initiative by emami in Tamil cinema industry. The placement of the product was done in one famous song sequence "Kolaveri di, where it was choreographed in front of an emami stall where there is a lot of crowd buying Navaratna oil, a product of emami. Product placement has been a trademark of emami's marketing strategy over the years especially in south India, which is evident from the fact that they hold 65% of market share for the product endorsed by young south Indian actors in each state[2].Apart from this, the song also places brands such as Air Asia,Airel etc.(See figure 1) The brand had done similar sort of exercise in other regional languages as well.[3] Another tamil movie "Vaazhthukulam", features at least 3-4 brands including Havell's Interior accessories, Timond watches and Mark Diamonds.

Now a day's the product placement is a million dollar business satisfying the film producers for reducing production cost and also to market well. This type of advertising was started in India by Leo Entertainment by Leo Burnets. The advertising agency could understand the behavior of the movie and identify areas or sequences for product placement by making suitable changes on situations, if required. Thus in film advertisements are significant parts of marketing budgets for corporates.

Brand placement can be done in many different ways where it can naturally happen or can be a planned one or can be one that is well organized in the movie for a financial benefit. Having said that "Each frame of a film has got an opportunity for branding", as it is being identified as the most

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

effective form of advertisement when it is a part of the movie's content. Brand placement in cinemas had gained a push all over the world.

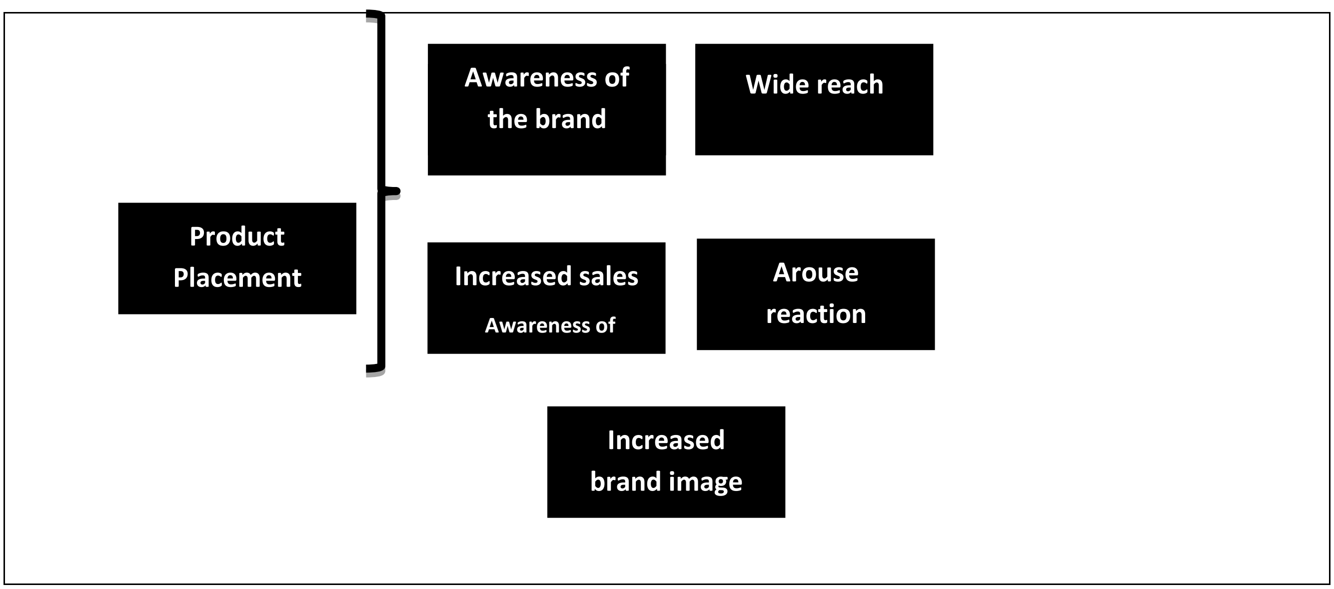
It seems that the major reason for marketers to take product placement in to account as an effective communication tactic because, viewing a movie is an activity which requires high involvement compared to other media vehicles. It acts an open, Influential and peaceful way for promoting the brand. Product placement is a routine exercise for brand communication, which is appearing as an important tool for marketing communication.

REVIEW OF LITERATURE- IMPORTANCE OF BRAND PLACEMENT

According to Scala and Maynard(2006), product placement is a marketing plan which will be used by an advertiser to place his product/products in a movie. The companies will generally be interested in placing its brand rather than a particular product in movies. For example, when coca cola advertises, it emphasizes that as a brand and not as any other soft drink. Generally the south indian films portrays the culture of the state, products and practices endorsed by the regional stars or iconic brands who can have an impact on the movie goers. The rapid growth of urban middle class has led to an increase in multiplex theatres in the country and subsequently increased the audience strength moving to theatres. Compared to Hollywood and Bollywood movies, the brands can get longer visibility in regional films. The popular brand placement studies measure the degree of efficiency of product placements on the basis of the remembrance of the brand.

A study conducted in USA in the year 1993 reveals that participants between the age group 18-34 were significantly positive with respect to brand placement and the preference for such placements were positive than that of other types of television advertisements. The benefits of product placement is given below(Figure-1).

PRODUCT PLACEMENT- BENEFITS



Source: Author research

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

FIGURE-1

The authors of this research paper haven't found any evidence of work that has been carried out on product placement in south Indian cinema.

PRODUCT PLACEMENT- THE HISTORY

It is important to assimilate the brand with the plot of the movie to make the audience feel that the product has got congruence with the plot and the same should also be absorbed with the character of the movie or otherwise the whole exercise may turn out to be useless. As far as the plot of the movie is stronger, the impact of the placement would also be strong enough.

Brand placements are to be exploited for the development of brand knowledge and brand memory effect between the consumers.

PRODUCT PLACEMENT- THE DIFFERENT POSSIBILITIES

Mainly it has been classified in to three categories

1) **ACTIVE /INDIRECT PLACEMENT**

   In this method, the character of the movie in a situation would be openly agrreying that he/she is using a particular brand. For Example, in a Malyalam movie " Nerariyan CBI" the iconic brand, Mamootty says that he is a customer of Tata Indicom, now docomo(See figure 3 and 4)

2) **SPOKEN PLACEMENT**

   In this type, the star/main character of the movie would recommend the product to his peer/friends. For example in "Nerariyan CBI" the iconic brand, Mamootty recommends his co-actor Jagathy Sreekumar to Purchase Kalyan Jewellery(See figure 5 and 6)

3) **USAGE PLACEMENT**

   In this method, the star/ character of the movie in some situation or the other would be seen as using/ consuming the product. For example, in the movie " Diamond Necklace" the the star seems using the diamond necklace from "Joy Alukkas" in the entire movie(see figure 7).

4) **PASSIVE / VISUAL PRODUCT PLACEMENT**

   In this type, the product, logo or the service can be perceived for a few minutes or seconds in the movie and it may not have any relationship with the plot of the movie. For example, in tamil movie, Mounam pesiyathe released in the year 2000, endorses brands such as Coca-cola,Airtel etc. (See figure 8 and 9 and 10).

The basic idea behind product placement is to utilize the emotional values through transferring the image of the end user to the consumer.

RESEARCH DESIGN

The paper analyses the key characteristics of product placement with special reference to South Indian films and its effectiveness as a tool used for brand recall. Different types of product placements have been analyzed and sought opinion of the respondents on the basis of a set of parameters.

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

The research design for the study includes a rigorous review of literature with scholarly observations and investigation of other collected information's through reliable secondary resources. A survey was conducted among a sample of 100 respondents with the help of a questionnaire.

Most of the respondents recalled the brands advertised in the movies, which shows the acceptance of product placement among south Indian audience. This is in fact a growing practice in south India and receives positive response both from the audience and producers of the movie.

FINDINGS

In covariance analysis, it was identified that most of the people had same perception for the statements. The perception of both men and women were almost the same on the statements provided and had a positive attitude towards brand placement.

While considering education almost all the students including graduates, post graduates and professionals were having the same attitude towards product placement, which was positive with a negligible variation.

The consumer evaluation towards product placement and brand image was directly proportional and the brand's image was not significant in evaluation. Thus any brand that is appropriately positioned can attract the customer attention.

The population believes product placement as the better form for advertising rather than traditional methods as it frustrates the consumer especially if the story line is out of context.

Ways of using the product in movies are major factors for the people as it attracts them to use what their favorite iconic brand had used.

All most all the respondents were having a positive attitude to try out a product after seeing it in a movie.

Assimilated and clear brand placement proved to have greet brand recall and well-known brands are more recalled.

Brand that is more visible in advertisement and marketing campaigns proven to have more recall. While enquiring, most of the consumers were associating brands with particular movies based on the actor in the movie. For example, many recalled the brand in the movie "vettaiyadu vilayadu "placed Samsung Motto, where the hero of the movie uses a Samsung Motto with a ringtone each time pronouncing the brand. Many suggested brand placement in movies as a better alternative to traditional advertising

CONCLUSION

In this modern and mass adverting world, brands are constantly trying to bring out newer methods to reach out to their target audience. Innovative ways of delivery can only lead them to success. The importance of movies on masses was evident in south India especially in Andhra Pradesh and Tamilnadu. Consumers feel that the advertisements should be entertaining and the same should be conjoined with the storyline in order to convey the brand message in the best possible way.

The publicity of a movie in south India especially in Tamilnadu and Andhra Pradesh is huge, which gives the brands a prospect to influence the customers with the association.

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

FIGURE-2

FIGURE-3

FIGURE-4

FIGURE-5

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

FIGURE-6

FIGURE-7

FIGURE-8

FIGURE-9

FIGURE-10

TABLE: 1: GENDER DISTRIBUTION

Gender	**Population**
Male	64
Female	36
Total	100

Source: Author research

TABLE: 2: AGE GROUP AND EDUCATION

Age Group	**Population**	**Education**	**Population**

Below 20 years	8	Graduation	26
21-25	36	Post-Graduation	32
26-30	30	Professional	34
31-35	13	Others	8
35 and above	13	-	-
Total	100	Total	100

Source: Author research

TABLE: 3: CONFIDENT STATEMENTS

Name	**Statement**	**Out of 100**	
		Yes	**No**
Substitute	Product placements are good substitutes for traditional advt	76	24
Recall	The usage of product by an iconic brand makes it more likely to remember the brand	67	23
First Usage	Started using a product after seeing it in the movie	56	44
Product Experiment	Felt trying out a brand after seeing the same in movie	60	40

Category	**Influence**
Corporate placement	In order to increase the companies repute. Sun feast by ITC shown is kodeeswaran shown in Viajy Tv, where the brand is also endorsed by the anchor of the program
Generic Placement	The product characteristics are explained without using the brand name.In "Ningalkum aakam Kodeeswaran" TV show shown in Asianet using "Airtel" to make phone calls for phone a friend.
Service Placement	Presenting an institution. The movie "Baba Kalyani" shows The Federal Bank in a particular seen.
Idea Placement	Including opinion or fact in a particular plot. Discussing about the movie "Spirit" in a TV show is an indirect placement.
Innovation Placement	Introduction of a new product in a movie. Tata DoCoMo introduced Nanban recharge through the movie "Nanban"

Source: Author research

REFERENCE

Sukhbinder Barn, (2009),"Product placement in Bollywood movies", Marketing Intelligence & Planning, Vol.27 Iss: 7 pp. 976 - 980

Meera Mathur,Shubham Goswami (2012). A Study Of Consumer Behavior And Product Placement In Indian Cinema. Annals of Management Research, 2(1), 29-38

Alain dA stous, Chemsi Berrada (2011), Communication Strategies to Enhance the Effectiveness of Product Placement in Movies. International Journal of Arts Management, 14(1)

Gokhale, Shruti Vinayak, "Comparative Study of the Practice of Product Placement in Bollywoodv and Hollywood movies" (2010). Master's Theses. Paper 3860

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

Lemon Media... In-Film product placement, Theatre activation, Associate marketing and Celebrity Endorsements (n.d.). [Video file]. Retrieved from

http://www.lemonmedia.in/services_infilm.php

Brand image measurement cadbury dairy milk (n.d.). [Video file].Retrieved from http://www.slideshare.net/zeeshanpraxis/brand-image-measurement-cadbury-dairy-milk

Top 40 Product Placements of all time: 10-1 : Brands & Films (n.d.). [Video file]. Retrieved from http://brandsandfilms.com/2011/01/top-40-product-placements-of-all-time-10-1

A Publication of TRANS Asian Research Journals

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

AN ANALYSIS THE DIFFERENT HEALTH AND HYGIENE CONDITIONS OF GOVERNMENT PRIMARY SCHOOLS IN THE PROVINCE OF SINDH (PAKISTAN)

Dilshad Amir Ali Khowaja*; Dr. Parveen Munshi; Dr. Sajjad Hayat Akhtar*****

*Principal,
Provincial Education Department.
**Dean,
Faculty of Education,
University of Sindh,
Pakistan.
***Head ,
Provincial Education Department,
Pakistan.

ABSTRACT

The study investigated in to descriptive research to investigate the different health and hygiene conditions of Government Primary Schools In the province Of Sindh Pakistan. This study has focused on the health of pupils, hygiene conditions of the Government Primary Schools, and focused on the concrete measures for the future betterment. To analyze the different health and hygiene conditions of Government Primary Schools of Hyderabad District. The main objectives of the study were to find out root causes which create hurdles in promoting healthy environment, examine the effects of health and hygiene conditions on learning of pupils of primary schools and analyze the role of media to build good or bad habits in the personality of pupils of the primary schools. The following results were drawn by the researcher in the light of the analysis of the data. It was observed that light and Electricity connections were provided to Govt Primary Schools but the classrooms were congested, not properly well lighted and ventilated creating ill effects on eye sight of the pupils. Due to suffocation and unavailability of Fresh Air, pupils suffered from cough, cold and allergy problems. Mosquitoes and insects made their way under the benches and 20% pupils suffered from Malaria fever.

***KEYWORDS**: Basic Rights, Hygiene Conditions, Health Of Pupils, Healthy Environment, Role Of Media And Primary Schools.*

INTRODUCTION

It is difficult to define any universally acceptable conceptualization of Health. Health is interpreted in diverse ways by different people around the world and understanding of health is always evolving (Pridmore et al 2000, p.30). The World Health Organization defined the health and this WHO definition of health was first presented in 1946 Constitution of the World Health Organization and is still widely quoted as: "A state of complete physical, mental and social well being and not merely the absence of disease or infirmity. (WHO1948:1). Even though there are many criticisms about this definition, the WHO definition has merit in recognizing health as more than the absence of disease and acknowledging three of its dimensions (Beattie et al 1993). Health has frequently been interpreted as "state of harmony and balance ... hygiene is less a science than a virtue, sickness being the result of straying away from the natural environment." (Pridmore 2000, p.32)

It is obvious that the significance of health, at every step of life, in every era of the time, is inevitable. Now-a-days, health fitness is more important in this fast moving life, where an ill person, cannot move with the world, where there is less income and more expenditures. In 21st century, health and education are far more expensive, than they ever were. A healthy body bears a healthy mind and to build health is a process, which starts from the fetus, and lasts for the whole life.

The early childhood period is the fundamental and delicate period, which needs special care. Gabriela Mistral, 1948, Nobel prize winner from Chile said," We are guilty of many errors and many faults, but our worst crime is abandoning the children, neglecting the fountains of the Life... many of the things we need can wait, but the child cannot. Right now is the time, his bones are being formed, and his blood is being made and his senses are being developed. To him we cannot answer tomorrow. His name is TODAY".

LITERATURE REVIEW

SCHOOL BASED HEALTH AND NUTRITION PROGRAM

UNITED NATIONS CHILDREN'S FUND (UNICEF)

OBJECTIVES

The main objective of this work was the preparation of a synopsis of donor support for school-based health and nutrition initiatives

- To help meet the basic rights and expand opportunities of children aged 0 to 18 within the framework of the 1989 UN Convention of the Rights of the Child
- Develop common strategies that address school health and the joint UN Program on AIDS
- Water, Sanitation and Hygiene programs for schools in many countries
- Child-to-Child and extra-curricular activities for the whole community developing sense of hygiene

CONCLUSION

- UNICEF is working hard for water and sanitation (including hygiene promotion), interactive health education (including HIV/AIDS)
- In addition to school based programs, UNICEF are also considering the more difficult area of reaching children in crises, as well as street children and working children, who are often not attending schools and whose health and nutrition are often most compromised.
- Work is also underway to examine options for improving the nutritional status of primary school children. (www.unicef.org)
- National Agencies working for health
- Here are some national agencies working for the health, nutrition, sanitation and hygiene of schools.
- Eidhi Foundation
- Aga Khan Foundation

- Child to Child Pakistan
- PAIMAN (Pakistan Initiative for Mother and Newborns)
- Pakistan Lions Club
- Al Khidmat Welfare Society
- Association for the Development of Pakistan
- Pakistan Red Crescent Society

Following National agencies worked for Health of Pupils and Hygiene conditions of their Institutions, cared about nutrition of the children, and got positive results, which are given as examples.

CHILD TO CHILD PAKISTAN

OBJECTIVES

- The health of the community can be improved and promoted through the active involvement of the school-age children.
- The Child-to-Child approach emphasizes children as partners to transfer health knowledge and skills beyond school and into the family and community and acting as an agent of change in the community.
- The most effective theme of this approach is to involve children in decision making rather than merely using them as communicators of adult
- The main focus of utilizing the Child-to-Child approach as an effective tool is to create awareness among children and communities affected by water and sanitation-related diseases.
- Engaging children in improving the sanitation, health and hygiene conditions at the school and community level
- Recommendations

1. Monitoring and Evaluation of Child-to-Child Activities should be carried out according to the program.Training Activities should be implemented as:

- Basic health and hygiene education
- Components of sanitation;
- The six-steps of the CtC approach;
- Why and when child participate, etc.
- The trainings are conducted. through the active involvement of children, based on life skills.
- (http://www.child-to-child.org/wherewework/pakistan_project4.htm)

Primary Environmental Care Program and Primary Environmental Care in Girls Primary Schools.

(i) PEC Project

(ii) Objective

(iii) Primary Environmental Care Program was started in 1992 covering Punjab, NWFP and Balochistan Provinces... The main objective of the PEC is to

- Contribute to child survival
- Inculcate knowledge
- Practice for improved sanitation and hygiene among school children.
- Introducing concept of household latrine construction
- Installation of hand pumps

(ii) Primary Environmental Care in Girl Primary School (PECGPS)

(iii) Considering the fact that lack of drinking water and sanitation facilities is one of the main reasons for low enrollment and high drop out rates in the girl primary school, UNCIEF launched the province in 1998.

(iv) Learning Material

(v) School children are customized to learn from the text book, therefore subject related printed material has been prepared in form of booklets, charts and games, and a package prepared by an NGO namely Health, Education & Adult Literacy (HEAL) is provided to each school. The material is published in Urdu language and easy to understand for the primary school teachers as well as students. It comprises of the following items of material:

- Booklets
- Latrine Ka Istemal
- Hatton Ki Safai
- Mahol
- Peenay Ka Pani
- Aam Bimariyan
- Charts and Games
- Illustrated charts Latrine Istemal Karney Ka Tarika
- Ludo Games on Hygiene Practices
- Personal Hygiene Kit
- One Nail Cutters (Source: www.pecgps.org)

SAFEGUARD AND SAVE THE CHILDREN PAKISTAN

AIMS & OBJECTIVES

Safeguard and Save the Children aim to address the incidence of common illnesses arising from poor sanitation facilities in school children, and empower Pakistani children to adopt healthy habits through health education and improved access to hand washing, toilet and water supply facilities. The overall aim is to enable children and their families to adopt better health and hygiene habits in the long-term.According to estimates, water, sanitation and hygiene related diseases cost Pakistan's economy about Rs 112 billion per year and over Rs 300 million a day in terms of health cost and lost earnings.

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

RECOMMENDATION: Every day, 670,000 children miss school due to illnesses. According to the Karachi Soap Health Study (2002) led by the Center for Disease Control (USA), HOPE and P&G, regular hand washing with soap can reduce the incidence of diarrhea and common illnesses by up to 50 percent. [...] We will be building these facilities this year, and are committed to provide sustainable maintenance to these facilities for the years to come.

CONCLUSION

Safeguard has empowered over 6 million children in more than 17,000 Pakistani schools through Sehat-o-Safai, the largest school health and hygiene awareness campaign in the country. To reinforce its commitment to health and hygiene, Safeguard is making this sustainable long term investment to improve the lives of Pakistani children and to instill the message of the importance of hand washing with soap. The Safeguard team will be educating 40,000 children through this partnership, and about 1.5 million children overall through the Sehat-o-Safai program this year. (Source: www.savethechildren.com)

HEALTH AND HYGIENE IN CURRICULUM

The researcher reviewed the curriculum from Class I to V, edition 2009-10. In terms of Health and Hygiene Education, it was found insufficient. In the curriculum very little content about personal health and hygiene were given which are not enough for the basic awareness and habit building of students.In formal education, a curriculum is a set of courses and other contents that is offered at a school or university. Curriculum is designed for the students to undergo a positive change so that they may be successful in the society. A curriculum encompasses the entire scope of formative deeds and experiences occurring in, and out of the school. To Bobbitt, “the curriculum is a social engineering arena” (Bobbitt, John Franklin. The Curriculum. Boston: Houghton Mifflin, 1918).

As the WHO definition for health is, “the complete physical, mental and social well being and not merely the absence of infirmity”, it links the human health with the health of environment and friendly relations with other human beings. This needs to be taught in our curriculum. “The curriculum needs to put emphasis on five categories of knowledge: the human body, hygiene (with sanitation) nutrition, personal safety and disease prevention”. (Pridmore 2000: Forces shaping current Practice; Concepts, Culture and History, P. 9). We, in our curriculum are lacking these essentials. In Pakistan, implementation of policy and practice in schools is made slowly and unevenly.A study in Guatemala, Central America (Martorell 1992) demonstrated that improved nutrition during early childhood was related to improve intellectual performance in adolescence and adulthood.

In the Pakistani syllabus for primary students, not much was found about health and hygiene, daily physical exercise, sports, healthy life style. In contrast, when an international curriculum was looked at, many lessons we found, one of which is quoted as follows: “Teeth are those enamel-coated wonders that help us chew, talk and smile. Unfortunately, many of our students may not know how to care for their pearly white property”. (www.kidshealth.org/classroom/perk) Such lessons, which inculcate good habits, cleanliness, happiness and healthy lifestyles beside intellectual progress, must be included in the Pakistani curriculum in an interesting way, as above. Not only in black and white,

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

but also, excursions and fascinating teaching aids should be used, so that the students get motivated and apply cleanliness in their lives.

OBJECTIVES

- To analyze the different health and hygiene conditions of Government Primary Schools of Hyderabad District.
- To find out root causes which create hurdles in promoting healthy environment?
- To examine the effects of health and hygiene conditions on learning of pupils of primary schools.
- To analyze the role of media to build good or bad habits in the personality of pupils of the primary schools.

METHODOLOGY

Data were collected through survey and questionnaires. The researcher administered self assessment questionnaire and sampled Head Teachers of the sampled Govt. Primary Schools in Hederabad district of Sindh province.Percntage was applied to measure the different health and hygiene conditions , good or bad habits, and spare time activities for primary school pupils. Heads of the schools were taken 30% as a sample.

RESULT

TABLE: QUESTIONNATIRE FOR HEAD OF THE INSTITUTONS

S.No	Statement	Boys Yes%	Girls Yes%	Mixed Yes%	Mean	Total
1	Regular Assemblies	87.2	92.7	87.6	89.2	136
2	Teaching on Educational Topic	2	5	3	3.3	136
3	Discussions about health topic	1	2	2	1.6	136
4	Availability of electricity	100	93.5	98.8	97.4	136
5	Availability of proper light for reading	17	15	18	16.6	136
6	Well ventilated classrooms	17	13	18	16	136
7	Bringing of Lunch for Recess Time	10	15	10	11.6	136
8	Buying of edibles from hawkers	45	45	35	35	136
9	Encouragement for home made food	2	10	5	5.6	136
10	Availability of First Aid Box	NIL	2	2	2	136
11	Medical cares	NIL	NIL	NIL	NIL	136
12	Provision of vaccination facility	NIL	NIL	NIL	NIL	136

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

13	First Aid Training for teachers	NIL	NIL	NIL	NIL	136
14	Availability of Play Ground	15	10	10	12.3	136
15	Use of Play Ground	15	15	12.5	12.5	136
16	P.E classes in timetables	NIL	NIL	NIL	NIL	136
17	Availability of PTI	NIL	NIL	NIL	NIL	136
18	Garbage along boundary wall	51.9	65.6	57.1	58.2	136
19	Availability of drinking water	94	84.1	96	91.3	136
20	Cleanliness of water storage tanks	20	25	20	21.6	136

1. It is revealed that conducting regular assembly in Boys Primary Schools is 87.2%, in Girls Primary School, is 92.7% and in Mixed Primary Schools is 87.6%.
2. It is shown that the teaching on any educational topic in the assembly in Boys Primary Schools is 2%, in Girls Primary Schools is 5% and in Mixed Primary Schools 3%.
3. The data says that percentage of discussion on a health topic in the assembly is just 1% in Boys Primary Schools, 2% in Girls Primary Schools and 2% in Mixed Primary Schools.
4. It is shown that 100% electricity is available in Boys Primary Schools, 93.5% in Girls Primary Schools and 98.8% in Mixed Primary Schools.
5. It is indicated that, in 17% Boys Primary Schools, 15% Girls Primary Schools and 18% Mixed Primary Schools, classrooms are well lighted.
6. It is shown that 17% of Boys Primary Schools, 13% of Girls Primary Schools and 18% of Mixed Primary Schools were found well ventilated. It makes overall 48% and in rest 52% schools the classrooms were not properly aerated, and had a foul smell.
7. The data reveals that 35% pupils bring their lunch from home, while 65% pupils do not. The data also reveals that there is a weak trend of bringing lunch from homes.
8. It is shown that the pupils are more interested in having junk food, rather than home made. Data shows that 45% in the Boys, 35% in the Girls and 35% in the Mixed Primary Schools buy lunch from the hawkers.

9. The data shows the level of encouragment done by the parents and school teachers to the students for lunches. Only 2% of the Boys Primary Schools promote the home made food. Also, 10% of the Girls Primary Schools are encouraged to bring their lunch and just 5% of the teachers in Mixed Primary schools provide an encouragement to the students.
10. The data indicates that the immediate medical facility, i.e the first aid box is not available at all in the Boys Primary Schools. Only 2% of the Girls Primary Schools and 2% of Mixed Primary Schools have it. Rest 98% do not bother about the facility. The first aid box with Mixed Primary Schools were poor in condition and contained expired medicines.
11. The nil reveals that there is no specified doctor or dispensray provided for the medical care of pupils.
12. The nil data describes that there is no vaccination facility provided to primary scgool pupils against day to day infections.
13. The nil data describes that there is no first aid training arranged for primary school teachers.
14. Only 15% Boys Primary Schools, 10% Girls Primary Schools and 10% Mixed Primary Schools have the facility of playground. Data illustrates that on an average 35% primary schools are blessed with playground facility. Rest 65% are deprived of this facility.
15. Data shows that the use of play ground in Boys Primary Schools is 15%, in girls primary schools is 10% and in a Mixed Primary Schools is 12.5%. The table tells us that the use of playground for physical activities, even where available, is very little that is an average of 12.5%, and the remaining 87.5% schools are not using playground for physical exercise, sports and games even with the availability of playground.
16. The nil data reveals that there is no games or P.E. period provided in the time table.
17. The nil data reveals that there is no PTI (Physical Training Instructor) provided to primary schools.
18. It is revealed that garbage is dumped along boundary walls of 51.9% of Boys Primary Schools, 65.6% Girls Primary Schools, 57.1% Mixed Primary Schools.
19. The availability of water in Boys Primary Schools is 94%, in Girls Primary Schools is 84.1% and in Mixed Primary Schools is 96%. In 91.3% of the sampled schools had water available while 8.7% of the schools did not have the facility of drinking water.
20. The nil data shows that there is no avaliablility of filtered drinking water, in any of the pirmary schools.

CONCLUSION

Following points have been concluded from the study:

General health of pupils was not satisfactory. 40-45% of absenteeism was due to illness. The study revealed that only 25% of schools educate pupils about their health and personal hygiene and use the assembly timings in the most purposeful ways for grooming of innocents pupils physical, mental and Spiritual development at their early age.

It was observed that light and Electricity connections were provided to 97.4% Govt Primary Schools but the classrooms were congested, not properly well lighted and ventilated creating ill effects on eye sight of the pupils. Due to suffocation and unavailability of Fresh Air, pupils suffered from cough, cold and allergy problems.Mosquitoes and insects made their way under the benches and 20% pupils suffered from Malaria fever.

It was observed from the study that 11.2% schools had Playground available. The ground surface was uneven and could not be used for physical exercise or sports.

In 55% Govt Primary Schools, sitting arrangement was not according to age of pupils. Big benches without backs create unhealthy effect on pupils' physical posture and they get tired sitting on these uncomfortable seats.

The study showed that in 100% of Govt Primary Schools, there were no medical facilities available. No periodic medical checkups were arranged, no sick room and library was available. Physical exercises, educational excursions, health exercise were not observed as an important part of Primary education. Hand pumps were also seen in those schools where there was not other source of water supply.

It was observed by the researcher that water connections were provided in 91.3% primary schools. But water storage was not satisfactory as drink up water tanks were not clean at appropriate Intervals. Filtered water for drinking purpose was not seen at any of the Govt Primary Schools.It was observed that 80% pupils do not take breakfast in the morning and they depend on junk food.

During the study it was observed that 45% parents seemed not taking care of children's break fast. Due to their ignorance, poverty and heavily populated homes, they were not able to provide breakfast to their children in the morning.

RECOMMENDATIONS

In the light of findings and conclusion, following recommendations were made:

- The study strongly recommends that the school assembly should be conducted purposefully and the topics related to pupils' physical, mental, social & spiritual developments should be discussed frequently.
- There is a need of clean, happy & hygienic environment in the Primary Schools. Sanitation and toilet facility should be provided and improved in every school.
- The study strongly recommends to celebrate the important days, e.g.: cleanliness day, lice-free day, dustbin day, personal hygiene day, no-smoking day and green day etc.
- Activities and presentations on National Heroes should be arranged to activate the pupils, their parents, teachers, and the school management.

- Emphasis should be made on cleanliness in the school and outside the school.
- Major reparation and renovation of primary school is recommended at least once in two years.
- Proper seating, lighting and ventilation arrangements in the class rooms are recommended very strongly.
-

REFERENCES

- Bailey, D., Hawes, H., & Bonati, G. (Eds). (1992a). Child-to-Child A Resource Book. Part 1: Implementing The Child-to-Child Approach. London: Child-to-Child Trust.
- Bailey, D., Hawes, H., & Bonati, G. (Eds). (1992b). Child-to-Child A Resource Book. Part 2 Child-to-Child Activity Sheets. London: Child to Child Trust
- Bobbitt, John Franklin. (1918) The Curriculum. Boston: Houghton Mifflin,
- Barnekow, V (2006), The European Network of Health Promoting Schools – From Iceland to Krgystan- Promotion and Education Xii, 3-4 IUHPE, Paris.
- Bell, J (1993). Doing your Research Project: A Guide for First Time Researchers in Education and Social Sciences**.** Milton Keynes, Open University Press, London.
- Bernard, H. Russell (1995). Research Methods in Anthropology, Second Edition, Alta Mira Press, London.
- Barnekow Rasmussen V, Rivett D, Burgher MS (1999). The European Network of Health Promoting Schools: the allliance Settings: Challenges to generating evidemce of effectiveness, Health Promotion International.
- Benson Edmund, Suzanne, Arise Basic Health 101 Series, ARISE Foundation
- Chiwoza Bandawe. A synopsis of the field of health education in Malawi. Malawi Medical Journal; December 2009
- D. Lindsay (2010) :Personal Hygiene Personal Care (Essential Clinical Skills for Nurses) Wiley-Blackwell
- Deal T Benham, Hodges Bonni, Role of 21st Century Schools in Promoting Health National Education Association Health Education Network (NEAHIN)
- Doris, M (2006): Shivji F, Bhutta S. Health Action Schools: Class I to Class V. Teacher's Guide. Save the Children, Child-to-child Trust, AKU-IED, Karachi, Pakistan

- Ferron, S.; Morgan, J. and O'Reilly, M. (2006). Hygiene promotion: A practical manual for relief and development. 2nd ed. Warwickshire, UK, Practical Action Publishing.
- Gordon, J. and Turner, K. (2003). School Staff as Exemplars – Where is the potential?
- L. R. Gay (2008) Educational Research: Competencies for Analysis and Applications, Prentice Hall.
- M. Jansen, (2007) Mind the gap: Collaboration between practice, policy and research in local public health, Universitaire Pers Maastricht
- Morley, David and Lovel, Hermoine (1986): An illustrated discussion of child health, society and poverty in less developed countries. "My Name is Today" Mc Millan Education Ltd. (1986). Printed in Hong Kong.
- Messer.E (1986) The "small but healthy" hypothesis: Historical, political, and ecological influences on nutritional standards, Springer Netherlands
- Parkes, Louis. C (1890): Hygiene and Public Health, London, Lewis
- Pridmore. P, Stephens. D (1999) Child-to-child: the parameters in Children as partners for health p69-92 zed books: London.
- Pridmore P. & Kassam-Khamis, T. (2006). Small is Healthy – A Guide to Promoting Health in Small Schools**.** AKU-IED Karachi, and Child –to-Child Trust, UK
- Snel, Mariëlle, Ganguly, Sumita and Shordt, Kathleen (2002). School Sanitation and Hygiene Education – India. Child to Child Trust and UNICEF India.
- Official page of United Nations Organization from www.un.org
- Official page of Water Supply and Sanitation Collaborative Council from www.wsscc.org

AJMR
A Publication of TRANS Asian Research Journals
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

BEING A TEACHER IN KNOWLEDGE SOCIETY : TEACHING AS A LIFELONG PROCESS OF LEARNING

Dr. Kavita Suri*

*Associate Professor/Assistant Director,
Department of Lifelong Learning,
Formerly, Centre for Adult, Continuing Education & Extension,
University of Jammu,
Jammu and Kashmir.

ABSTRACT

India is emerging as a knowledge society. The thrust is on acquiring new knowledge with the integration of formal, non-formal education and informal education which is available to us in the form of unlimited learning opportunities at every step of our lives. In the changing world and globalization, lifelong learning has become quite important which brings to the fore the fact that one has to keep him or herself abreast with the change around and adapt to lifelong learning situations. Lifelong learning helps in smooth transition in a rapidly changing workplace environment. This paper explores the crucial role that a teacher has to play in a lifelong learning process in the context of Indian society. The paper focuses on the significance of a teacher in lifelong learning sector in India in striving for continuous improvement in the learners through reflective practice. A teacher has to create and provide effective and stimulating opportunities for learning through high quality teaching that enables the development and progression of all learners.

KEYWORDS: *Lifelong learning; India; Knowledge Societies; learning opportunities.*

INTRODUCTION

With the changing world and globalization, the learning needs of the society around us are also changing. The society is no longer the traditional learning society but has emerged as a "lifelong learning society". The world today realizes the fact that learning occurs at all stages of life, in different forms and in variety of arenas. Learning never ceases and continues till death, hence the concept of 'cradle-to-grave' for lifelong learning gains prominence in the present day world and work environment. Thus we can say that the present society around us is a knowledge society; it is a human society in which thrust is on knowledge for justice, solidarity, democracy and peace. This is a society in which knowledge is a force for changing society.

DEFINITION OF LIFELONG LEARNING

Lifelong education covers "formal, non-formal and informal patterns of learning throughout the life cycle of an individual for the conscious and continuous enhancement of the quality of life, his own and that of society" (Dave, 1976). According to the Free Dictionary, Lifelong learning is the provision or use of both formal and informal learning opportunities throughout people's lives in order to foster the continuous development and improvement of the knowledge and skills needed for employment and personal fulfillment. Lifelong Learning is more necessary than ever in our changing world, ecologically and economically precarious world. Lifelong learning has also been defined by

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

the Commission for a Nation of Lifelong Learners (1997), as "a continuously supportive process which stimulates and empowers individuals; help to acquire all the knowledge, values, skills and understanding they will require throughout their lifetimes...and to apply them with confidence, creativity, and enjoyment in all roles, circumstances, and environments."

This definition emphasizes lifelong learning as:

1. Continuous (it never stops);
2. Supportive (it is not done alone);
3. Stimulating and empowering (it's self-directed and active, not passive);
4. Incorporating knowledge, values, skills, and understanding (it's more than what we know); Spanning a lifetime (it happens from our first breath to our last);
5. Applied (it's not just for knowledge's sake);
6. Incorporating confidence, creativity, and enjoyment (it's a positive, fulfilling experience); and
7. Inclusive of all roles, circumstances, and environments (it applies not only to our chosen profession, but to our entire life).

In this context UNESCO has highlighted the following four pillars of lifelong learning for the 21st Century.

- Learning to know by mastering cognitive skills & collaboration.
- Learning to do by mastering skills & production.
- Learning to be by admitting multiple intelligent (MI) and sustainable human development.
- Learning to live together by dialogue and tolerance.

These four pillars of knowledge cannot be anchored solely in one phase in a person's life or in a single place. There is a need to re-think when in people's lives education should be provided, and the fields that such education should cover. The periods and fields should complement each other and be interrelated in such a way that all people can get the most out of their own specific educational environment all through their lives. The advantages of lifelong learning in the long run in real life settings in work environment are immense. These are:

EMPLOYERS

- Better trained workforce

- Up-to-date knowledge

- Improve employee morale and commitment

- Improve staff problem solving potential.

EMPLOYEE

- Improve promotion prospects

- Improve employability

- Improve earning potential

- Gain university-recognized or accredited qualifications.

LEARNERS AND LIFELONG LEARNING

In the Knowledge Society, every learner is a lifelong learner. To keep up with the changing world and the new emerging challenges, a learner has to keep him or herself updated with the new emerging knowledge and thus there is increasing need to focus on lifelong learning. The content and methods of basic education have to take into account preparation for lifelong learning. The development of lifelong learning needs an integration of education into the real world. The challenge for lifelong learning is to fundamentally rethink learning, teaching, and education for the information age in an attempt to change mind-sets. Lifelong learning involves and engages learners of all ages in acquiring and applying knowledge and skills in the context of authentic, self-directed problems. By integrating working and learning, people learn within the context of their work on real-world problems.

The mental activities involved in learning may be divided into four categories:

(a) Social interaction,

(b) Processing verbal and other symbolic information,

(c) Direct experience, and

(d) Reflection

TEACHERS AND LIFELONG LEARNING IN INDIA

Teachers have a crucial role in lifelong learning sector. They have to value all learners individually and equally and thus strive for continuous improvement through reflective practice. A teacher has to create and provide effective and stimulating opportunities for learning through high quality teaching that enables the development and progression of all learners.

The challenges for a teacher in lifelong learning society are immense. Being a teacher in the Knowledge society requires new specific competencies: a teacher has to deal with new knowledge, new ways for accessing knowledge; with a networked world and with new types of co-operation and collaboration; with a society in which knowledge plays a crucial role. As such, teaching in not a static but an evolving, continuous and lifelong process. Learning has become a determining factor in ensuring that content and relevance of teaching pedagogy is in accordance with the technological practices existing. The concept of continuous learning has become important because it places priority on acquiring, adapting and learning from change. It is closely related to continuous professional development, not just taking courses but developing skills and learning how to learn so that life's experiences become a learning lab. The concept of continuous learning for a teacher has become quite prominent over the past few years.

PRE-REQUISITES OF LIFELONG LEARNING FOR TEACHER

In the teaching profession acquired knowledge, skills and competencies need to be optimally used to suit the changing educational scenario. If the teachers do not understand the reforms and cannot apply them and are not committed to them, they will not be able to achieve the set goals of

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

improving the quality of education. Lifelong learning is therefore about acquiring and updating all kinds of abilities, interests, knowledge and qualifications from the pre-school years to post-retirement. Teachers are expected to value all forms of learning formal, non-formal and informal. A teacher has to know and identify the needs of the learner, his motivation levels and his immediate environment. The teacher needs to identify ways to offer effective support for learning, recognize learner entitlement in the learning process, enhancing learners' access to and participation in programmes of learning. A lifelong learner has to be motivated for enjoying his learning so that effective and appropriate methods and strategies are adopted for teaching and supporting learning and learning objectives

In lifelong learning, the teacher has to be careful about effective communication and interaction with the learner and for this there has to be an impressive verbal power, proper and effective teaching and learning sessions in which not only the learner has to be encouraged to take responsibility of their own learning but also encourage learners' understanding of the assessment process and its importance

Equally important is for a teacher to remain in touch with current trends and developments in one's field and associated domain of knowledge and on the basis of it, seek regular feedback about the world happenings and its relevance with one's activities, remain open to the feedback and positive criticism and make appropriate adjustments with ongoing feedback so as to ensure meeting closely priorities and values. The follow up in lifelong learning settings has to be building of a body of knowledge to solve problems and generate great ideas which can further inspire lifelong learners and encourage him or her to develop a temperament of their own to think more innovatively and rigorously and thus develop a culture of learning at all stages of life.

CONCLUSION

Most of the teachers in Indian settings are still not comfortable with the concept of lifelong learning in the knowledge societies and the traditional formal education is still part of most of their routine teaching. However, the teacher needs to understand that if a learner is not encouraged for lifelong learning, he or she may be left behind and the opportunities surfacing in the new global knowledge society may not be available to them. The responsibility lies on the shoulders of the teacher to use lifelong learning as a guiding principle to shape the lives of the learners and also encourage other fellow teachers to adopt lifelong learning to development and strengthen their teaching which recognizes the need to grow and learn. Every teacher has to inculcate a variety of required skills and develop suitable attitudes to become lifelong learners. A teacher can contribute to effective lifelong learning in the learners by following steps:

- Reflection
- setting goals
- assessing knowledge and skills
- creating a learning plan
- putting the plan into action
- evaluating and refocusing

A teacher has to do lot of reflection and fully understand the important of lifelong learning and thus align it with curriculum, set goals to achieve these and then assessment knowledge and skills of the learner which can effectively promote student-achievement and create environment to support learning which will help them grow as lifelong learners.

As lifelong learning is concerned with the personal growth of individuals throughout their lifespan, pedagogy related to different learning styles and different types of intelligence need to be demonstrated by the teacher besides creating new learning opportunities including integrating formal, non-formal and informal learning with new information and communication technologies. The teacher can use transaction strategies like collaborative techniques, experiential learning, effective technology, reflective model, etc. After the teacher put the plan into action, there has to be evaluation and if the need arises after assessing the outcomes of the lifelong learning process, there can be refocusing of the entire process. This can result in a stable learning society in India which otherwise is not possible unless teachers in training and teachers in service understand and come to terms with lifelong learning ideas, concepts and practices.

REFERENCES

1. Cropley, A.J. & Dave, R.H. (1978). Lifelong Education and the Training of Teachers, Hamburg: UNESCO.
2. Day, C. (1999). Developing teachers: The challenges of lifelong learning, London: Routledge Falmer.
3. Faure, E. et. al. (1972). Learning to Be: The World of Education Today and Tomorrow, Paris: UNESCO.
4. UNESCO, (1997), Teachers as Lifelong Learners: Case Studies of Innovative In-Service Training Programmes in the E-9 Countries, Paris.
5. Martin, I. (1999). Lifelong learning: Stretching the discourse. In P. Oliver (Ed) Lifelong and continuing education: What is a learning society? (pp. 181-194). Aldershot: Ashgate.
6. Siens, C.M., & Ebmeier, H. (1996). Developmental supervision and the reflective thinking of teachers. Journal of Curriculum and Supervision, 11 (4), 299-319.
7. Todd, S. (ed.) (1997). Learning desire: Perspectives on pedagogy, culture, and the unsaid**.** New York and London: Routledge.

A Publication of TRANS Asian Research Journals

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

DESIGNING MULTIFACTOR SECURE AUTHENTICATION ARCHITECTURE FOR FINANCIAL TRANSACTIONS

Dilbag Singh*; Kanchan Arora; Poonam Punia*****

*Associate Professor,
Department of Computer Science and Applications,
Chaudhary Devi Lal University,
Sirsa, India.
**Department of Computer Science and Applications,
Chaudhary Devi Lal University,
Sirsa, India.
***Librarian,
National College of Education,
Sirsa, India.

ABSTRACT

Security is an alarming issue for web based online financial transactions. There are various internet threats which affect the security system of internet and increase risk for electronic transaction. Current authentication techniques for online payment system are not very much secure. Single factor authentication technique for online payment system is not very secure to protect users from identity theft, as a result any attacker gain the access on confidential information of the user. Strong customer authentication is necessary to enforce security and assist financial institutions to detect and decrease user identity thefts. Hence, there is need of Multifactor Authentication techniques for secure financial web transactions and to increase faith of users on wireless financial transactions. An authentication system is required that is highly secure.

KEYWORDS: *Authentication, Cryptograhy, Security, Financial Web Transaction.*

1. INTRODUCTION

Internet represents an insecure channel for exchanging information leading to a high risk of intrusion or fraud, such as phishing. Different methods have been proposed for secure transfer of data, including encryption, cryptography etc. [1]. IPsec Protocol is designed to protect communication in a secure manner using TCP/IP. It provides security and authentication at the IP layer using cryptography. Some online sites offer customers the ability to use a six-digit code which randomly changes. The key on the security token have mathematical computations built-in and manipulate numbers based on the current time built into the device. Email messages can be protected by using cryptography in various ways. The first two methods, message signing and message body encryption, are often used together; however, encrypting the transmissions between mail servers is typically used only when two organizations want to protect emails regularly sent between each other. A Message Authentication Code uses a secret key to encrypt a message. The Message Authentication Code protects both a message's data integrity as well as its authenticity [2]. Selection of an appropriate authentication key is one important characteristic of securing online services. Password, hardware token, software tokens, one-time password and biometric techniques can be used for authentication [3]. Financial agencies consider that single-factor authentication is not appropriate for financial transactions. Financial institutions should assess the security of such authentication techniques and protect their customer's data from various online threats such as phishing, malware access and pharming. In case the use of single-factor authentication is not appropriate, financial institutions should implement multifactor authentication. Multifactor Authentication will increase the system security [4][5]. Secure wireless payment system is challenging area from the last few years. Mobile payment is being used for M-commerce to support point-of-sale/point-of-service payment transactions using mobile devices such as cellular phones, smart phones and personal digital assistants, or mobile terminals. M-payment systems is widely used by merchant to make wireless based payment, content vendors, and information and service providers to process and support m-payment transactions based on wireless commerce applications[6].

Financial organizations offer internet based financial services that need an effective method of authentication. A single factor authentication such as user name and password is inadequate for user identity verification and vulnerable to various internet attacks. One-time password system is more secured than ordinary password based system, it is difficult to break and secured from unauthorized users. A biometric secure authentication based system is also used. Still there is a need to pay more attention towards wireless money mobile transactions. In present study a model for Multi-factor Authentication techniques is proposed to increase the security of financial transactions.

2. OBJECTIVES OF THE STUDY

The objectives of present study are listed below:-.

i. To study different payment system.

ii. To study the Existing authentication methods.

iii. To provide a highly secure wireless environment for financial web transaction that is simple to use and deploy.

iv. To achieve secure web transaction using cell phones/PDA.

v. To design a model based on multifactor authentication that is more usable and secure.

3. RESEARCH METHODS: The present study is based on experimental research reason as it is based on the concept of multifactor authentication for the web transactions and authentication is verified through by experimentation. Desired level of security cannot be ensured using traditional methodology. In present study, security mechanism has been proposed to reduce the online frauds. Authentication mechanism has been improved by adding more provisions to get high degree of security. The present study is analytical as facts or information already available are used to make the analysis of the security system. In this research study, factors of authentication are studied and analysis has been made so as to propose the new model to increase the security in case of wireless transactions.

4. TOOL USED IN THIS RESEARCH: Various tools are available for multifactor authentication of web transactions as discussed below:

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

4.1 TIC GENERATION AND DISTRIBUTION: Important module in the protocol is generation of TIC codes at the financial institution server, distribution of TIC's to the customer and encryption of TIC's before storing them on client environment. TIC codes are pseudo random codes and can be generated with pseudo random number generation algorithm.

4.2 ENCRYPTION AND DECRYPTION: To secure the data used in this model, encryption algorithm is used. The TICs are stored on the cell phone/PDA in an encrypted format and password protected. The data which are used in encrypted form which is secure to use. AES Rijndael algorithm is used for encryption. To get security a block size of 16 bytes with 128-bit key encryption is used. This combination is suitable to implement operations on J2ME devices due to the limited resources like speed and memory. The user will insert the local password of TICs to open the encrypted list of TICs and can Store on phone/ PDA select any TIC from the list to initiate financial transaction. This selection of TIC automatically decrypts the selected TIC and displays it on the user screen.

4.3 J2ME & MID LETS: J2ME is the preferred development platform the portability of Java code, the Java phone can process data locally which reduces the network traffic, and the capability to establish a new security policy on the client that will encrypted only sensitive data rather than encrypting complete transaction data. Mobile information device applications (MIDlets) can make use of the WAP to perform HTTP network connection, without requiring TCP/IP. Java Servlets are used to implement the server side functionality. Java Servlets are the Java platform technology for extending and increase the functionality of Web servers.

5. ASSUMPTIONS: In the proposed work, following assumptions have been made:

- The user has one cell phone with java enabled service.
- On a mobile connection user has activated General Packet Radio System (GPRS) connection. In GPRS connection, the charging amount depends solely on the amount of exchanged data and not on the duration of the connection.
- To make system less vulnerable authentication should be independent of the web server as the web server is generally vulnerable to several types of hacking attacks. Hence, the authentication is done by the separate Authentication Server offered by the financial service provider. This makes the system more secure to maintain confidentiality and privacy of customer's data.
- Cell phone should have capabilities to send and receive SMS.

6. PROPOSED MULTIFACTOR AUTHENTICATION SYSTEM: In this section, architecture for multifactor authentication system has been proposed. In the present work, suitable encryption/decryption techniques are used to keep TICs as secret codes on cell phones/ PDAs. The proposed technique may provide highly secure services to financial institutions. Single-factor authentication is inadequate for high-risk transactions. To provide secure web transactions using cell phones multifactor authentication techniques should be

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

used. In this system, multifactor authentication is used in two different modes. The implementation is performed using TIC and SMS.

TIC AUTHENTICATION: TIC Authentication is the technique which is used to identify both the user and the ongoing transaction. TIC code certifies that the current transaction has been initiated by the right person and it is a valid user who is trying to access account. TIC code is:

- Issued by the Bank or Financial institution to its customer.
- 8 bit or 16 bit Pseudo randomly generated code which is assigned to the customers.
- May be complicated digit sequence or combination of numeric or alpha numeric characters.
- One TIC code is used only once that is a unique TIC is used for each transaction.

It is assumed that financial institutions are responsible to store TIC generation logic and algorithm confidentially and have specific parameters to decide the complexity of TICs format. Financial institutions are also responsible for upgrading from time to time the TIC generation logic and data and also to keep it absolutely secret. The user will get the list of TIC codes from the bank or financial institution according to its requirement.

Financial institution will keep the record of issued TIC codes to its customers and match the same code during the online web transaction. A TIC code is cancelled after each successful transaction. Validity time period of TICs can be decided according to issuing organization policies, which provides an extra security feature in the system.

SMS AUTHENTICATION: Another method to validate user transaction is an SMS confirmation. Financial institution stores user cell phone number to provide multifactor authentication. It is believed that users will carry cell phone and can receive/send the short message. As a result, only valid users who have account will receive confirmation SMS from the authentication server. After getting an SMS the user can acknowledge the choices. When authentication server receives “YES” than it is taken that the user is valid and the user may be allowed to initiate the transaction. On other hand, if the user sends a “No” or the user does not send any response within a specified time period then the transaction will be rolled back and terminated.

7. **STEPS OF MULTIFACTOR AUTHENTICATION:** Multi factor authentication is used to verify user identity by using following steps:

- **WEB-BASED BASIC AUTHENTICATION:** Firstly, the user has to prove their identity to the web authentication server using a web-based username/password basic authentication process.
- **TIC AUTHENTICATION:** After authenticating the user, the web authentication server demands a TIC code from the user. Now Cell phone/ PDA user will insert a onetime TIC code to uniquely identify their transaction and prove authentication to the web authentication server. TIC code would be selected from the stored list of TICs which were issued by authorized financial institution and uniquely assigned to its customers.

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

- **SMS CONFIRMATION:** After the TIC code identification and validation the remainder of the transaction will proceed. At the end of the transaction the user will get an SMS from the web authentication server to confirm financial transaction. Security of the proposed system will also depend on the security of encrypted messages sent by SMS and algorithm used for message encryption.

8. PROPOSED ARCHITECTURE: Basic flow of messages has been presented for implementing the proposed protocol. This also allows us to identify different components of the system and its functionalities. Figure 1 shows the Protocol for secure web authentication using Cell Phone/PDA. This protocol starts with the action of money transfer decided by user. It is assumed that the user information is available at server which includes user's cell phone number. A separate authentication server is recommended to maintain strong security to authenticate users and their transactions with regular web and database servers of user information. As illustrated in Figure 1, following are the steps:

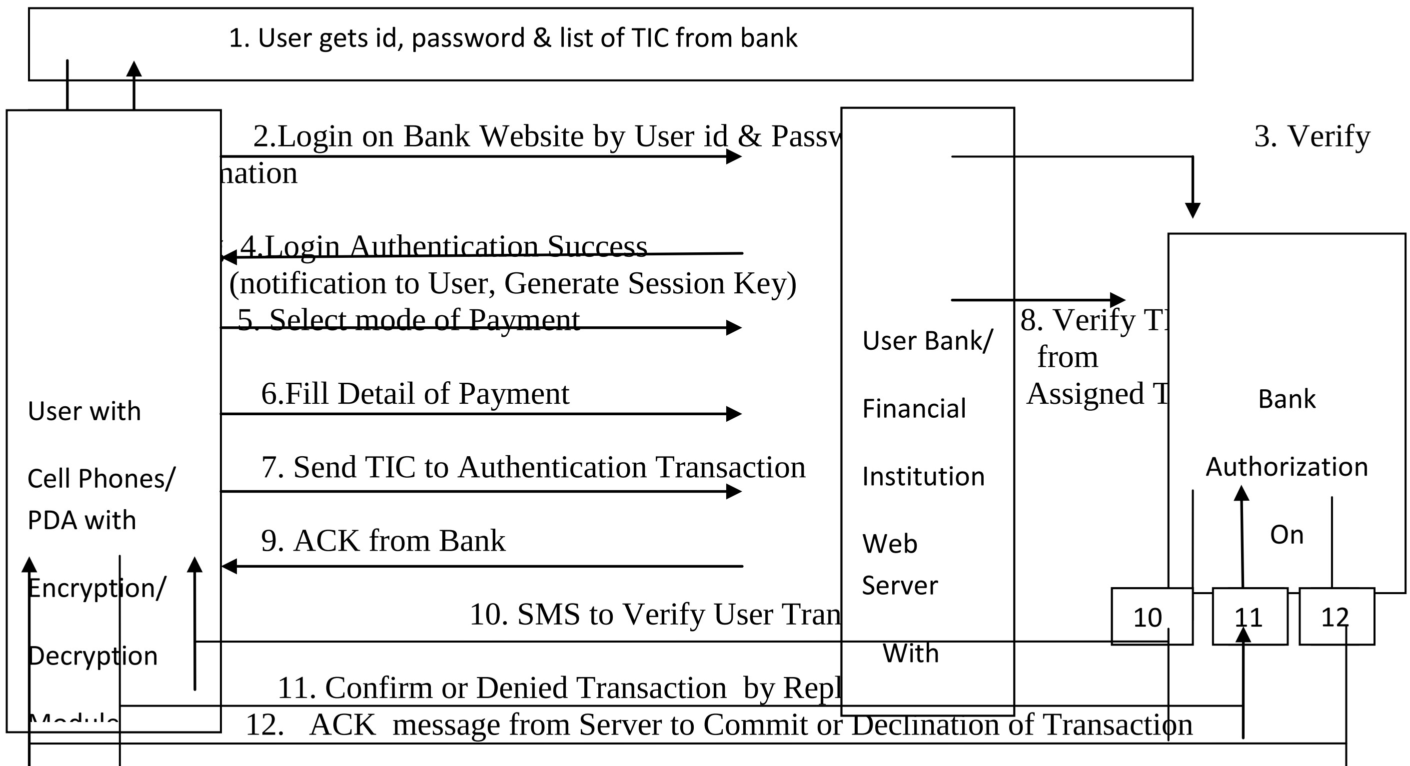


FIG 1: ARCHITECTURE OF WIRELESS PAYMENT

Step wise description of the above architecture is as follows:

- User gets username/password and Transaction Identification codes (TICs) from the Bank. Each user has only one username/password to their account, but TIC code is unique for each online transaction. So users will get list of TIC codes from the bank authority or authorized financial institution according to requirement.
- A Web-based username/password basic authentication is used to identify the user to the Web server.
- The username and password will be verified by the Bank Authentication Server. After user recognition the user will get option screen to proceed further.
- The user will get a notification of a successful logging with welcome message. This step also generates a session key.
- The user will select mode of payment. There are two modes of payment: Credit Card based system & Account based Electronic transfer. It is straightforward to add other modes to system.
- User will insert the details of payment by filling in a simple form with details such as merchant's bank and branch code information, invoice number and account number to which an amount has to be transferred.

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

- The user will insert a TIC code by simply choosing a TIC code from the stored list of TICs. Note that TICs are stored, with password protection, with a local encryption on the cell phone. The user will decrypt and insert the TIC in the financial transaction to give unique authentication to each web transaction. All details of the transaction, with attached TIC, will be further encrypted by AES encryption technique and submitted to the bank web server. The bank web server would pass it on to the authentication server where it would be decrypted and matched with the list of TICs that have been issued to the user.
- The bank authorization server decrypts the received message and extracts the TIC. It then verifies the TIC received from the user by comparing it with the stored list of TICs in the user account information at server database. If both TICs match then it cancels the used TIC from its database and goes to the next step. If no TIC matched with those in database then the authentication server will deny the user transaction and display appropriate error message to the user.
- Bank server generates an acknowledgement to the user, which makes user free to logout from the web portal and wait for a confirmation SMS or to initiate another financial web transaction.
- After completing the database updating with respect to the ongoing transaction, the authentication server will send an SMS to the user's cell phone to verify the initiated web transaction. The cell phone number of the user is available on authentication server.
- The user would confirm initiated transaction by choosing "YES" or deny it by choosing "NO" by replying confirmation SMS.
- The server will notify the user by a Message to acknowledge the successful completion of transaction or declination of the transaction.

In the above module, all the transactions from client to server or vice-a-versa are strictly in encrypted format. Encryption and decryption module is installed on the cell phone/PDA of the user and on server side environment. From the above description it is clear that after authenticating the user using the basic login/password mechanism, the user and transaction are authenticated again using the TIC mechanism and the transaction is again verified using SMS.

SYSTEM FOR TWO WAY AUTHENTICATION TO AUTHENTICATE BOTH THE PARTIES

Web site is authenticated to the customer along with authenticating the customer identity. Currently, most of the financial institutions do not authenticate their web sites to the customer before carrying out sensitive information. Financial institutions can provide authentication of their web site to the customer which helps customers in selection of legal web sites over spoofed site. Secure one-way authentication mechanism for wireless payment is shown above. Extended two-way authentication mechanism is being discussed now. In this mechanism, service provider is authenticated to the user in addition to the authentication of the user and transaction. In order to develop an architecture providing two ways authentication, following terms have been considered:

I. **USER:** A user is a valid account holding customer of the bank.

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

II. **CUSTOMER AGENT (CA):** CA is a software module which is installed on the user's mobile device.

III. **MERCHANT AGENT (MA):** An MA is an online service provider and merchant website by which the users perform online purchasing / transactions.

IV. **CUSTOMER'S BANK:** This is the bank in which the user has a valid account, it also contains the authentication server necessary to authenticate the users and their transactions.

V. **MERCHANT BANK:** This is the bank in which the merchant has a valid account; the merchant Bank is also responsible for authenticating the merchant services.

Two way Authentication protocol starts when the MA sends an invoice detail to CA related to purchase goods with payment information and terminates when the MA receives acknowledgement of received payment from Merchant's bank as shown in Figure 2, the flows for the payment transactions are as follows:

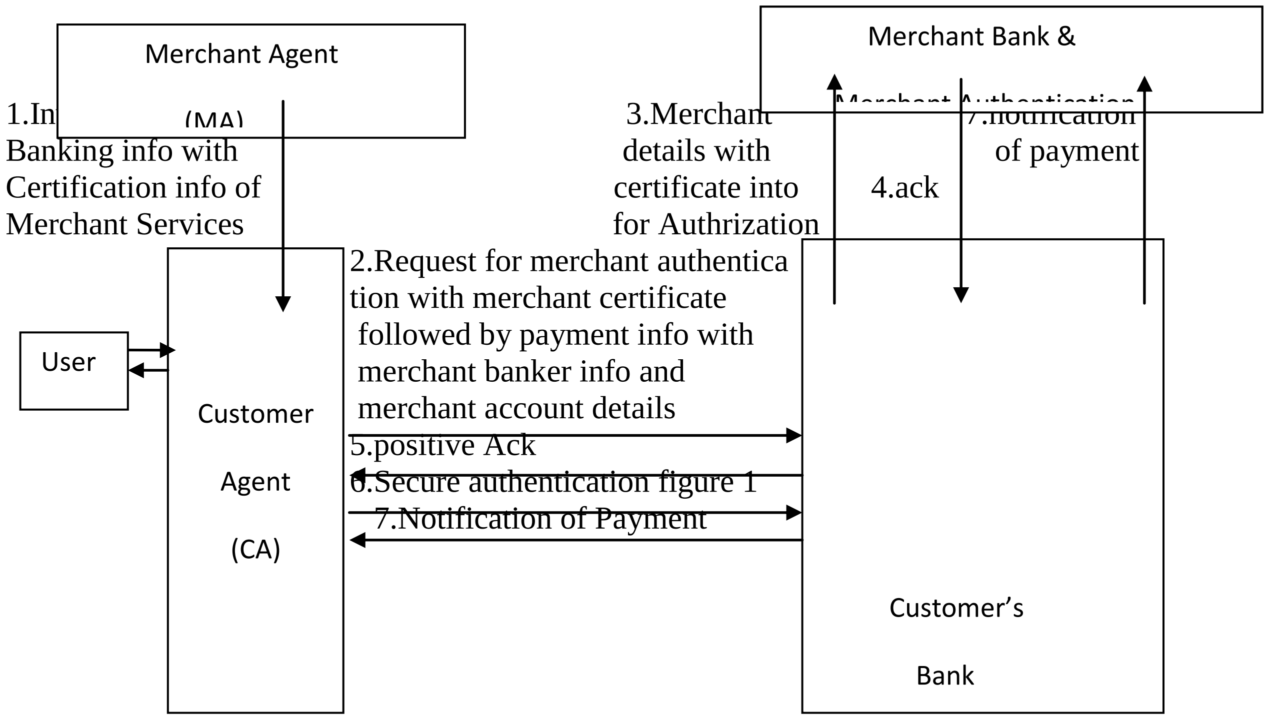


FIG 2 PROTOCOL FOR WIRELESS PAYMENT: TWO WAY AUTHENTICATION

i. The MA generates an invoice related to purchasing detail and sends the Merchant's encrypted banking information and authentication certificate with the invoice and payment details to the CA.

ii. The CA requests for authentication of Merchant to its Bank with the Merchant bank details, the merchant account details and Merchant authentication certificate provided by the MA.

iii. The Customer Bank forwards the Merchant details with the authentication certificate to the Merchant bank for valid authentication of the merchant.

iv. The Merchant Bank / Authentication party sends a positive or a negative acknowledgement to the customer bank which confirms the validity of the merchant or invalidates the merchant.

v. In case of validation, the Customer's bank sends positive ACK to the CA and goes to the next step or if merchant certificate is not valid, the Customer bank will notify the CA with that information. If Customer Bank received negative or suspicious ACK of the merchant authentication it simply rejects the user transaction with valid security reason.

vi. After valid authentication of merchant, here secure web authentication protocol will run as shown in Figure 1, to authenticate customer before making payment. If the Customer Bank received positive acknowledgement of the Merchant it demands a TIC for Customer authentication. After a TIC validation it sends a confirmation SMS to the customer to verify initiated transaction

vii. After getting an SMS confirmation from the customer, the customer Bank will send payment notification to the Merchant bank as well as to the customer with the customer details and payment detail.

viii. Merchant Bank will send confirmation of received payment from the customer to the MA with relevant details such as invoice number and customer id and amount received.

The proposed architecture does not route payment transaction data via the MA, hence, the approach is less burdensome. It does not route the customer payment instructions from the merchant portal, so payment details cannot be modified by the merchant.

CONCLUSION

In the present architecture, application-layer security solution is used for wireless payment system to implement an end-to-end authentication and to maintain the data confidentiality between wireless client and server. This system is based on multifactor authentication – TIC validation and SMS verification are the strong features of the system. This architecture supports the two way authentications to authenticate both the parties. Hence, this architecture provides a highly secure wireless environment for financial web transaction that is simple to use and deploy. This architecture ensures the protection against lost or stolen devices for secure web financial transactions and provides the security against the man-in-the-middle attack. This will help to reduce fraud and increase security for online applications and increases faith of users on wireless financial transactions.

REFERENCES

1. Ayu Tiwari, Sudip Sanyal, Ajith Abraham, Sugata Sanyal and Svein Knapskog, ”A Multifactor Security Protocol For Wireless Payment-Secure Web Authentication using Mobile Devices”, IADIS International Conference, Applied Computing 2007, Salamanca, Spain, pp. 160-167, February 2007.

2. Http://en.wikipedia.org/wiki/Internet_security.

3. Guidelines: “Guidance on Multi-factor Authentication”, e-GIF Operations, State Services Commission, Wellington, Version 1.0, June 2006. (http://www.e.govt.nz).

4. White paper: AEP Smartgate Security, Strong Multi Factor User Authentication for secure information sharing, white paper, AEP Networks. http://www.aepnetworks.com/products/downloads/wp_SmartGateSecurity.pdf.

5. White paper : Enhanced Online Banking Security , Zero Touch Multi-Factor Authentication http://www.entrust.com/resources/download.cfm/22600/EfraudWhitePaper.pdf.

6. E. Limor, “Using Public Key Cryptography in Mobile Phones”, white paper, VP Research, Discretix Technologies Ltd.,2002. http://www.discretix.com.

7. J. Daemen and V. Rijmen, “Rijndael, the advanced encryption standard,” In Dr. Dobb's Journal, Volume 26 Issue 3, pp. 137-139, March 2001.Websites and Articles: cts/sjwtoolkit.

8. Pohlmann, N. “Authentication via Mobile Phone —Breaking the Ground” Business Briefing Global Security Systems, 2002.

9. Guidelines: “Authentication in an Internet Banking Environment “, Federal Financial Institutions Examination Council, Arlington.

10. Http://en.wikipedia.org/wiki/Systems_modeling.

THE NON-VISUAL SIDE OF INVISIBLE EMPLOYEES: A STUDY

Dr. B .Chandra Mohan Patnaik*; Dr. Ipseeta Satpathy**

*Associate Professor,
School of Management,
KIIT University,
Bhubaneswar, Odisha, India.
**Professor
School of Management,
KIIT University,
Bhubaneswar, Odisha, India.

ABSTRACT

The present paper is an attempt to understand the non-visual side of the invisible employees working in an organization. For this purpose we had made an initial pilot study considering sixteen various variables and after the pilot study we restricted the variables to nine variables. During our study we met number of people with dynamic talent but because of introvert attitude of the employees the due recognition is not achieved. The solution lies in both employees and employer. Both have to need take initiative to break the ice for the overall development of the organization and create sense of belongingness of these invisible employees.

KEYWORDS: *invisible employee, perception, introvert and extrovert.*

INTRODUCTION

Since school, we have been introduced to two major personality types- extroverts and introverts. The introverts are the ones who enjoy spending 'alone time' whereas the extroverts are social by nature. Also, extroverts are looked upon as easy -going and approachable- two traits vital at the workplace. On the other hand, introverts get perceived as 'non-participative' because of their less- expressive nature. Studies have shown that about one third to one half of the population consider themselves to be introverts. Studies have also revealed that some of the best leaders in the world have been introverts by nature. These introverts' employees are good listeners, composed and quietly assertive. However, they also less vocal and may not express themselves, thus losing out on visibility. These are typically derive energy from within, reflect upon their thoughts and the resulting ideas or solutions have immense depth in value. They are known to be great contributors to an organization's success; however, not all introverts are talented. Talent introverts are generally aloof, observant and less talkative and may need probing elicit response. They may not be socially inclined and don't enjoy much of attention, but prefer to work in solitude. They generally perform better as an individual than a team. Introverts have a lot to offer employers, but introversion still carries a stigma at the workplace. Sometimes, they may get excluded in certain recognitions and/or similar exercises, essentially because such people prefer to work within an individual capacity. This might also be true in situations where extroverted co-workers outshine their introverted counterparts, when they actively draw attention and 'brand' themselves in front of their superiors.

While introverts suffer from underselling themselves, extroverts suffer from overselling themselves. Organizations must take adequate care in applying systems in such a way that the real talent does not go unnoticed, regardless of the personalities. Introverts never having a raw deal mainly because they are smart managers. If introverts get a raw deal, it is owing to their managers not being educated about the personality types. Continual and focused interactions with an introverted employee are vital towards making them valued. One way is to recognize and appreciate the talent of introverts in public. This drives a powerful message that 'it is not the individual's external demeanor/behavior that decides his/her success in the organization, but the output'. Organizations should focus on developing their leaders to handle diversity of this nature effectively. The leadership development programmes should help leaders to identify this diversity of extroverts and introverts in their teams and suit their leadership style in the line with the personalities of the people they are leading. The possible ways of identifying such talents is by proactively looking out for silent performers, who have displayed great results and encouraging performers to participate and interact in small group discussion. Introverts have a wealth of natural strengths. By understanding the needs of such employees, managers can harmonize them and encourage their introverts to be their best selves.

OBJECTIVE OF THE STUDY

- ✓ To understand non-visual sides of the invisible employees.
- ✓ To suggest remedial measures to overcome this problem.

LIMITATIONS OF THE STUDY

- ✓ The present study is restricted to Capital region of Odisha i.e Bhubaneswar and Cuttack
- ✓ The views expressed by the respondents not necessarily universal.
- ✓ The period of study is restricted to 3 months. i.e. November 2012 to January 2013
- ✓ The data collected from the working executives of private sectors in selected units

RESEARCH DESIGN

For the study we have interacted with 153 employees and however 94 final responses received. This includes 36 female and rests were males. 9 variables considered for the questionnaires after conducting pilot study and simple percentage method is used for the better understanding of the findings of the study. The research area was restricted the capital region the state capital of Odisha and in this region the employees of various private sector units included for the study.

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

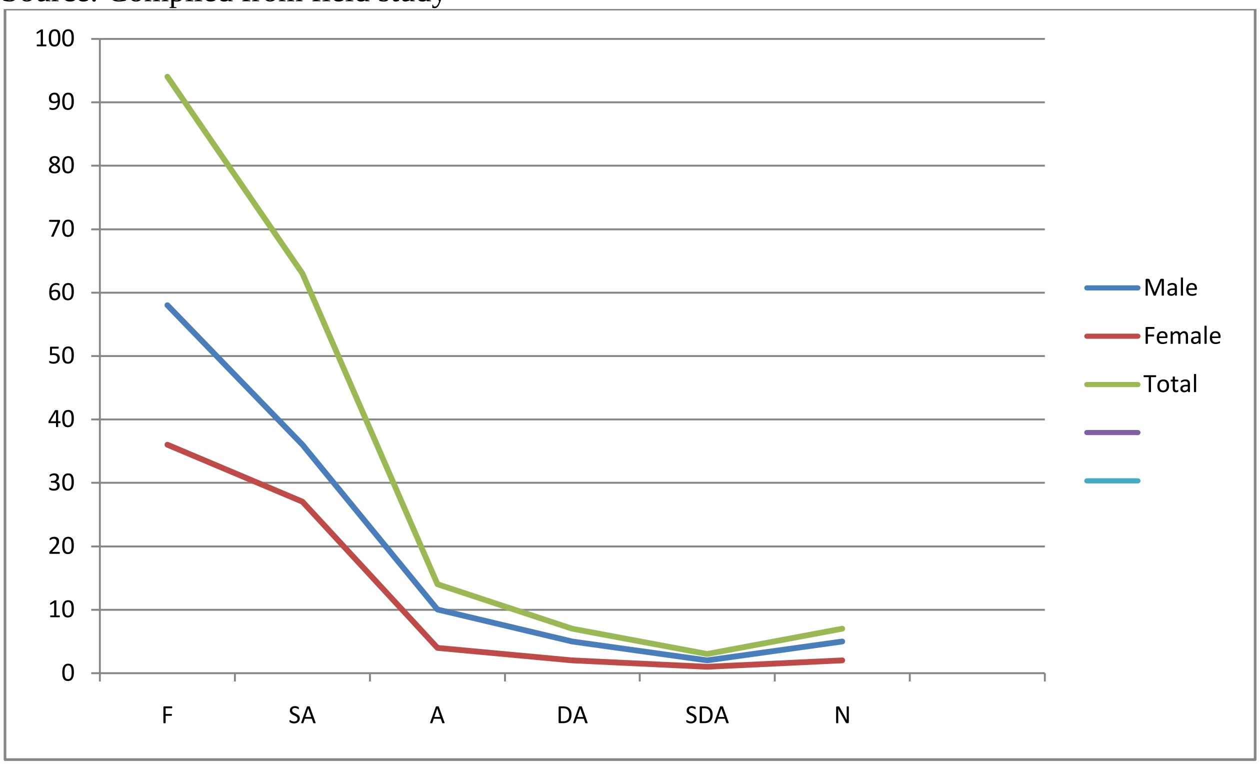
ANALYSIS OF DATA

F- Frequency	**SA- Strongly Agree**	**A- Agree**
DA- Disagree	**SDA- Strongly Disagree**	**N- Neutral**

INVISIBLE EMPLOYEES DO NOT GET ENCOURAGEMENT FROM IMMEDIATE BOSSES OR TOP MANAGEMENT

Gender	F	SA	%	A	%	DA	%	SDA	%	N	%
Male	58	36	62	10	17.2	5	8.6	2	3.4	5	8.8
Female	36	27	75	4	11.1	2	5.5	1	2.7	2	5.7
Total	94	63	67	14	14.9	7	7.4	3	3.2	7	7.5

Source: Compiled from field study

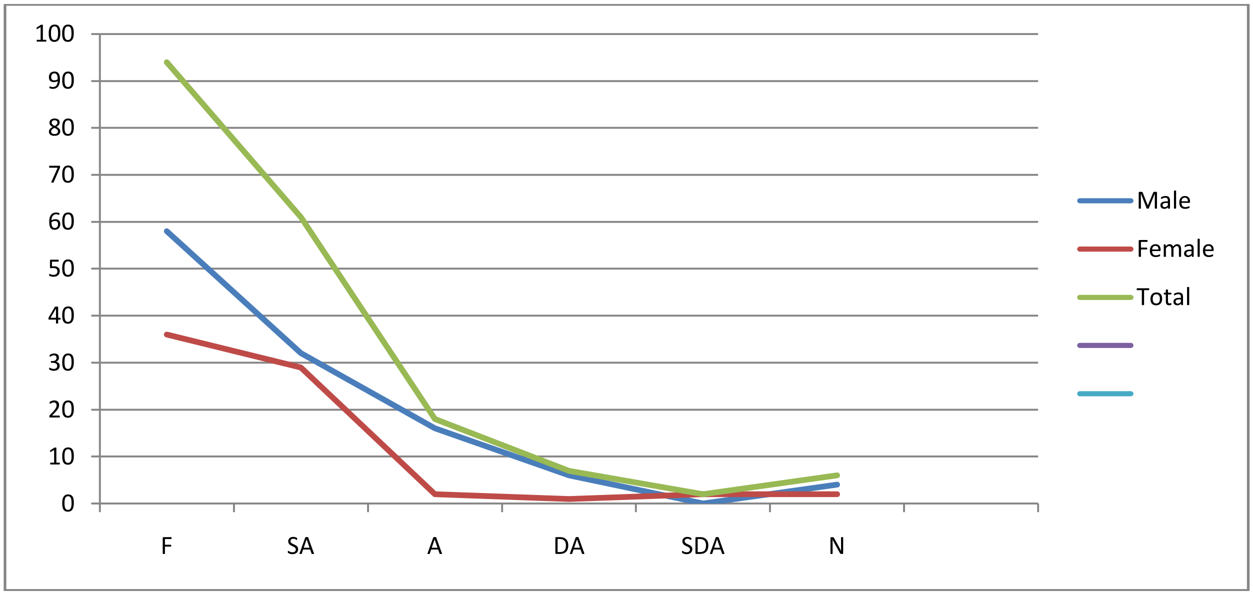


INTERPRETATION: Responding to this question, 67% of total respondents strongly agree, 14.9% agree, 7.4% disagree, 3.2% strongly disagree and rest 87.5% remain neutral. From the male side the same were 62%, 17.2%, 8.6%, 3.4% and 8.8% respectively. In case of female respondents 5.7% were neutral, 2.7% strongly disagree, 5.5% disagree, 11.1% agree and 75% strongly agree.

INVISIBLE EMPLOYEES DO NOT GET DUE RECOGNITION DUE TO EXISTENCE OF COTERIE IN A SYSTEM.

Gender	F	SA	%	A	%	DA	%	SDA	%	N	%
Male	58	32	55.2	16	27.6	6	10.3	-	-	4	6.9
Female	36	29	80.5	2	5.5	1	2.7	2	5.6	2	5.7
Total	94	61	64.9	18	19.1	7	7.4	2	2.1	6	6.5

Source: Compiled from field study

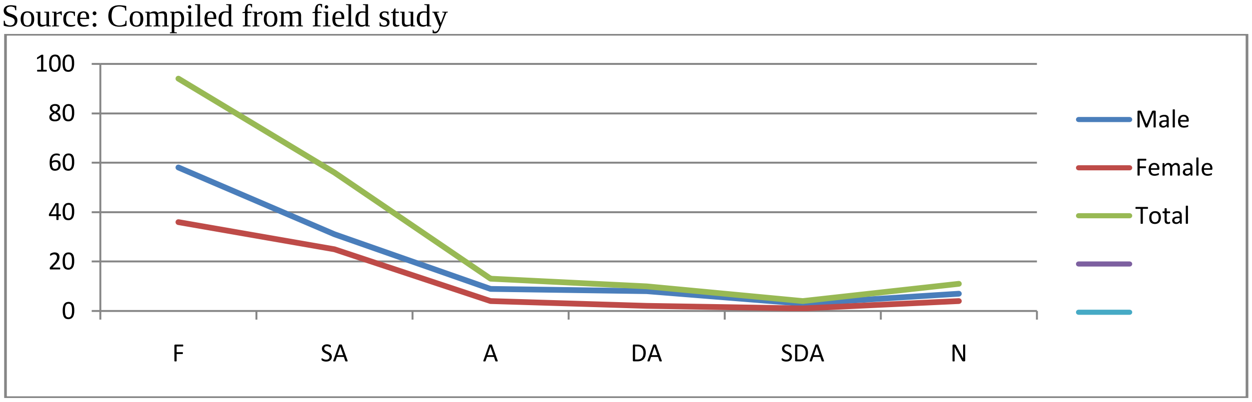


INTERPRETATION: Answering to this question, in overall, 6.5% were neutral, 2.1% were strongly disagree, 7.4% disagree, 19.1% agree and 64.9% strongly agree. In case of female for the same are 5.7%, 5.6%,2.7%,5.5% and 80.5% respectively. In case of male respondents 55.2% strongly agree, 27.6% agree, 10.3% disagree and 6.9% remain neutral.

THE FEELINGS OF THE INVISIBLE EMPLOYEES ARE OVERLOOKED, IGNORED AND NOT APPRECIATED

Gender	**F**	**SA**	**%**	**A**	**%**	**DA**	**%**	**SDA**	**%**	**N**	**%**
Male	58	31	53.4	9	15.5	8	13.8	3	5.2	7	12.1
Female	36	25	69.4	4	11.1	2	5.5	1	2.7	4	11.3
Total	94	56	59.6	13	13.8	10	10.6	4	4.3	11	11.7

Source: Compiled from field study



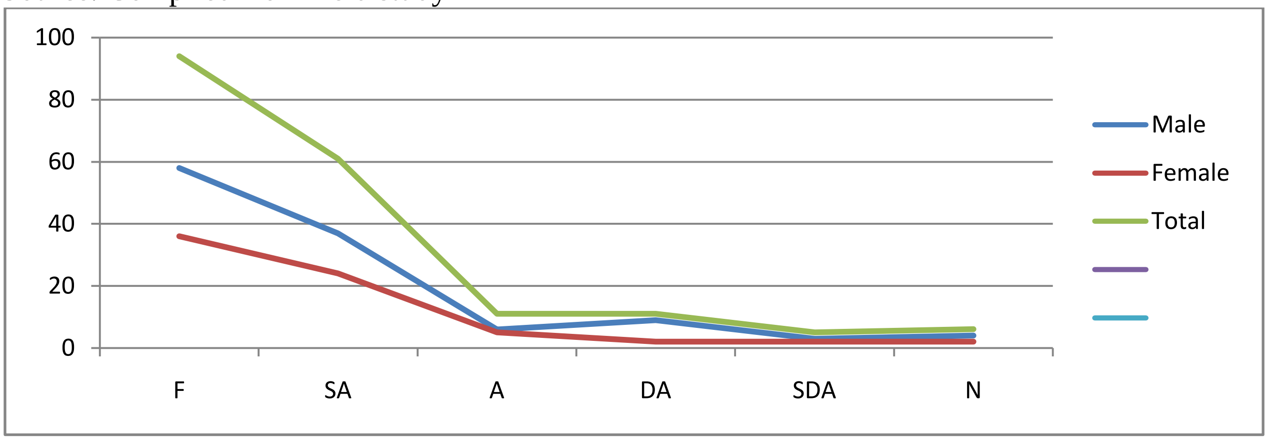
INTERPRETATION: Joining to this question, from female side, 69.4% strongly agree, 11.1% agree, 5.5% disagree, 2.7% strongly disagree and 11.3% remain neutral. The same for the male respondents were 53.4%, 15.5%,13.8%, 5.2% and 12.1% respectively. In case of overall perception taking male and female together were 11.7% neutral, 4.3% strongly disagree, 10.6% disagree, 13.8% agree and 59.6% strongly agree.

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

INVISIBLE EMPLOYEES ARE DE-MOTIVATED BY THE IMMEDIATE SUPERIORS.

Gender	**F**	**SA**	**%**	**A**	**%**	**DA**	**%**	**SDA**	**%**	**N**	**%**
Male	58	37	63.8	6	10.3	9	15.5	3	3.4	4	7
Female	36	24	66.7	5	13.9	2	5.5	2	8.3	2	5.6
Total	94	61	64.9	11	11.7	11	11.7	5	5.3	6	6.4

Source: Compiled from field study

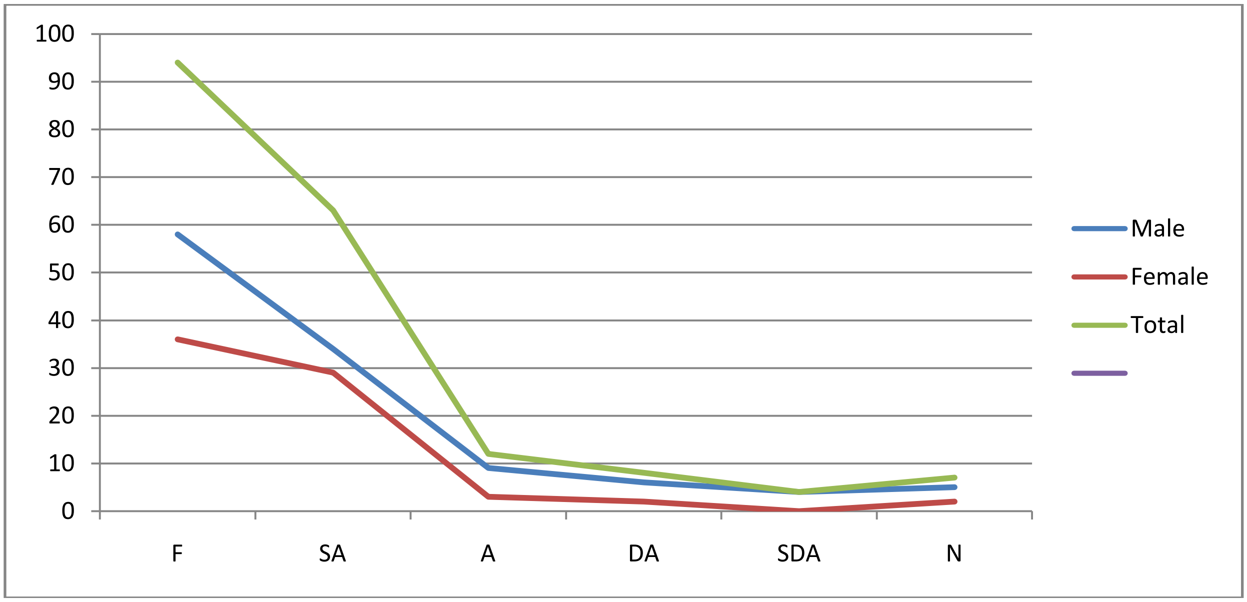


INTERPRETATION: Responding to this question, 64.9% strongly agree, 11.7% agree, 11.7% disagree, 5.3% strongly disagree and 6.4% remain neutral. From the female side the perception for the same were 66.7%,13.9%,5.5%,8.3% and 5.6% respectively. In case of male respondents only 7% were neutral, 3.4% strongly agree, 15.5% disagree, 10.3% agree and 63.8% strongly agree.

WORKING ENVIRONMENT COMPELS INVISIBLE EMPLOYEES TO FEEL DEPRESSED

Gender	F	SA	%	A	%	DA	%	SDA	%	N	%
Male	58	34	58.6	9	15.5	6	10.3	4	6.9	5	8.7
Female	36	29	80.5	3	8.3	2	5.5	-	-	2	5.7
Total	94	63	67	12	12.8	8	8.5	4	4.3	7	7.4

Source: Compiled from field study

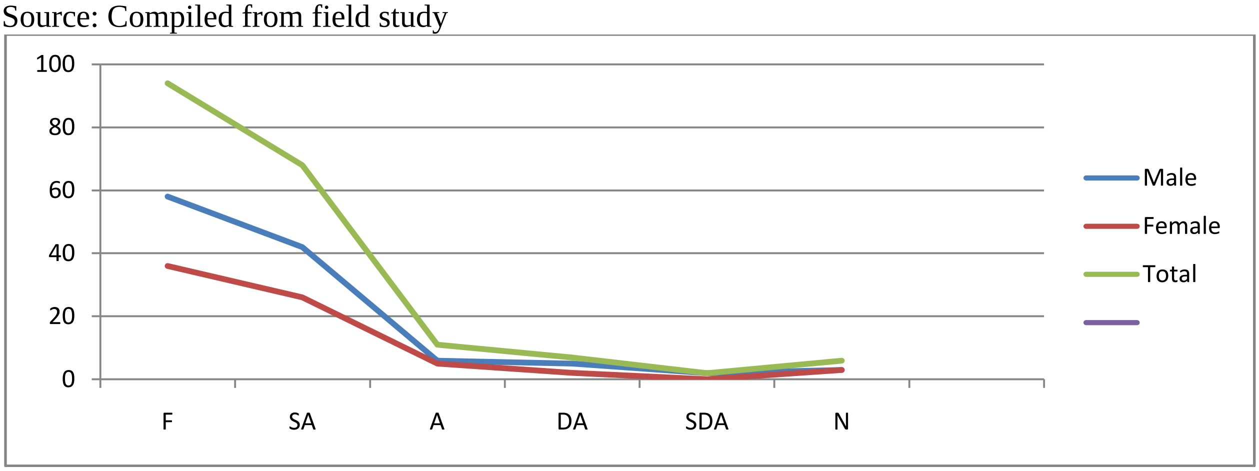


INTERPRETATION: Answering to this question from male respondents side, 58.6% were strongly agree, 15.5% agree, 10.3% disagree, 6.9% strongly disagree and 8.7% remain neutral. In case of total respondents the same were, 67%, 12.8%, 8.5%, 4.3% and 7.4% respectively. For the female respondents 5.7% were neutral, 5.5% disagree, 8.3% agree and 80.5% strongly agree.

THE CONTRIBUTIONS OF INVISIBLE EMPLOYEES ARE NOT ACKNOWLEDGED

Gender	F	SA	%	A	%	DA	%	SDA	%	N	%
Male	58	42	72.4	6	10.3	5	8.6	2	3.4	3	5.3
Female	36	26	72.2	5	13.9	2	5.5	-	-	3	8.4
Total	94	68	72.3	11	11.7	7	7.4	2	2.1	6	6.5

Source: Compiled from field study



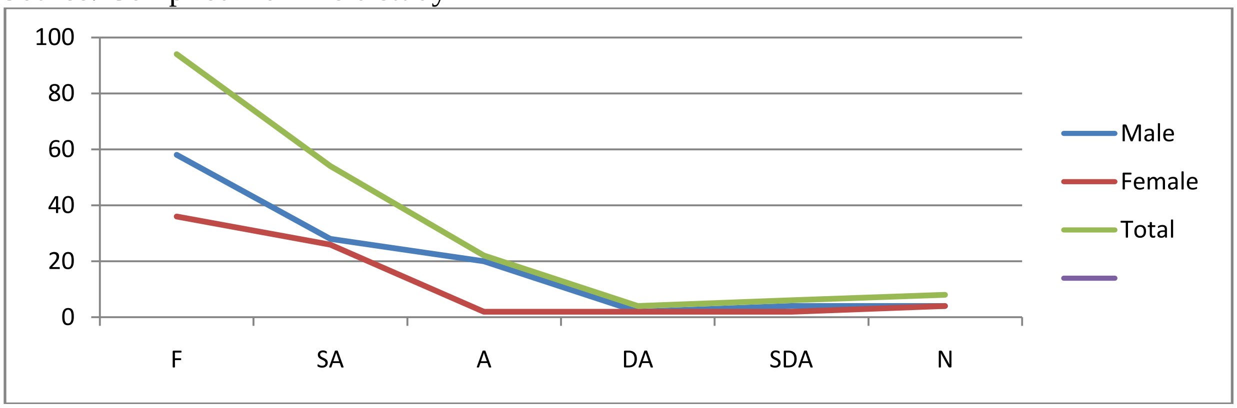
INTERPRETATION: Joining to this question in total, 72.3% strongly agree, 11.7% agree, 7.4% disagree, 2.1% strongly disagree and 6.5% remain neutral. In case of male respondents for the same were 72.4%,10.3%,8.6%,3.4% and 5.3% respectively. For the female respondents the 8.4% remain neutral, 5.5% disagree, 13.9% agree and remain 72.2% strongly agree.

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

THE EXPERTISE KNOWLEDGE OF INVISIBLE EMPLOYEES IS UNDERUTILIZED

Gender	F	SA	%	A	%	DA	%	SDA	%	N	%
Male	58	28	48.3	20	34.5	2	3.4	4	6.8	4	7
Female	36	26	72.2	2	5.5	2	5.5	2	5.5	4	11.3
Total	94	54	57.4	22	23.4	4	4.3	6	6.3	8	8.6

Source: Compiled from field study

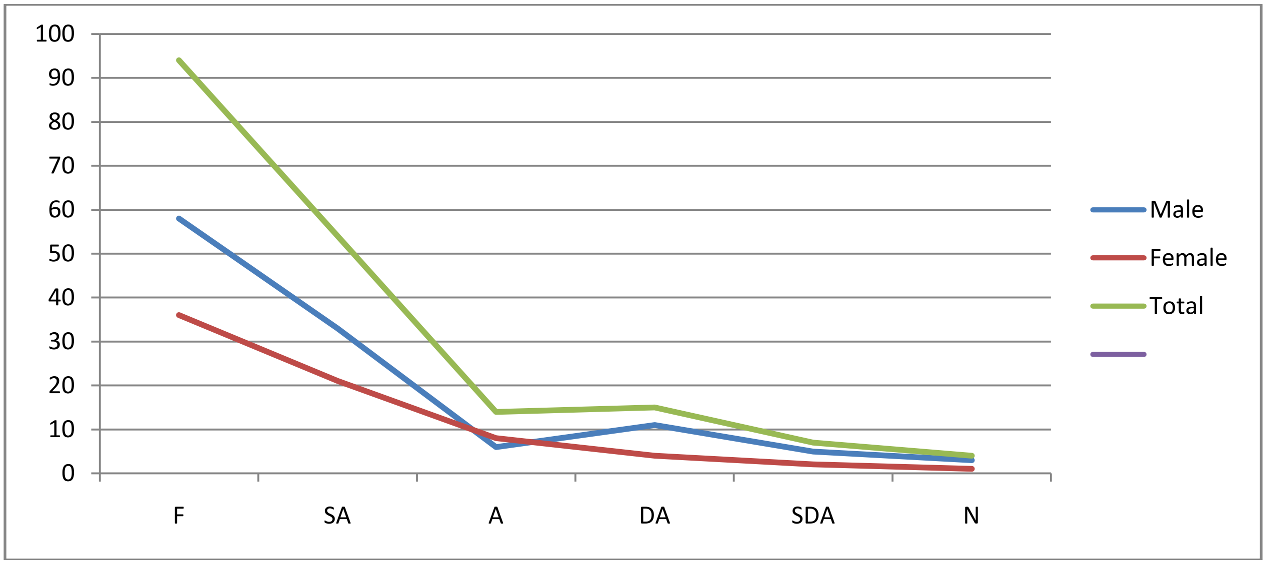


INTERPRETATION: Answering to this question, from the female respondents, 11.3% remain neutral, 5.5% strongly disagree, 5.5% disagree, 5.5% agree and 72.2% strongly agree. The same for the male respondents were 7%, 6.8%,3.4%,34.5% and 48.3% respectively. In case of total respondents, 57.4% strongly agree, 23.4% agree, 4.3% disagree, 6.3% strongly disagree and 8.6% remain neutral.

NOT VALUING THE INDIVIDUAL WORTH OF THE INVISIBLE EMPLOYEES

Gender	F	SA	%	A	%	DA	%	SDA	%	N	%
Male	58	33	56.9	6	10.3	11	19	5	8.6	3	5.2
Female	36	21	58.3	8	22.2	4	11.1	2	5.5	1	2.9
Total	94	54	57.4	14	14.9	15	16	7	7.4	4	4.3

Source: Compiled from field study

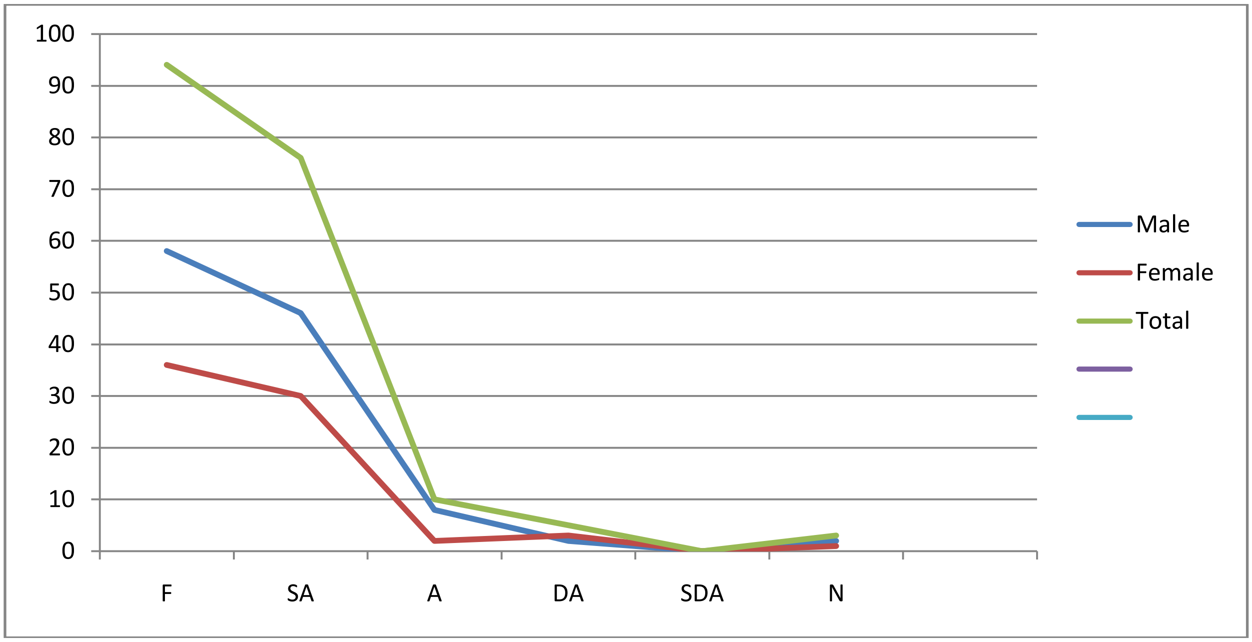


INTERPRETATION: Answering to this question, 4.3% remain neutral, 7.4% strongly disagree, 16% disagree, 14.9% agree, 57.4% strongly agree. The same for the female respondents were 2.9%, 5.5%, 11.1%, 22.2% and 58.3% respectively. In case of male respondents, 56.9% strongly agree, 10.3% agree, 19% disagree, 8.6% strongly disagree and 5.2% remain neutral.

THE INVISIBLE EMPLOYEES DO NOT GET RECOGNITION BECAUSE OF INCONSISTENT HR POLICY OF THE ORGANIZATION

Gender	F	SA	%	A	%	DA	%	SDA	%	N	%
Male	58	46	79.3	8	13.8	2	3.4	-	-	2	3.5
Female	36	30	83.3	2	5.5	3	8.3	-	-	1	2.9
Total	94	76	80.9	10	10.6	5	5.3	-	-	3	3.2

Source: Compiled from field study



INTERPRETATION: Joining to this question, 80.9% of total respondents strongly agreed, 10.6% agreed, 5.3% disagreed, 3.2% were neutral. The same for the female respondents were 79.3%, 13.8%, 3.4% and 3.5%. In case of male respondents the perception were 3.5% neutral, 3.4% disagree, 13.8% agreed, 79.3% strongly agree.

SUGGESTIONS

YOU ARE A BRAND

You are a brand and would need to market your work within the organization. Share the results on email if you are hesitant to speak it up in public discussions. Develop a niche skill that makes you a sought-after person in the organization. Every work should be documented so that it is a milestone for your annual assessment.

STAND UP FOR YOURSELF

Introverts normally find it difficult to speak the truth when some other person is usurping the credit for the work they have done. This is a tough one! In the corporate world, you cannot rely on a third person to fight your battles. So, even if it means that you will ruffle some feathers, you need to speak the truth when you are being taken for a ride the very first time only.

FEAR IS THE FACTOR

Face your fear head on. Talk to yourself about your fears. The sinking feeling that you are about to be drowned will be replaced with a new dawn of confidence. The boat may rock yet it will give you inner peace and contentment. Take that first step and you will find the courage to reach your goal.

CONCLUSION

The invisible employees are the one who are the best employees and the pillars of the organization. They always believe in performance, not like others who speaks lot of things but never convert them in real practice. Now the responsibility lies in hands of the employer and employee both. The employer has to identify these employees and at the same time these employees also come forward and lead the show. Invisible is good however, too much of this is not accepted. In today's world people believe in visibility and more acceptance is for the visible ones only. The onus lies more for the employer to safe these jewels of the organization, the contribution for the organizational cannot be undermined. The expertise of these invisible employees should be extracted and should be invested in the right direction for the betterment and growth of the organization. The environment should create in such a way that these employees should feel the sense of the belongingness to the organization. If this belongingness missed out the productivity of the employee will also affect considerably. Take note that most of those employees who want to leave are your best employees. The not-so-desirable ones would endure because they couldn't find a job somewhere else. The danger there is that they are not only unproductive; they might even be causing some damage or trouble to your company.

REFERENCES

1. OSCE, Guide on Gender-Sensitive Labour Migration Policies (2009), p. 14
2. ILO, Give girls a chance: Tackling child labour, a key to the future (2009), p. 12.
3. Decent Work for domestic workers: a long way to go, Education Career 2007/3-4, nos. 148-149 (2007), p. 20.
4. ILO, Decent work for domestic workers, Report IV(1) (2010), p. 8.
5. Save the Children, Trafficking - A Demand Led Problem? A Multi-Country Pilot Study (2002), p. 50.
6. OSCE, Guide on Gender-Sensitive Labour Migration Policies (2009), p. 15.
7. Economic and Social Council, Commission on Human Rights, Report of the Special Rapporteur, Ms. Gabriela Rodríguez Pizarro, submitted pursuant to Commission on Human Rights resolution 2003/46, E/CN.4/2004/76 (12 January 2004),para.
8. ILO, Forced Labour in the Russian Federation Today: irregular migration and trafficking in human beings (ILO, 2005), p. 52.
9. B. Anderson, "Just Another Job? The Commodification of Domestic Labour", in B. Ehrenreich and A. Russel Hochschild (under the dir. of), Global Woman (Metropolitan Books: New York, 2003), pp. 104-114.

A Publication of TRANS Asian Research Journals

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

THE MAUKHARIS OF KANAUJ

Dr. Moirangthem Pramod*

*Assistant Professor,
G. G. D. S. D. College,
Chandigarh, India.

INTRODUCTION

With the coming of kumāragupta III on the throne of Magadha, the weakness of the imperial Gupta had become a known fact to all. Taking advantage of the situation some feudatories of the Guptas raised their heads to grab the political power in north India to establish their own independent kingdoms. Among these feudatories, the Maukharies of kanauj was one of them. This branch of the Maukharis is known from the seals and inscriptions discovered from the modern districts of Farrukhabad, Gorakhpur, Jaunpur and Barabanki of Uttar Pradesh, Patna district of Bihar, Nimad district of Madhya Pradesh and from the literary work like Bāṇa's Harshacharita. As most of the seals and inscriptions of this Maukhari family are discovered from the above mentioned district of Uttar Pradesh, their seat of power should be roughly placed in this part of the state. Even though, we do not have any hard facts about the capital of this ruling family, it is generally agreed that Kanauj (ancient Kānyakubja) must have been the center of their rule.[1]

Harivarman is described as the progenitor of the Kanauj branch of Maukharis. In the inscriptions and seals which we have discovered till now, he is given the simple title, Mahārāja indicative of his feudatory position. It is very likely that he was the contemporary of Kṛishṇagupta, the founder of the Later Gupta dynasty. He is given the epithet of Jvālāmukha (flamed faced)[2] and is said to have influence "whose fame stretched out beyond the four oceans; who had other kings brought into subjection by (his) powess, and by affection (for him).[3] According to R.G.Basak, Harivarman had brought some kings under his subjection by the dual policy of prowess and affection but it is not clear, who were these kings. R.S.Tripathi refuted the translation of R.G.Basak, of Harivarman's subjugating kings. He said that the praise must have been because "of the simple fact that he was the first Maukhari to attain distinction."[4]

One Harivarman is mentioned in the copper-plate inscription discovered from Shankarpur in Sidhi district of Madhya Pradesh. This inscription was engraved in the year 168 of the Gupta era (CE 487) during the reign of emperor Budhagupta of the imperial Guptas. Three ancestors of Hrivarman, are mentioned in this inscription, namely,Mahārāja Sālan, Mahārāja Gītavarman, and Mahārāja Vijayavarman. Scholars do not agree on the point whether Harivarman of this inscription is the same person as Harivarman of the Haraha stone inscription and Asirgadh copper seal. S.R.Goyal is of the opinion that they cannot be one and the same person since Mahārāja Sālan's dynasty is said to have come along with the Uchchakalpas, the Parivrājakas and the Pandavas during the political re-organization of the Baghelkhand and Bundelkhand region of central India. Goyal contends that Harivarman of the Shankarpur record was ruling in the Siddhi district of Madhya Pradesh, where as the center of the Maukharis power was Kanauj. He further says that the Maukhari kingdom was not big enough to stretch to Madhya Pradesh. On the contrary, B.C.Jain, who first edited this inscription,

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

has identified Harivarman of both the inscriptions as one and the same person, stating that Harivarman seems to have migrated in and around Kanauj in the early part of his rule.[5] What Goyal has ignored is the fact that Harivarman of Shankarpur copper-plate was a governor of Budhagupta, who could posted any where in the empire by supreme ruler. The Maukharis could have moved to region of Kanauj during the last days of the Gupta rule. As for the extent of the Maukharis rule it should be kept in mind that their seal has been discovered from Madhya Pradesh. Further, it is well known that Iśānavarman the first Mahārājādhirāja of the Maukhari family and the fourth ruler of this dynasty was ruling in 554 CE. He may have started his rule in c.550 CE. If we give about 20 years each to the first three rulers of this family, the reign of Harivarman shall come to c. 490 CE, which is very near to 487 the known date of Shankarpur inscription. It is hard to think of two important persons of the same name serving under the same imperial authority at the same time. As such Harivarman of both the inscriptions must be one and the same person and his three ancestors known from this inscription must have ruled in the early part of the fifth century CE.

His son, Ādityavarman, born of his wife Bhaṭṭārikā Jayasvāminī, succeeded him. Nothing of historical importance is attached with his name except that he was called with the epithet, Mahārāja like his father, in the Haraha inscription and the Asiragadh seal. He has been credited of performing several sacrifices and regulating the right conduct of the four castes and stages in life.[6] He got married with a Later Gupta king Harshagupta as it was a common practice in those days for brothers and sisters to bear such identical names, of course with variation of gender in the end to indicate the sex.[7] This marriage alliance must have been contracted by Harivarman with his contemporary and neighbour, Kṛishṇagupta, the father of Harshagupta in order to divide their spheres of influence and cooperate in mutual build-up at cost of the rapidly declining Gupta empire.

The third ruler of this dynasty is Īśvavarman born of Harshagupta, who succeeded his father, Ādityavarman. Like his father, he married a princess with the name ending 'gupta',i.e. Upaguptā. B.P.Sinha suggests that Upaguptā was definitely a Gupta princess but he is not sure to which Gupta family she belonged, the imperial Gupta or the Later Guptas. He inclined to take Upaguptā as a sister of Vishṇugupta, the last known Gupta emperor. But Upaguptā is more likely a Later Gupta princess since they have a good relation with them during that time. And moreover, his predecessor also married a princess of this ruling family. Like his father he is said to have performed several sacrifices.

The Jaunpur inscription of Īśvavarman,[8] which contains a great deal of historical information about a Maukhari king who's name is damaged at the end of the lines which makes it difficult for the scholars to identify the king and the real significance of the various military campaign he had undergone. Even though it is quite clear from the verse of the inscription that the said Maukhari king had defeated an Āndhra king and the later king took shelter in one crevice after another in the Vindhya mountains because of the fear of the Maukhari king. In the same verse, an adversary of this king is mentioned to have fled to the Raivataka mountain in Surāshṭra (Kathiaward). The name of the enemy king must have been mentioned but had gone with the mutilated part of the stone. J.F.Fleet[9] and R.C.Majumdar[10] were not certain of the Maukhari king referred to in the inscription because of the lacunae in between the following lines, as they are so extensive. Hirananda Sastri[11] attributes the epigraph to Īśānavarman. D.C.Sircar[12] states that the victorious king was Īśānavarman

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

or one of his successors. N.G.Majumdar,[13] R.G.Basak,[14] R.S.Tripathi[15] and S.R.Goyal[16] have given this achievement to Īśvaravarman, which is most likely since his name is engraved in line four of the inscription and has been described profusely. He must have been repulsing the attacks of this king, as we could not find any evidence of the Maukharis spreading in the Vindhyan mountains.

Īśvaravarman, was the first Maukhari ruler who really brought the family into prominence. He enhanced his power and prestige by successfully repulsing the attack of the odds. He is given the simple title of Mahārāja in the Asirgadh seal. According to R.K.Mookerji,[17] this must be because he did not have imperial ambitious nor he tried to extend his conquests. He contented in defending his country.

The Haraha inscription, found from Barabanki district, Uttar Pradesh gives more illuminating history of this ruling Maukhari family. It says, Īśānavarman, born of Īśvaravarman and Upaguptā, was ruling in the year 611 in that part of the world. This is the only dated inscription we have come across of this ruling Maukhari family. Though no specified era has been assigned, scholars generally follow Keilhorn's[18] assigning of this date to the Vikrama era corresponding to 554 CE. This " is supported by the paleographic as well as the numismatic evidence".[19] Along with this recorded year, it also gives important historical facts about this ruler. He is said to have defeated the lord of the Āndhras, "who had thousands of threefold rutting elephants," the Śūlikas, "who had an army of countless galloping horses" and the Gauḍas, " living on the seashore, in future to remain within their proper realm."[20]

After his successful campaign against these three kings, Īśānavarman assumed the sovereign title Mahārājādhirāja, which is indicative of an independent and powerful ruler. He was the first ruler to have assumed the higher title while his three predecessors were simply addressed as Mahārāja. He may have adopted this sovereign title soon after the death of the last imperial Gupta ruler, Vishṇugupta in c. 551-52 CE. He must have achieved all the campaigns mentioned in the inscription, in and around 554 CE, since the epigraph was composed in this year. He is said to be a good human being who pleased his subjects by his noble deeds. He is also reported to have performed several religious sacrifices.

From the Haraha inscription, we come to know of a Maukhari prince, Sūrayavarman. He has been mentioned as the son of Īśānavarman. His name is also found engraved in the Sirpur stone inscription of Mahāśivagupta. He is being referred to in this inscription as nṛipa " born in the unblemished family of the Varmans great on account of (their) supremacy over Mgadha".[21] Scholars have wide diverging opinions about the status of prince Sūryavarman. Scholars like, Kielhron,[22] Hirala,[23] Ghosh,[24]Majumdar[25] are of the view that Sūryavarman of these two inscriptions, is not one and the same person. They come to this conclusion from the palaeography of the inscription and the latter inscription is said to be of the 8th or 9th century CE. On the other hand D.C.Sircar[26] and B.P.Sinha[27] are of the view that even the competent epigraphists sometime fail to interpret the palaeographic data accurately because of their fixed view on dates and identification of political events. " Therefore there is no insurmountable palaeographical hurdle in identifying Sūryavarman of the Sirpur inscription with Sūryavarman, son of Īśānavarman."[28] Now generally scholars follow their interpretation of identifying Sūryavarman of the Sirpur stone inscription with Sūryavarman of the Haraha inscription. We fail to get any evidence to support his accession to the throne of Maukharis

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

from the Asirgadh, Sohnag inscriptions and Nalanda seals. Śarvavarman is said to have succeeded his father Īśānavarman and Sūryavarman is no where mentioned in the seals. Neither coins nor inscriptions of his period have been found, nor he is being mentioned in the genealogical table of the Maukharis; this shows that he never ascended the throne. Scholars have given various possibilities; first, if he was the eldest son, he must have predeceased his father or his claims were overlooked by the king who preferred to nominate his younger son, Śarvavarman to the throne to preserve the integrity of the Mukharis.[29] Second, there must have been a war of succession after his father, in which he was defeated by his brother, Śarvavarman.[30] Third, it has been suggested that Sūryavarman and Śarvavarman are of two different names of the same person, but the lettering in both the inscription is so clear that the reading is indisputable. Fourth, he was taken to be the younger brother of Śaravaraman. He might have helped his brother in defeating the Later Guptas and in lieu of it, he was appointed as the governor or a subordinate ruler of Magadha by his brother after the conquest of that region. On the other hand, R.C.Majumdar suggests that Sūryavarman could be a scion of the Maukhari family of Gayā, which B.P.Sinha refuted by stating, “the Sirpur inscription does not refer to the Varman as belonging to Magadha but famous for their paramountcy over Magadha.”[31] The only reasonable inference appears to be Varamanakula, referred in the inscription, which means the Varman who ruled over Magadha but not of Magadha. The Varman of this epigraph is generally taken to be the Maukharis of Harivarman’s house, as we do not have any other Varman dynasty ruling in Magadha except the Maukharis of Kanauj.

The sixth ruler of the Maukhari dynasty, Śarvavarman succeeded his father Īśānavarman to the throne. He is born of Mahādevī Lakshmīvatī. He turns out to be chip of all block, and he thoroughly avenges his fathers defeat by his successful engagement with the Guptas. A Later Gupta ruler, Dāmodaragupta is said “to have been breaking up the presently stepping array of mighty elephants belonging to the Maukhari, which had thrown aloft in battle the troops of the Hūṇas (in order to trample them to death)” in the Aphsad inscription and “he become unconscious”.[32] According to K.C.Chattopadhyaya, Dāmodaragupta was injured in the fight and become unconscious but later on regained his consciousness.[33] D.C.Sircar refuted his interpretation by quoting parallel passages from other Sanskrit works[34] and shows that the passage means the death of Dāmodaragupta. His interpretation is quite reasonable and followed by the scholars. This led to the rise of another question, as to whom ‘the Maukhari’ mentioned in the inscription to be assigned, as it did not mention the name of the Maukhari ruler, who defeated the Later Gupta ruler, Dāmodaragupta. Īśānavarman’s name is mentioned in verse 8 of the Aphsad inscription, in order to avoid the repetition of his name, he has been referred to by his dynastic appellation, ‘Maukhari’ in verse 11 of the same epigraph. S.R.Goyal is of the view that Dāmodaragupta met his end while fighting the Maukhari under his father’s reign. His theory has to be refuted as Dāmodaragupta succeeded his father, Kumāragupta and issued coins after coming to the throne. B.P.Sinha tried to identify the Parameśvara Śaravavarman of the Borah copper plate of Bholadeva, who is said to have made a grant of some land in the Udumbara Vishaya of Kālañjara Mandala with the Maukhari ruler, Śarvavarman, who is said to have extended their empire up to the foot hill of Vindhyas. But this identification has to be rejected, as Śarvavarman of this inscription is a feudatory ruler who issued this grant after the approval of the Pratihara ruler Nāgabhaṭa where as Śarvavarman of the Maukhari was a sovereign ruler. It seems the Maukhari king was Śarvavarman, who was probably the eldest son of Īśānavarman, who ascended the throne after his father. He was born of Lakshmīvatī. Since in

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

the Asirgadh seal, Śarvavarman is specifically referred to as 'Maukhari' and since Dāmodaragupta's father had fought against Īśānavarman, father and predecessor of Śarvavarman.

In the copper-plate inscription, discovered from Nirmand, a village of Kullu district in Himachal Pradesh, a Mahārāja Śarvavarman is said to have renewed a grant, which was earlier granted by Mahārāja Śamudrasena. Śarvavarman of this inscription can be identified with the Maukhari ruler, Śarvavarman. In doing so, two points come as hurdle to this theory; first, the Thaneśwar area was ruled by the Pushyabhūtis, which comes in between Kanauj and the area around Nirmand. Second, Śarvavarman is given the title of Mahārāja in this inscription, where as he is mentioned with the epithet of Mahārājādhirāja in the Asirgadh seal.[35] Both the hurdle can be ruled out as the predecessors of Prabhākaravardhana were relatively speaking, petty chiefs and as such the Maukharis could well have made their weight felt in the Kullu region of Himachal Pradesh during this period. Moreover, Prabhākaravardhana was the first to have attained status of a sovereign. It is probable that the predecessors of Prabhākaravardhana were subordinate to the Maukharis.[36] The literary works of Bāṇa do not mention any hostilities between the Maukharis and Pushyabhūties and he mentions of their matrimonial alliance. As of the title, it could well have been a scribal error "as the epigraph was written sometime after the reign of that Maukhari king, when the Kullu region probably no more formed part of the Maukharis dominions."[37] It is possible that Śarvavarman of the Maukhari ruler built a Śiva temple and villages were given for the maintenance of the temple.

From the passage, "breaking up the proudly stepping array of mighty elephants, belonging to the Maukharis, which had thrown aloft in battle the troops of the Hūṇas." B.P.Sinha[38] suggests that the Hūṇa mercenaries joined the Maukharian army in the fight against the Later Guptas. It is unlikely, as the Hūṇas could not have been recruited in the Maukharian army as they were disliked and despised by the Indians in general. It refers to the mighty elephants of the Maukharis who had defeated the troops of the Hūṇas in the battle. It is not certain who amongst the rulers of Maukhari defeated the Hūṇas. Scholars like R.K.Mookerji[39] and C.V.Vaidya[40] are of the view that the Pushyabhūties and the Maukharis joined hands together and fought against their common enemies as the Sthānaśvara area falls between the kingdom of Kanauj and that of the Hūṇas. D.Devahuti on the other hand, suggests that the Pushyabhūties allowed the Maukhari armies to pass through their territories in the fight against the Hūṇas as the latter posed a greater danger to them than the Maukharis. It is believed that Kullu region must have been brought under the Maukhari ruler during their expedition against the Hūṇas.

A copper seal of Śarvavarman was unearthed from Asirgadh in the Nimand district in Madhya Pradesh.[41] The discovery of this seal has given rise to the question, whether Asirgadh region came under the Maukhari rule[42] or not. Scholars like R.S.Tripathi argue that the mere presence of a single seal that too in a private collection should not be taken as proof of the Maukhari rule over the territory as it is small and easily portable which could have been brought there from the region of the Maukharis. But his argument has to be revised again as we know that the kings of Gauḍa, Āndhras and Śūlikas had already been defeated by Śarvavarman's predecessor, it is quite reasonable to suppose that the power of Śarvavarman extended to the south of the Vindhyas. Thus we can take Asirgadh to be the southern out-post of the Maukhari kingdom.[43] This can be supported from the fact that the Maukhari queen Rājyaśrī sought shelter in the Vindhyan forests which is also an indication

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

of the region being within the territories of the Maukharis.[44] From the Deo-Barnak inscription of Jīvitagupta II[45] which records the grant of a village Varuṇika for the maintenance of temple, we also learn that it had been made earlier by king Bālāditya[46] and by the two Maukhari rulers, Śarvavarman and Avantivarman. This means that the heart of Magadha had come under the Maukharis from the grip of the Later Guptas during the reign of Śarvavarman and Avantivarman. Śarvavarman had the most extensive territories under his rule. Many dated coins of his have come to light but unfortunately the numerical figures are very uncertain as some are given in two figures and some in three and the dates are not marked with any era.

The discovery of the Nalanda seal of Avantivarman,[47] has established that the ruler who come after Śravavarman was his son, Avantivarman. Earlier, scholars had tried to place Śusthitavarman, referred in the Aphsad inscription of Ādityasena, who had defeated the Later Gupta ruler Mahāsenagupta, in between the rule of Śarvavarman and Avantivarman. It has to be rejected, as Śusthitavarman of this inscription has been identified with Śusthitavarman of the house of Bhāskaravarman of Kāmarūpa. Avantivarman is referred to with the customary imperial title in this seal. His reign was quite and peaceful, which does not mean that he had lessened the prestige of his royal house instead he brought peace and prosperity after so many years of almost ceaseless strife and wrangling. Above all this, he kept in content the large extent of his reign handed down by his father. Bāṇa refers to him as pride of the race, and says, "at the head of all royal houses stand the Maukharis worshipped like Śiva's footprint by all the world."[48] Like his father's coins, his coins bear dates also of two digits and some of three digits but the era is also not specified which make it more difficult for us to give an exact date and year of his rule. He was a contemporary of Prabhākaravardhana of Pushyabhūtis.

Grahavarman, the eldest son of Avantivarman, as known from the Harshacharita of Bāṇa, succeeded his father.[49] No inscription or coins of Grahavarman are known so far and our only source of information about this ruler remains a detailed description contained in the Harshacharita of Bāṇa. Edward Pires has made a vain attempt to identify a certain king with Varman ending name, mentioned in the Deo-Barnark inscription.[50] However, his theory is far-fetched, has no merit and has been rejected by all the scholars.

Grahavarman is known to have married Rājyaśrī, the youngest daughter of the Pushyabhūti king Prabhākaravardhana and sister of Rājyavardhana and Harshavardhana. Bāṇa gives an elaborate picture of this matrimonial alliance between the two royal houses of the Pushyabhūtis and the Maukharis equating them with the moon and the sun it is quite clear from the Bāṇa's description that Grahavarman himself negotiated his marriage with Rājyśrī, daughter of Prabhākaravardhana through an ambassador, which means that by the time of his marriage his father was dead. Moreover, when the betel bearer from the bridegroom's place arrives at the court of Prabhākaravarman, the later enquires about the health of Grahavarman, not of his father. This further confirms that Avantivarman was already dead otherwise Prabhākaravardhana would have enquired about his father's health. When the bridegroom's party arrived at Sthaneśvara, Prabhākaravardhana received Grahavarman, and there is no mention of his father. R.S.Tirpathi[51] says that his father's absence does not mean that he was dead, he might have been alive, but stayed back in the capital, thinking it unwise to leave the capital unprotected. Through it is not convincing, since there was no indication of any political crisis and evidence of threat to the Maukhari capital from any corner at that time. If there were any threat to their capital, the marriage ceremony could have been postponed and not only the king but even the crown prince would have stayed at the capital. It is generally agreed that his father was already dead by the time of his marriage.

The matrimonial alliance between these two royal families had brought sea of changes in the political condition of northern India. Friendly relation between, the Pushyabhūtis and the Later Guptas, were disturbed and lot of changes had been brought by this matrimonial alliance. It is believed that the Maukharis took the initiative in establishing this matrimonial alliance with the Pushyabhūtis in order to strengthen their position. In reaction to this alliance the Later Gupta formed an alliance with the Gauḍa king against the two newly allied powers, the Pushyabhūtis and the Maukharis. The king of Mālava, who is generally identified with Devagupta mentioned in the inscription of Harshavardhana and taken to be a ruler of the Later Gupta dynasty, in alliance with Śaśāṇka, the king of Gauḍa, jointly invaded Kānyakubja (Kanauj) and killed Grahavarman. No details of the Mālava-Gauḍa invasion on the Maukharis are given by Bāṇa except that Harshacharita, gives the information that Rājyśrī was taken as prisoner and was treated like a brigand's wife with a pair of iron fetters kissing her feet. What followed next forms the subject of a subsequent chapter.[128] Thus with the death of Grahavarman, the Maukhari empire of Kanauj, founded by Harivarman, seems to have come to an end but for some epigraphical evidence that brings in another son of Avantivarman.

If we believe the account of Hsiuen Tsang, the throne of Kanauj passed on to Harshavardhana after the death of Grahavarman. However, fragmentary clay seal discovered from Nalanda, containing parts of the genealogy of the Maukharis upto the time of Avantivarman has brought to light the name of another successor of Avantivarman, whose name started with the letter Su.[52] There is one more letter visible after Su that can either be va or cha. N.P.Chakravarti, took it as Cha and restored the name as Suchandravarman.[53] The name has been suggested to be Suvaratavarman on the basis of a later Buddhist work Āryamañjuśrimūlkalpa.

Since this ruler is given full imperial titles Paramabhaṭṭaraka Mahārājādhirāja in the Nalanda seal, it is obvious that he ruled for some time as successor of Avantivarman. This poses a problem and has led to a keen controversy amongst the scholars. R.S.Tripathi suggested that he probably ruled after the death of Grahavarman before Harsha took over of the Kanauj.[54] Alexander Cunningham[55] followed by E.A.Pires[56] and D.Devahuti[57] have suggested that he was a younger brother of Grahavarman but Collins[58] takes him to be the same as Grahavarman. R.C.Majumdar[59] has taken him to be a protégé of Śaśāṇka, who was put on the Maukhari throne after the death of Grahavarman, by the king Gauḍa. Thereafter, he was removed when Harsha recovered Rājyśrī and become the king of Kanauj. It has been suggested that it is possible that Su was governor of Magadha and rebelled against Grahavarman when the latter become the king.[60] Another suggestion is that he was an elder brother of Grahavarman and become the king after Avantivarman but died before the marriage of Grahavarman.[61] It is highly unlikely as Bāṇa's portrayal of the event does not leave place for such an eventuality. Su was only a child when Grahavarman died and become king after Harsha is another suggestion, that does not make much sense, inspite of the fact that S.R.Goyal has also suggested the possibility that even Yaśovarman of Kanauj belonged to the Maukhari family.[62] Of all these view, it seems more plausible that he was a younger brother of Grahavarman

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

and become kings for sometimes after the latter's death. He was removed by the supports of Grahavarman who was loyal to Rājyśrī and offered the throne to Harshavardhana. That would also account for Harsha's hesitation to accept the offer made by Po-ni as recorded by Hsuien –Tsang.

REFERENCE

1. For detailed study, see the reference of R.S.Tripathi, History of Kanauj, Motilal Banarasidass, New Delhi, 1937, pp. 32-36;S.R.Goyal, Harsha Aur Uska Yug, Megha Prakashan, Jodhpur, 1993, p. 47.
2. Epigraphia Indica, XIV, p. 119.
3. Corpus Inscriptionum Indicarum, 1888, III, pp. 220-221; Epigraphia Indica, XIV, p. 119; verses 4-5.
4. Tripathi, R.S., History of Kanauj, Motilal Banarasidass, New Delhi, 1937, p. 36.
5. Sinha, B.P., Dynastic History of Magadha, Abhinav Publication, New Delhi, 1977, p. 111; Tripathi, R.S., History of Kanauj, Motilal Banarasidass, New Delhi, 1937, p. 36.
6. Epigraphia Indica, XIV, p. 119.
7. Tripathi, R.S., History of Kanauj, Motilal Banarasidass, New Delhi,1937, p. 37; Corpus Inscriptionum Indicarum, 1881, III, p. 4.
8. Corpus Inscriptionum Indicarum, 1888, III, p. 225.
9. Ibid, p. 229.
10. Majumdar,R.C., Comprehensive History of Bihar, Vol. I, Part II, Kashi Prasad Jayaswal Research Institute, Patna, 1974, p. 183.
11. Epigraphia Indica, XIV, p. 112.
12. Journalof Indian History, Madras, XIII, p. 127.
13. Indian Antiquary, Bombay, XLVI, p. 127.
14. Basak, R.G., History of North-Eastern India, Sambodhi Publication Pvt. Ltd., 1967, p.109.
15. Tripathi, R.S., History of Kanauj, Motilal Banarasidass, New Delhi, 1937, p. 38.
16. Goyal,R.S., Harsha Aur Uska Yug, Megha Prakashan, Jodhpur, 1993, p. 50.
17. Mookerji, R.K., Harsha, Oxford University Press, New Delhi, 1965, p. 54.
18. Indian Antiquary, Bombay, XX, pp. 407ff.
19. Pires, E., The Maukharis, B.G.Paul & Co. Publishers, Madars,1934, p. 77.
20. Epigraphia Indica, XIV, p. 120.
21. Epigraphia Indica, XI, pp. 195.
22. Journal of the Royal Asiatic Society of Great Britain and Ireland, london, 1965, pp. 221.
23. Epigraphia Indica, IX, pp. 221.

24. Epigraphia Indica, XXV, pp. 266ff.

25. Majumdar,R.C., Comprehensive History of Bihar, Vol. I, Part II, Kashi Prasad Jayaswal Research Institute, Patna, 1974, p. 222.

26. Journal of the Royal Asiatic Society of Bengal Letters, Calcutta, XI, p. 72f.

27. Sinha, B.P., Dynastic History of Magadha, Abhinav Publication, New Delhi, 1977, pp. 116f.

28. Sinha, B.P., The Decline of the Kingdom of Magadha, Motilal Banarasidass, Patna, 1954, p. 444.

29. Pires, E., The Maukharis, B.G.Paul & Co. Publishers, Madars, 1934, p. 87.

30. Tripathi, R.S., History of Kanauj, Motilal Banarasidass, New Delhi, 1937, p. 44.

31. Sinha, B.P., Dynastic History of Magadha, Abhinav Publication, New Delhi, 1977, p. 118.

32. Corpus Inscriptionum Indicarum, III, 1888, p. 206.

33. D.R.Bhandarkar felicitated Vol., pp. 181ff.

34. Journal of the Royal Asiatic Society of Bengal Letters, Calcutta, XI, p. 70, fn.

35. Corpus Inscriptionum Indicarum, III, 1888, p. 219f.

36. Goyal,R.S., Harsha Aur Uska Yug, Megha Prakashan, Jodhpur, 1993, p. 57.

37. Thaplyal, K.K., Inscription of the Maukharis, Later Guptas, Pushpabhūtis and Yaśovarman of Kanauj, Indian Council of Historical Research, New Delhi, 1985, p. 29.

38. Sinha, B.P., Dynastic History of Magadha, Abhinav Publication, New Delhi, 1977, p. 114.

39. Mookerji, R.K., Harsha, Oxford University Press, New Delhi, 1965, p. 13.

40. Vaidya, C.V., History of Mediaeval Hindu India, Vol. I, Oriental Books, Puna 1921, p. 2.

41. Corpus Inscriptionum Indicarum, III, 1888, p.219.

42. Tripathi, R.S., History of Kanauj, Motilal Banarasidass, New Delhi, 1937, pp. 53-54.

43. Arvamuthan, T.G., The Kaveri, the Maukharis and the Sangam Age, Madras University, Madras, 1925, pp. 96-97; Chattopadhayaya, 1968, p. 272.

44. Sinha, B.P., The Decline of the Kingdom of Magadha, Motilal Banarasidass, Patna, 1954, p. 198.

45. Corpus Inscriptionum Indicarum, III, 1888, p. 213.

46. i.e., Narasiṁhagupta Bālāditya of the imperial Gupta dynasty.

47. Epigraphia Indica, XXIV, p. 283f.

48. Cowell, E.B. & Thomas, F.W., The Harṣa-Carita of Bāṇa, Motilal Banarsidass Publishers Pvt. Lt., Delhi, 1993, p. 122.

49. Ibid.

50. Pires, E., The Maukharis, B.G.Paul & Co. Publishers, Madars, 1934, p. 107.

51. Tripathi, R.S., History of Kanauj, Motilal Banarasidass, New Delhi, 1937, p.50.

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

52. The seal was first published by A. Ghosh in Epigraphia Indica, XXIV, p. 285f and subsequently republished with plate by K.K.Thaplyal in his Inscriptions of the Maukharis, the Later Guptas, the Puspabhūtis and Yashovarman of Kanauj, 1985, pp. 154-55.

53. Quoted by A. Ghosh, Epigraphia Indica, XXIV, p. 284.

54. Tripathi, R.S., History of Kanauj, Motilal Banarasidass, New Delhi, 1937, p. 50.

55. Archaeological Survey of India, Annual Report by Alexander Cunningham, IX, p. 27; Journal of the Royal Asiatic Society of Great Britain and Ireland, london, 1889, p. 139.

56. Pires, E., The Maukharis, B.G.Paul & Co. Publishers, Madars, 1934, pp. 129-30.

57. Devahuti, D., Harsha – A Political Study, Oxford University Press, Oxford, 1970, p. 86.

58. Collins, DGRD, p. 26.

59. Majumdar,R.C., Comprehensive History of Bihar, Vol. I, Part II, Kashi Prasad Jayaswal Research Institute, Patna, 1974, p. 102.

60. cf. Thaplyal, K.K., Inscription of the Maukharis, Later Guptas, Pushpabhūtis and Yaśovarman of Kanauj, Indian Council of Historical Research, New Delhi, 1985, p. 35.

61. Ibid.

62. Goyal,S.R., Maukhari-Pushybhūti-Chālukya Yuga, Kusumanjali Prakaskam, Merrut, 1988, p. 62.

A Publication of TRANS Asian Research Journals

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

PORTRAYAL OF WOMEN IN THE KAVYAS OF ASVAGHOSA

N. K. Ojha*; Sarika Dhiman**
*Professor,
Department of A. I. H. C. & A.,
Panjab University,
Chandigarh, India.
**Junior Research Fellow,
Department of A. I. H. C. & A.,
Panjab University,
Chandigarh, India.

ABSTRACT

Asvaghosa is one of those very few great poets, who have enriched Indian poetry by richness of the content presented and charmingness of the expression employed.[1] Asvaghosa, a man of par excellence ability in expressing himself is credited with the two kavyas- the Buddhacarita and the Saundarananda. The Buddhacarita is technically called a Mahakavya or great poem- a courtly epic in art and it is composed in the style appropriate to kavya. We find in the Buddhacarita a considered and an artistic arrangement of the material [2]from the birth of the Buddha until his entry into Parinirvana.

KEYWORDS: *Asvaghosa, Buddhacarita, Saundarananda, Virtues, Vices.*

INTRODUCTION

Asvaghosa is known to us as one of the most eminent poet of Sanskrit literature, as the masterly model of Kalidasa and as the author of epic, dramatic and lyrical poems.[3] Whereas much of Buddhist literature prior to the time of Asvaghosa had been composed in Buddhist Hybrid Sanskrit, Asvaghosa wrote in Classical Sanskrit. The tradition agrees that he was a contemporary of king Kaniska-I, the Kusana ruler (the last quarter of the first century CE and the first decade of the early second century CE). Asvaghosa (80-150 CE) is said to be born in Saketa in northern India to a Brahmin family.[4]

Asvaghosa is one of those very few great poets, who have enriched Indian poetry by richness of the content presented and charmingness of the expression employed.[5] Asvaghosa, a man of par excellence ability in expressing himself is credited with the two kavyas- the Buddhacarita and the Saundarananda. The Buddhacarita is technically called a Mahakavya or great poem- a courtly epic in art and it is composed in the style appropriate to kavya. We find in the Buddhacarita a considered and an artistic arrangement of the material[6] from the birth of the Buddha until his entry into Parinirvana. The Saundarananda is a kavya with the theme of conversion of Nanda, Buddha's half-brother, so that he might reach salvation. Though in these two works the centre of devotion is Buddha and his family but other aspects of life prevailing at that time are also beautifully sketched. Description of women is no exception to this aspect but it is mainly concerned with the

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

palace or the Master. It can be said that women in the kavyas of Asvaghosa are portrayed in different shades but with certain limitations, in consonance with the theme of the works.

Women played an important role in the life of the people, the society and the state. The author concentrated not only on the virtues of the lady but also depicted their vices through his poetical genius in a modest way. Virtuous, pleasant and beautiful qualities of a woman are projected by Asvaghosa. Maya Devi, wife of Suddhodana and mother of prince Siddhartha, is presented in the Buddhacarita not only as a benevolent queen but also as a benign mother. She is intended for the welfare of her subjects and is devoted to their well-being.[7] When she bore in her womb she is projected as a pure lady free from weariness, sorrow and illusion.[8] When Siddhartha was born Maya had mixed feelings of fear and joy. Like a mother she was ecstatic as her son possessed the powers other than human.[9] Maya Devi was “devoid of vices of anger, deceit and ignorance”.[10] Maya resembled the goddess of fortune in beauty and earth in fortitude.[11] Yasodhara, wife of Siddhartha, born of a noble family is portrayed as a virtuous and beautiful lady. She is modest, gentle and called as goddess of fortune.[12] Pious character of women is described in a beautiful manner. When prince Siddhartha was born, old women purified themselves performed luck-bringing rites and prayed to Gods for good fortune.[13] Character of Maya’s sister, Gautami, speaks of her selfless sacrificial spirit. Gautami who was equivalent to her sister Maya in affection was a bold and strong willed woman. The queen Gautami owned a great responsibility and exhausted herself in bringing up the prince Siddhartha as her own son.[14] Though this portrayal is restricted to palace but poet was successful in withdrawing the qualities considered to be possessed by a good lady. Respect of elders is another virtue of a woman depicted by the author in his kavyas. When they heard of that the prince is going out they went to see him only after seeking permission from their elders.[15] Natural tendency of a woman to adorn herself is very well sketched. Our poet has described the beauty of women in all postures, enhanced by make-up and ornaments. This description agrees with Mahavastu’s palace scene in the same context.[16] Women wore anklets,[17] earrings,[18] armlets,[19] necklaces,[20] garlands[21] to make them look beautiful but courtesy is described as their best ornament.[22]

Love and affection are other characteristics of a woman which are described beautifully by our poet. Undoubtedly in the Saundarananda Sundari is centre of attraction for her beauty but her feelings of love, attachment to her husband are also focused. She is portrayed as a mischievous, loving and beautiful wife.[23] She lamented badly when she heard the news of Nanda’s initiation into the Sangh by Buddha, the Tathagata. She screamed loudly, threw away the ornaments by saying she no longer needs them, entered the house of grief and wept.[24] The spirit of devotion and renunciation of Sakya women is portrayed through the advices given by the attendant woman. When Sundari was distressed on learning Nanda’s initiation one of the waiting woman counsels her courage by saying that the wives of these Sakyas who go off in search of salvation, treat the homes as groves of asceticism taking the vow of chastity (Sadhvi bratam) on themselves as if it were the same as love.[25] Similar feelings of grief, devotion and affection are expressed by Yasodhara when she heard of Siddhartha’s departure from the palace. In the words of Chandaka Yasodhara is devotedly faithful to her husband.[26] Her words “my desire is to secure that my beloved shall not leave me either in this life or in the hereafter”[27] shows an extreme devotion and love of a wife towards her husband. Due to this feeling of great affection for Siddhartha she chided Kanthaka the horse, that when everyone was asleep at night, he carried off her treasure like a jewel-thief.[28] Chief Queen Gautami as affectionate for the son lost her self-control and wailed around on learning that Siddhartha left the palace.[29]

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

Beauty is a concept which has been dealt with in both the kavyas. Nanda's wife 'Sundari' is the example of the chaste physical beauty of a woman.[30] She is 'Sundari' for her majesty and beauty, Manini for her obstinancy and pride and Bhamini for her extreme beauty in love and her spirit.[31] According to our author's perception she was par excellence in physical beauty and resembled some fair Apsara.[32] Her face seemed like a lotus with the tamala leaf for its water- weed, her dark red lips for its flaming tip and her long flashing eyes for the bees settled on it.[33] This simile tells the study of a woman's delicate and fragrant beauty. She was so beautiful that she needed no decoration. If Nanda covered her with ornaments, not that she should be decorated, but simply in order to serve her, otherwise she was the ornament of her ornaments.[34] She was like a divinity wandering in the garden of Nandana.[35] In the Buddhacarita in a charming way it is depicted how, when the news arrives that the prince had gone out, the ladies of the city in their curiosity hasten from their chambers to the roofs of the houses and to the windows. The faces of the beauties, charming as lotuses, gleaming out of the windows appear, as if the walls of the houses were really decorated with lotus flowers.[36] Yasodhara is also mentioned as a beautiful lady but not in such depth as the case with Sundari in the Saundarananda.

Buddhist sources record that women worked as slaves in the houses of rich people to earn their livelihood. They were also employed as attendants and personal servants of the members of the royal families.[37] Women were employed as nurses in the palace. When Asita, the great seer came to the palace of the Sakya king to see Siddhartha he (Siddhartha) was resting on the nurse's lap.[38] Numerous incidents regarding the employment of women as attendants in the palace are depicted in the kavyas of Asvaghosa. When queen Maya entered the city with her child she was attended by aged women.[39] During Buddha's visit to Nanda's house young women were busily employed in providing for their master's amusements – one woman was pounding ointment, another perfuming clothes, another preparing the bath and others weaving sweet-smelling garlands.[40] During Sundari's despair on Nanda's initiation the waiting women reached her and sat down beside her according to their position and rank.[41] In her distress she was soothed by her maidens.[42] When Sundari was in deep grief on Nanda's entrance into the mendicants life she was embraced by the oldest of the woman there from behind, she wiped her tears and advice her to have courage.[43] The people of higher strata had also female musicians in their houses. In the royal courts the female dancers, singers and musicians were also employed. Sometimes the courtesans also used to sing and dance. Siddhartha passed his time with the noble music of singing women. Some attendants were dexterous in dance that dances of these women rivaled those of beautiful apsarases.[44] Women employed in the palace for prince Siddhartha are described noblest and expert in instrumental music such as flute,[45] vina[46] or drum.[47]

Women are also employed in the services to gratify the senses. These women are skilled in the accessories of love and indefatigable in sexual pleasure.[48] In their beauty they are compared with apsarases. They are adept even in captivating the mind of great seers. They make use of clever tricks to conquer a man and Buddhacarita's Canto. IV has ample of references regarding their tricks. According to Asvaghosa they are so strong and powerful that they have captivated crowds of divine and royal seers by their passion, pride, gait, beauty, smiles, anger, intoxication and voices.[49] Women and maidens of the palace as ordered by the family priest bend their energies on their seductive art to soothe the prince and turn him from his distressing thoughts which he had after learning of old age, disease and death, though the prince remains untouched by soft distractions. Earlier they delighted

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

him with their soft voices, charming blandishments, playful intoxications, sweet laughter, curvings of eyebrows and sidelong glances.[50] Women in their bad aspect are portrayed as sinful, sexy and deceitful.[51] Dealing with this aspect poet has condemned even the touch of a woman. They are the origin of all sins and dangers and full of intoxications.[52] They cause friction.[53] They have honey in their tongue and poison in heart.[54] They never love whole-heartedly though they may mount their husbands' funeral pyre.[55] They are unsteady, ignoble and ungrateful.[56] According to poet thought of a wife means wandering in the darkness.[57] Vices of woman such as pride and anger are portrayed. Sundari and Yasodhara both showed ferocious nature over desertion by their respective husbands Nanda and Siddhartha. Alongwith feeling of love and attachment natural tendency of a woman of suspecting the husband of being unfaithful is also portrayed. When Nanda failed to fulfill his promise Sundari, who was unaware of his initiation into the Order, became suspicious of him. She thought he had fallen for someone else.[58] Jatakas are full of stories narrating the snares of women. They are told as embodiment of unchastity, infidelity and as untrustworthy. Men are warned against their evil influence. In Jataka 4 in Kulla Padma women are projected as ungrateful and treacherous.[59]

Portrayal of different aspects of a woman, compatible with the theme, shows Asvaghosa's command over the insight and psychology of a woman. On one side he portrayed the exemplary qualities of woman viz. endurance, love, affection, devotion, generosity but on the other side he has condemned the company of woman to the extent of hatred. This portrayal of women by Asvaghosa captured a prominent place in the imagination of writers and the artists. Virtue of motherhood was so pious that it finds a prominent place in the thoughts of the artists. The theme of Buddha's birth was followed by the artists in the Mathura school of art and the Ajanta paintings. Attractive hairdo, fine necklace, pearled string, various jewels and gems, female wearing several ornaments in the sculptures of Mathura school of art projects the influence of Asvaghosa on the artists. Music scene in a palace,[60] a female flute player,[61] toilet scenes[62] (like a man arranging the hair of a lady who looks into a mirror or lady putting on a necklace) portrayed in Mathura school of art commensurate with the portrayal of women by Asvaghosa. R.C. Sharma[63] identifies the toilet scenes of Mathura Museum with Nanda-Sundari scene of the Saundarananda. This belongs to Kusana period and it is a contemporary work. Keeping in light the situation of that time period and that the working area of Asvaghosa was north-western India it leads to doubt that how the theme of his work became so popular simultaneously at a far place like Mathura? Kalidasa, the greatest of our classical poets, also gives the description of beauty of human body by making use of such similes as used by Asvaghosa.[64]

REFERENCES

1. 1 S.K. Datta, Asvaghosa as a Poet and a Dramatist, Calcutta, 1979, p.1.

2. 1 Photodharma, Op.cit.

3. 1 http://www.records.photodharma.net/texts/j-k-nariman-asvaghosa-and-the-buddhacarita.

4. 1 S. Khosla, Asvaghosa and his Times, New Delhi, 1986, p. 4.

5. 1 S.K. Datta, Asvaghosa as a Poet and a Dramatist, Calcutta, 1979, p.1.

6. 1 Photodharma, Op.cit.

7. 1 B. I. 16.

8. 1 B. I. 5.

9. 1 B. I. 29.

10. 1 S. II. 49.

11. 1 B. I. 2.

12. 1 B. II. 26.

13. 1 B. I. 30.

14. 1 B. II. 19, B. VI. 32.

15. 1 B. III. 13.

16. 1 Khosla, op.cit., p. 213.

17. 1 B. III. 14, 15, 17,18,19,21, S. VI. 8.

18. 1 B. V. 41, S.VI. 2.

19. 1 B. V. 50.

20. 1 S. VI. 3, 5.

21. 1 S. VI. 34.

22. 1 B. IV. 70.

23. 1 S. IV. 12-22.

24. 1 S. VI. 24-34.

25. 1 S. VI. 40.

26. 1 B. VI. 33.

27. 1 B. VIII. 66.

28. 1 B. VIII. 38.

29. 1 B. VIII. 51.

30. 1 Khosla, op.cit., p.211.

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

31. 1 S. IV. 3.

32. 1 S. VI. 3.

33. 1 S. IV. 21.

34. 1 S. IV. 12.

35. 1 S. IV. 6.

36. 1 Photodharma, op.cit.,

37. 1 A. Agrawal,(ed.), Working Women in Ancient India, Chandigarh, p. 175.

38. 1 B. I. 59, 61.

39. 1 B. I. 87.

40. 1 S. IV. 26-27.

41. 1 S. VI. 35-36.

42. 1 S. VI. 49.

43. 1 S. VI. 38-39.

44. 1 B. II. 29,30.

45. 1 B. V. 45, 48.

46. 1 B. V. 48, 49.

47. 1 B. V. 50.

48. 1 B. II. 31,32.

49. 1 S. VII. 24.

50. 1 B. II. 31.

51. 1 S. VIII. 38,39,43,61.

52. 1 S. VIII. 32.

53. 1 S. VIII. 34.

54. 1 S. VIII. 35.

55. 1 S. VIII. 42.

56. 1 S. VIII. 46.

57. 1 S. X. 3.

58. 1 S. VI. 13-19.

59. 1 Khosla, op.cit., p. 208.

60. 1 R.C. Sharma,The Splendour of Matura Art and Museum, New Delhi, 1994, p. 113.

61. 1 Ibid., p. 114.

62. 1 Ibid., p.124.

63. 1 Ibid., p.124.

64. 1 S.K. Saraswati, A Survey of Indian Sculpture, New Delhi, 1975, p.129.

A Publication of TRANS Asian Research Journals

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

WOMEN'S EMPOWERMENT IN HARYANA: ROLE OF FEMALE REPRESENTATIVES OF PANCHAYATI RAJ INSTITUTIONS

Dr. Ritesh Nagpal*

*Assistant Professor,
Department of Public Administration,
Chandigarh, India.

INTRODUCTION

A democratic country cannot progress if energies of its half population are concerned in the kitchen only. After attaining independence Indian constitution ensured gender equality through various provisions and regulations. it was presumed that these rights would automatically get translated into political development of the women in the country. The issue of women's participation in politics cannot be viewed in isolation from the general position of women in a society but despite their vast strength, women occupy a marginalized position in the political system.[1]

This step was based on the premises that there can be no true democracy or no true people's participation in governance and development without equal participation of women in all spheres of life and at different levels of decision-making and then the goals of development can not be fully realized without women's full and active participation not only in the development process but also in the shaping of its goals. It is well known that parliamentary democracy is the rule of majority and by ignoring nearly fifty per cent of women's population; no country can march towards attaining the goals of justice, liberty and equality under the socialist, egalitarian and democratic framework of India's Constitution.[2]

Political status of women implies a degree of equality and freedom enjoyed by women in sharing of power and importance given by the society to the role of women in the political system. The equality and active political participation are inseparable. Participation of women in political arena is integral to the advancement of women. Their political participation means not only using the right to vote, but also power-sharing, co-decision-making, and co-policy-making at all levels of governance of the State. Women's equal status in every sphere is inextricably linked to country's progress and development.[3]

The political empowerment of women is considered as a powerful and indispensable weapon for their upliftment and providing them an equal status with men. A notable and concrete step in the direction was taken by the Narsimha Rao government when 73rd and 74th Constitutional Amendment were passed which paved the way for empowering women by reserving 33 per cent seats for them in rural and urban local bodies. The 73rd amendment to the constitution was the milestone in the history of PRIs in India, which gave statutory status to the Panchayats and provided for 33 percent reservation of seats for women in all the three tiers of Panchayati Raj system. Himachal Pradesh has been the first state who has given 50 per cent reservation for women in all the three tiers of Panchayati raj system. It also ensured the participation of women to provide leadership and hold decision- making position.[4] This new amendment indicates the governments desire that women should have proportionate representation in the local decision making bodies. However, with the reservation at the grass roots level today there are one million Panchayat members who have come forward as partners in the development process.[5]

The 73rd amendment has ushered in changed political scene where the women through reservation of seats in the PRIs have been assigned specific role where they would exhibit their political and administrative leadership qualities

The present study makes an assessment of the participation level of the female representatives regarding in the working of PRIs.

OBJECTIVE OF THE STUDY

To assess the women's empowerment in terms of participation of the female representatives in panchayati raj institutions

LOCALE OF THE STUDY

The present study covers the PRIs of the district Sirsa. Sirsa town proud of its glorious past and its ancient name was Sirshaka which found mention in Mahabharta, but a local tradition assigned the name to King Saras who founded the town in the 7th century A.D and built a fort. Sirsa district comprise of four tehsils, namely, Dabwali, Sirsa, Rania and Ellenabad and five towns viz. Mandi Dabwali, Kalanwali, Sirsa, Rania and Ellenabad. With 60.6 per cent literacy rate, it was among the three bottom ranking districts of the State. Position was slightly better in female literacy (49.9 per cent), Scheduled castes literacy rate (41.4 per cent) was still worst. Rural character of the district is reflected through various parameters like 61.5 percent of the workers are engaged in agricultural pursuits, 43.6 per cent households have no facility for drainage of waste water, 78.6 percent households using firewood, crop residue and cow dung cake as cooking fuel, low ranking in possession of various assets by households like television, telephone, radio/transistor, scoter/motorcycle, bank accounts etc. and availability of electricity for domestic use to 73.9 per cent households (18th rank). The district of Sirsa is one of the oldest district having a large chunk of rural population engaged in the agricultural activities irrespective of the gender[6]. Thus the district of Sirsa being rural and remote was selected as locale of the study to analyze the women's empowerment in terms of participation of elected female representatives.

RESEARCH METHODOLOGY

The district Sirsa has been comprised of seven development blocks namely Ellenabad, Nathusaria Chopta, Odhan, Baragudha, Dabwali, Rania and Sirsa. Of the total seven development blocks for the purpose of study, four blocks were selected. On the basis of population out of these four blocks, two of the blocks had highest population Sirsa and Nathusaria Chopta and the other two blocks had lowest population Odhan and Badagudha. From each of the four blocks, further four village panchayats were selected on the basis of the population i.e. one village with maximum population, one village which was moderately populated and two villages with the minimum population.

DATA COLLECTION

For the present study, both primary and secondary data was used. For the purpose of collecting primary data, a sample of 93 elected female representatives was picked up from the selected 16 Gram Panchayats and 4 Panchayat Samitis along with the Zila Parishad of the Sirsa district. All the female elected representatives of PRIs comprising of 4 Sarpanches and 62 Panches of Gram Panchayats, 20 members along with the Chairpersons of the four Panchayats Samitis and 7 members

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

along with the Chairperson from the Zila Parishad of the select Gram Panchayats, Panchayat Samitis and Zila Parishad constituted the sample of the study.

An interview schedule was developed and administered to the sample of the female elected representatives of the PRIs to get the responses on the raised questions and also non-participatory observation method was used by the researchers to get the first hand information regarding the participation of the elected female representatives in the PRIs.

For the purpose of collection of the secondary data, various annual reports, statistical abstracts, reports of the Directorate of Rural Local Bodies, 73rd Constitutional Amendment Act (1992) and Haryana Panchayati Raj Act (1994) as amended from time to time, various books, journals and articles were used.

DATA ANALYSIS, INTERPRETATION AND ASSUMPTIONS

In the study, the sample was further analyzed on the basis of demographic variables like age, caste and educational qualifications. The technique of cross tabulation with the percentages has been used for the purpose of analyzing the data. The benchmark for the analysis of the percentages of the primary data has been assumed as presented in the table 1.

TABLE 1: ASSUMPTIONS

Assumptions	Percentage of the Responses
High proportion	Next high proportion before the majority
More or less used on comparable basis	Less than 50 percentage
Maximum	Higher with in the specific response/s of a variable
Majority	50 to 60 percentages
Fair Majority	60 to 70 percentages
High Majority	70 to 80 percentages
Significant Majority	80 to 90 percentages
Highly Significant Majority	90 to 100 percentages

*Since the responses have been equally on nearly equally divided thus to find out the trends, the responses have been clubbed on the basis of their being positive and negative.

PROFILE OF THE FEMALE REPRESENTATIVES OF PANCHAYATI RAJ INSTITUTIONS

The responses were drawn from total number of 93 elected female representatives of selected 16 Gram Panchayats and 4 Panchayat Samitis along with the Zila Parishad of the Sirsa district with the help of interview schedule. The below tables 2, 3, and 4 summaries the socio-demographic profile of the total 93 female elected representatives of PRIs.

TABLE 2: AGE WISE CLASSIFICATION OF THE FEMALE REPRESENTATIVES OF PRIS

Age	Number of female representatives	Percentage

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

21-30 years	12	12.9
31-40 years	38	40.9
41-50 years	25	26.9
51 years and above	18	19.3

Source: Computed from primary data

Table 2 presents the age wise classification of Panchayati Raj female representatives. A perusal of the table reveals that out of the total sample of 93 female representatives, the 38 respondents (40.90 per cent) belonged to 31-40 years of age group, 25 respondents (26.90 per cent) belonged to 41-50 years of age group, 18 respondents (19.30 per cent) were from the age group of 51 years and above whereas 12 respondents (12.90 per cent) were from the age group of 21-30 years. Data analysis reveals that fair majority of respondents (67.80 per cent) belonged to the age group of 31-50 years and respondents (12.90 per cent) in the age group of 21-30 years.

TABLE 3: FEMALE REPRESENTATIVES OF PRIS ON THE BASIS OF CASTE

Caste	**Number of Female representatives**	**Percentage**
General	58	62.4
SC	31	33.3
BC	4	4.3

Source: Computed from primary data

Table 3 presents the classification of the respondents on the basis of the caste. It shows that out of total sample of 93 female representatives, 58 respondents (62.40 per cent) belonged to general caste, 31 respondents (33.30 per cent) belonged to SC caste, and 4 respondents (4.30 per cent) belonged to BC caste. So it can be depicted that all sections of the society had their representations in the sample, but the representation of BC category (4.30 per cent) was comparatively less.

TABLE 4: EDUCATIONAL QUALIFICATION OF THE FEMALE REPRESENTATIVES OF PRIs

Educational qualification	**Number of female representatives**	**Percentage**
Illiterate	20	21.6
Primary/ Middle / Metric/ 10+2	59	63.4
Graduate/ Post graduate	12	12.9
Technical degree/ diploma	2	2.1

Source: Computed from primary data

Table 4 highlights the segregation of the respondents on the basis of educational qualifications. As is evident from the above table that out of total sample of 93 female representatives, the 59 respondents (63.40 per cent) were qualified up to 10+2, 20 respondents (21.60 per cent) were illiterate, 12 respondents (12.90 per cent) were either graduates/post graduates and only 2 respondents (2.10 per cent) held technical degree/diploma. So, it can be concluded that PRIs were mainly dominated by the female representatives who were primary/middle/Matric/10+2 passed and the representatives did not possess higher educational qualifications.

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

The present research paper is an attempt to analyze the women's Empowerment in term of participation level of the female representatives of the PRIs in the district Sirsa and to find out this, certain questions have been posed to the female representatives to ascertain their responses which have been investigated and analyzed in the discussion to follow.

TABLE 5: HOW OFTEN DO YOU ATTEND MEETINGS OF THE PRIs?

Responses	Ranks	Regularly	Very often	Very rarely	Never
Age	21-30 years	5 (41.7)	3 (25.0)	4 (33.3)	0 (0.0)
	31-40 years	6 (15.8)	8 (21.0)	24 (63.2)	0 (0.0)
	41-50 years	5 (20.0)	8 (32.0)	12 (48.0)	0 (0.0)
	51 years and above	4 (22.2)	6 (33.3)	8 (44.4)	0 (0.0)
Caste	General	12 (20.7)	16 (27.6)	30 (51.7)	0 (0.0)
	SC	6 (19.4)	8 (25.8)	17 (54.8)	0 (0.0)
	BC	2 (50.0)	1 (25.0)	1 (25.0)	0 (0.0)
Educational qualification	Illiterate	6 (30.0)	8 (40.0)	6 (33.3)	0 (0.0)
	Primary/ Middle / Metric/10+2	12 (20.4)	13 (22.0)	34 (57.6)	0 (0.0)
	Graduate/ Post graduate	1 (8.3)	3 (33.3)	8 (66.7)	0 (0.0)
	Technical degree/diploma	1 (50.0)	1 (50.0)	0 (0.0)	0 (0.0)

Figures in the parentheses are percentages.

On checking whether the respondents attended the meetings of the PRIs, the analysis of the data presented in the Table 5 indicates that fair majority of respondents (63.20 per cent) in the age group of 31-40 years very rarely attended the meetings of PRIs, on the other hand fair majority of respondents (66.70 per cent) in age group of 21-30 years and majority of respondents (above 50 per cent) in the age groups of above 40 years either regularly or very often did so. On the basis of caste, the majority of general category respondents (51.7 per cent) and SC respondents (54.8 per cent) as against the BC respondents (25.00 per cent) very rarely attended the meetings of PRIs. The high majority of illiterate respondents (70.00 per cent) and all the respondents (100 per cent) with technical degree/diploma holder either regularly or very often attended the meetings of PRIs, whereas the majority of respondents (57.6 per cent) with qualifications up to 10+2 and fair majority of graduate/post graduate respondents (66.7 per cent) very rarely did so.

FINDING: The high proportion of female representatives very rarely attended the general meetings of PRIs.

TABLE 6: WHAT REMAINS THE MAIN HURDLE IN ATTENDING MEETINGS OF THE PRIS?

Responses	Ranks	Busy with family work	Do not bother about meetings	Diffidence	Dominating/ Bias attitude of the male representatives
Age	21-30 years	5 (41.7)	1 (8.3)	4 (33.3)	2 (16.7)
	31-40 years	26 (68.4)	3 (7.9)	5 (13.1)	4 (10.5)
	41-50 years	16 (64.0)	3 (12.0)	3 (12.0)	3 (12.0)
	51 years and above	10 (55.6)	2 (11.1)	1 (5.5)	5 (27.8)
Caste	General	36 (62.1)	6 (10.3)	8 (13.8)	8 (13.8)
	SC	19 (61.3)	2 (6.4)	5 (16.1)	5 (16.1)
	BC	2 (50.0)	1 (25.0)	0 (0.0)	1 (25.0)
Educational qualification	Illiterate	12 (60.0)	3 (15.0)	3 (15.0)	2 (10.0)
	Primary/Middle/Metric/10+2	40 (67.8)	2 (3.4)	8 (13.5)	9 (15.3)
	Graduate/ Post graduate	5 (41.7)	3 (25.0)	2 (16.7)	2 (16.7)
	Technical degree/diploma	0 (0.0)	1 (50.0)	0 (0.0)	1 (50.0)

Figures in the parentheses are percentages.

The data presented in the Table 6 indicated that on the basis of age, the fair majority of respondents (above 60.00 per cent) in the age group of 31-50 years, followed by the majority of respondents (55.60 per cent) in the age group of 51 years and above as against 41.70 per cent of respondents in the age group of 21-30 years were busy in their family work were not able to attend the meetings of PRIs. On the basis of caste, the maximum of fair majority of SC respondents (61.30 per cent) and general category respondents (62.10 per cent) in comparison to BC respondents (50.00 per cent) found themselves busy with family work. On the basis of educational qualifications, illiterate respondents (60.00 per cent), respondents with qualifications up to 10+2 (67.80 per cent) were busy with family work, so were not able to attend the meetings of PRIs whereas the responses of technical degree/diploma holder respondents (50.00 per cent) were equally divided between not bothering about meetings and due to the bias attitude of the male representative.

FINDING: The high proportion of female representatives didn't attended the meetings as they were busy with the family work

TABLE 7: HAVE YOU EVER RAISED AN ISSUE IN THE MEETINGS OF THE PRIs?

Responses	Ranks	All meetings	Very often	Very rarely	Never
Age	21-30 years	2 (16.7)	3 (25.0)	7 (58.3)	0 (0.0)
	31-40 years	7 (18.4)	9 (23.7)	22 (57.9)	0 (0.0)
	41-50 years	8 (32.0)	6 (24.0)	11 (44.0)	0 (0.0)
	51 years and above	8 (44.4)	5 (27.8)	5 (27.8)	0 (0.0)
Caste	General	17 (29.3)	16 (27.6)	25 (43.1)	0 (0.0)
	SC	7 (22.6)	5 (16.1)	19 (61.3)	0 (0.0)
	BC	1 (25.0)	2 (50.0)	1 (25.0)	0 (0.0)

Educational qualification	Illiterate	1 (5.0)	4 (20.0)	15 (75.0)	0 (0.0)
	Primary/ Middle / Metric/10+2	18 (30.5)	14 (23.7)	27 (45.8)	0 (0.0)
	Graduate/ Post graduate	6 (50.0)	4 (33.3)	2 (16.7)	0 (0.0)
	Technical degree/diploma	0 (0.0)	1 (50.0)	1 (50.0)	0 (0.0)

Figures in the parentheses are percentages.

The data relating to the responses of the employees whether they ever raised any issue in the meetings of PRIs is presented in the Table 7. On the basis of age, the majority of respondents (above 50.00 per cent) in the age groups of 21-40 years very rarely attended the meetings of PRIs as against the majority of respondents (56.00 per cent) in the age group 41-50 years and high majority of respondents (72.20 per cent) in age group of 51 years and above who raised the issue either in all meetings or very often. Majority of BC respondents (50.00 per cent) very often, fair majority of SC respondents (61.3 per cent) and high proportion of general category respondents very rarely raised any issue in the meetings of PRIs. On the basis of educational qualification, the high majority of illiterate (75.00 per cent) and majority of respondents (50.00 per cent) with technical degree/diploma holder very rarely as against significant majority of graduate/post graduate respondents (83.30 per cent) and majority of respondents (54.20 per cent) with qualifications up to 10+2 raised issue either in all meetings or very often in the meetings of the PRIs.

FINDING: The high proportion of female representatives very rarely raised issue in the meetings of PRIs.

TABLE 8: YOUR PARTICIPATION IN THE PRIs MEETINGS PROVIDE YOU AN OPPORTUNITY TO

Responses	Ranks	Express your views about important issues	To make efforts to meet the needs and demands of the area	To work for the welfare of the people	To make your presence felt
Age	21-30 years	2 (16.7)	4 (33.3)	4 (33.3)	2 (16.7)
	31-40 years	10 (26.3)	13 (34.2)	6 (15.8)	9 (23.7)
	41-50 years	7 (28.0)	7 (28.0)	6 (24.0)	5 (20.0)
	51 years and above	4 (22.2)	6 (33.3)	4 (22.2)	4 (22.2)
Caste	General	14 (24.1)	18 (31.0)	13 (22.4)	13 (22.4)
	SC	8 (25.8)	10 (32.3	7 (22.6)	6 (19.3)
	BC	1 (25.0)	2 (50.0)	0 (0.0)	1 (25.0)
Educational qualification	Illiterate	9 (45.0)	5 (25.0)	4 (20.0)	2 (10.0)
	Primary/ Middle/Metric/10+2	13 (22.0)	22 (37.3)	10 (17.0)	14 (23.7
	Graduate/ Post graduate	1 (8.3)	3 (25.0)	5 (41.7)	3 (25.0)
	Technical degree/diploma	0 (0.0)	0 (0.0)	1 (50.0)	1 (50.0)

Figures in the parentheses are percentages.

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

Table 8 data indicates the responses of the respondents regarding the opportunities received by the respondents by attending the meetings of PRIs. It was found that majority of respondents (55.50 per cent) in the age group of 51 years and above, the respondents (56.00 per cent) in the age group of 41-50 years and the fair majority of respondents (60.50 per cent) in the age group of 31-40 years through the meetings of PRIs were able to meet the demands of their areas as well as were able to express their views about important issues but the fair majority of respondents (66.60 per cent) in the age group of 21-30 years were able to make efforts to meet the needs of their areas or were able to work for the welfare of the people. The majority of general category respondents (55.10 per cent), SC respondents (58.10 per cent) and high majority of BC respondents (75.00 per cent) got the opportunity to meet the needs of their area or to express their views on important issues. On the basis of the educational qualifications, the high majority of illiterate respondents (70.00 per cent) and the majority of respondents (59.30 per cent) with qualifications up to 10+2 got the opportunities either to meet the needs of their areas or to express their views on important issues, on the other hand the fair majority of graduate/post graduate respondents (66.70 per cent) and all the respondents (100.00 per cent) with technical degree/diploma holder were either able to work for the welfare of the people or were able to make their presence felt.

FINDING: Participating in PRI meetings provided the opportunity to majority of female representatives to express their views on important issues and make efforts to meet the needs and demands of the people of their area. The respondents who were graduate/post graduates (41.70 per cent) and those respondents who were technical degree/diploma holder (50.00 per cent) opined that the participation provided them are opportunity to work for a welfare of the people.

TABLE 9: HOW OFTEN YOU HAVE BEEN ABLE TO ADDRESS THE GRIEVANCES OF THE PEOPLE, WHO APPROACHED YOU?

Responses	Ranks	Always	Very often	Very rarely	Never
Age	21-30 years	4 (33.3)	2 (16.7)	4 (33.3)	2 (16.7)
	31-40 years	21 (55.3)	6 (15.8)	3 (7.9)	8 (21.0)
	41-50 years	11 (44.0)	5 (20.0)	3 (12.0)	6 (24.0)
	51 years and above	9 (50.0)	3 (16.7)	2 (11.1)	4 (22.2)
Caste	General	30 (51.7)	6 (10.3)	9 (15.5)	13 (22.4)
	SC	14 (45.2)	8 (25.8	2 (6.5)	7 (22.6)
	BC	1 (25.0)	2 (50.0)	1 (25.0)	0 (0.0)
Educational qualification	Illiterate	10 (50.0)	6 (30.0	2 (10.0)	2 (10.0)
	Primary/Middle/Metric/10+2	32 (54.2)	6 (10.2)	5 (8.5)	16 (27.2)
	Graduate/ Post graduate	3 (25.0)	3 (25.0)	4 (33.3)	2 (16.7)
	Technical degree/diploma	0 (0.0)	1 (50.0)	1 (50.0)	0 (0.0)

Figures in the parentheses are percentages.

The data pertaining to the view that how often the respondents have been able to redress the grievances of the people who approached them is presented in the Table 9. On the basis of age, majority of respondents (50.00 per cent) in the age group of 21-30 years, fair majority of respondents (above 60.00 per cent) in the age group of 31-40 years with either always or very often addressed the grievances of the people who approached them. On the basis of caste, the fair majority of general category respondents (62.00 per cent) and high majority of SC respondents (71.00 per cent) and BC respondents (75.00 per cent) either always or very often addressed the grievances of the people who approached them. On the basis of educational qualification, the more of illiterate, majority of respondents (50.00 per cent) and respondents (54.20 per cent) with qualification up to 10+2 as against the less proportion of respondents in remaining categories either always or very often addressed the grievance who approached them.

FINDING: The majority of female representatives (above 50.00 per cent) either always or very often addressed the grievances of people who approached them.

TABLE 10: TO HELP THE PEOPLE, DO YOU DEPEND UPON YOUR HUSBAND OR FAMILY MEMBERS?

Responses	**Ranks**	**Yes**	**To a large extent**	**To lesser extent**	**No**
Age	21-30 years	3 (25.0)	4 (33.3)	4 (33.3)	1 (8.3)
	31-40 years	4 (10.5)	5 (13.2)	22 (57.9)	7 (18.4)
	41-50 years	2 (8.0)	4 (16.0)	11 (44.0)	8 (32.0)
	51 years and above	1 (5.5)	2 (11.1)	5 (27.8)	10 (55.6)
Caste	General	6 (10.3)	8 (13.8)	27 (46.6)	17 (29.3)
	SC	3 (9.7)	5 (16.1)	14 (45.2)	9 (29.0)
	BC	1 (25.0)	2 (50.0)	1 (25.0)	0 (0.0)
Educational qualification	Illiterate	5 (25.0)	7 (35.0)	6 (30.0)	2 (10.0)
	Primary/Middle/Metric/10+2	4 (6.8)	5 (8.5)	31 (52.5)	19 (32.2)
	Graduate/ Post graduate	1 (8.3)	3 (25.0)	5 (41.7)	3 (25.0)
	Technical degree/diploma	0 (0.0)	0 (0.0)	0 (0.0)	2 (100.0)

Figures in the parentheses are percentages.

The data presented in the Table 10 demonstrates that more of respondents (57.90 per cent) in the age group of 31-40 years and the respondents (44.40 per cent) in the age group of 41-50 years as against the respondents (33.30 per cent) in the age group of 21-30 years and the respondents (27.80 per cent) in the age group of 51 years and above depended to lesser extent on their husband or family members to help the local people. Interestingly the majority of respondents (55.60 per cent) in the age group of above 51 years not at all depended upon their husband or family members. Majority of BC respondents (50.00 per cent) depended to a large extent whereas general category respondents (46.60 per cent) and SC respondents (45.20 per cent) depended on their husband or family members to help the people up to lesser extent. Fair majority of illiterate respondents (60.00 per cent) either always or up to large extent depended upon their husband and family members to help the people as compared to the less proportion of respondents in the remaining categories.

FINDING: The majority of female representatives (above 50.00 per cent) depended on their husband or family members to help the people.

TABLE 11: HOW OFTEN DO YOU MEET THE PANCHAYATI RAJ OFFICIALS CONCERNED WITH YOUR AREA?

Responses	**Ranks**	**Regularly**	**Very often**	**Very rarely**	**Never**

Age	21-30 years	2 (16.3)	3 (25.0)	3 (25.0)	4 (33.3)
	31-40 years	3 (7.9)	7 (18.4)	17 (44.7)	11(29.0)
	41-50 years	4 (16.0)	6 (24.0)	8 (32.0)	7 (28.0)
	51 years and above	5 (27.8)	7 (38.9)	5 (27.8)	1 (5.5)
Caste	General	9 (15.5)	14 (24.1)	21 (25.0)	14 (24.1)
	SC	4 (12.9)	7 (22.6)	12 (38.7)	8 (25.8)
	BC	1 (25.0)	2 (50.0)	0 (0.0)	1 (25.0)
Educational qualification	Illiterate	2 (10.0)	4 (20.0)	5 (25.0)	9 (45.0)
	Primary/Middle/ Metric/10+2	8 (13.6)	13 (22.0)	25 (42.4)	13 (22.0)
	Graduate/ Post graduate	3 (25.0)	5 (41.7)	3 (25.0)	1 (8.3)
	Technical degree/diploma	1 (50.0)	1 (50.0)	0 (0.0)	0 (0.0)

Figures in the parentheses are percentages.

When the respondents were asked how often they meet any Panchayati Raj official concerned with their area, the responses obtained were highlighted in the Table 11. On the basis of age the high majority of respondents (73.70 per cent) in the age group of 31-40 years either very rarely or never met their Panchayati Raj official as against the 58.30 percent of respondents in the age group of 21-30 years and 33.30 per cent of respondents in the age group of 51 years and above. More of SC respondents (64.50 per cent) as against the general category respondents (49.10 per cent) and BC respondents (25.00 per cent) very rarely or never met the Panchayati Raj officials. All the respondents (100.0 per cent) with technical degree/diploma holder regularly or very often met the officials but the fair majority of respondents (64.70 per cent) with qualifications up to 10+2 and the high majority of illiterate respondents (70.00 per cent) very rarely or never met the officials.

FINDING: The high proportion of female representatives very rarely met the Panchayati Raj officials related to their area.

MAJOR FINDINGS

1. The high proportion of female representatives very rarely attended the general meetings of PRIs.
2. The high proportion of female representatives didn't attended the meetings as they were busy with the family work
3. The high proportion of female representatives very rarely raised issue in the meetings of PRIs
4. Participating in PRI meetings provided the opportunity to majority of female representatives to express their views on important issues and make efforts to meet the needs and demands of the people of their area. The respondents who were graduate/post graduates (41.70 per cent) and those respondents who were technical degree/diploma holder (50.00 per cent) opined that the participation provided them are opportunity to work for a welfare of the people.
5. The majority of female representatives (above 50.00 per cent) either always or very often addressed the grievances of people who approached them.
6. The majority of female representatives (above 50.00 per cent) depended on their husband or family members to help the people.
7. The high proportion of female representatives very rarely met the Panchayati Raj officials related to their area.

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

SUGGESTIONS FOR EFFECTIVE PARTICIPATION OF FEMALE REPRESENTATIVES IN THE PRIs

It would be worth while to suggest steps to strengthen women's role in the political process and rural leadership. The following suggestions can be made to enhance the participatory role of female in Panchayati Raj Institutions and bring them at par with their male counterparts in the effective running of these institutions.

1. Education is an important variable of women empowerment Panchayati Raj Institutions. Therefore, the first and foremost step for empowering female representatives is the removal of illiteracy among them. It should be made obligatory for both male as well as female leaders that they must have attained minimum education upto primary or middle level which may enable them to read and write the alphabets so that they can go through the resolutions and decisions taken by the panchayats
2. There is a need to involve female representatives in the planning and execution of various development and welfare programs of the government to provide them opportunity for practical learning of the process of development planning and program implementation at local level.
3. The voluntary agencies, social and women organizations can play significant role to generate political awakening among women folk in general and women leaders in particular. Short duration camps, training work-shops and orientation courses/ seminars can be conducted in rural areas to motivate the illiterate women to participate actively in political activities in the rural areas.
4. The government should made wide publicity to motivate the rural women to participate in panchayat activities by means of public meetings pamphlets, audio-video aids and advertisement through newspapers radio and television etc.
5. The meetings of the Gram Sabha are not regularly held. Not even Gram Panchayats meet regularly. If it is held then the presence of the female representatives are very low. It has been observed that the male family members of female representatives do not allow them to attend meetings. Therefore, such provisions should be made that there can not be proxy representatives by their male family members of panchayats
6. Sometimes their voice in the meeting is not given due weightage. Participation is meaningless if women are unheard, no opportunity is provided for them to articulate their views and they are not recognized as leaders. So due weightage should be given to their ideas or views.
7. There is need on the part of governmental agencies and feminist organizations to mobilize and encourage female representatives to come forward and participate in the institutions of governance at the local level.
8. There is a need to infuse self confidence in the women leaders by imparting regular and frequent training in the various dimensions of the PRIs.
9. Female representatives need to be made more knowledgeable and aware about the persuasive and pressure techniques to overcome the counter pressures from male representatives and PRIs officials.

10. Workshops may be conducted in the rural areas, citing examples and stories of successful women leaders at the local level who have worked exceptionally well for the benefit of the community. Such efforts will encourage the women folk to take up to the local leadership.
11. It has been observed that a large section of women contest panchayat elections because their husband/family want them to do so and result is dependence upon husband or family members. While very few contest elections of their own. The actual participation of women leaders will emerge when the larger sections of women will contest the elections of their own.
12. Last but not the least, there is an urgent need of cooperative and positive attitude of bureaucracy towards women empowerment in Panchayati Raj Institutions. The devolution of powers and finances to strengthen these instructions of self-governance are the need of the hour which can be possible only through political will of the state. The women development programmes should be linked with panchayats for more effective participation of women and for establishing links between female representatives and development functionaries at the grassroots level.

Non-participation of the women in the Panchayati raj institutions despite half a century of experimentation must be a major concern of all those who would like Indian democracy to be strong. This may be because of apathy of the people borne out of ignorance and illiteracy or because of institutional drawbacks forcing people to be outside the system. The pattern and structure of local leadership is changing fast. There is need to involve the women leaders in all the process of governance to empower them.

REFERENCES

1. Rashmi Arun, "Role of Women in Panchayati Raj", The Administrator, Vol. 12, April-June 1996, p. 45.

2. 1 K. Subha and B.S. Bhargava, "Feminism and Political Empowerment of Women: The Karnataka Experience", as in M.R. Birju (Ed.), Decentralisation : An Indian Experience, National Publishing House, Jaipur, 2007, p. 158.

3. 1 R. Venkata Ravi and D. Sunder Raj, "Grass Roots Governance: Women Empowerment through Panchayati Raj Institutions" as in M.R. Birju (Ed.), Decentralisation: An Indian Experience, National Publishing House, Jaipur, 2007, pp. 481-482.

4. 1 Richa Tanwar and Usha Chawla, "Rural Development and Women in Panchayati Raj Institutions", as in Surat Singh and Mohinder Singh (Ed.), Rural Development Administration In The 21st Century- A Multi Dimensional Study, Deep and Deep Publications, New Delhi, 2006, p. 401.

5. 1 Rasil Basu, Women and Governance-re-amaging the State, Ekatra, New Delhi, March 2003, p. 4.

6. 1 Statistics taken from Statistical Abstract of Haryana, 2007, Economic Advisor, Government of Haryana.

AJMR
A Publication of TRANS Asian Research Journals
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

ROLE OF PANCHAYATI RAJ INSTITUTION IN DISASTER MANAGEMENT

Mr. Yudhvir*; Ms. Sunita**

*Assistant Professor,
C. R. Kisan (PG) College,
Jind, India.
**Doctoral Research Scholar,
Department of Public Administration,
Kurukshetra University,
Kurukshetra, India.

INTRODUCTION

Disasters like Floods, Cyclones, Droughts and Earthquakes are increasing in India due to environmental degradation, deforestation, increasing population, nuclear explosions and air pollutions, etc. There is also worldwide concern to mitigate the growing incidence of disaster and their toll on human life, property and environment. In India floods affect 11.2 percent of the land and drought account for 28 percent of the land, cyclones along 7516 km vulnerable coastline and earthquakes covering 57 percent of the land are other major disasters that occur quite often. Natural Disasters cannot be prevented, but their impact on the lives and the socio-economic aspects of the people can be reduced to a considerable extent. In the past, people have countered the effects of the disasters with their own efforts and have overcome the trauma of the calamity. While the Government has the role to help its people in distress, the people themselves have greater responsibility to withstand together to face such eventualities and help the Government to help themselves in this process, rather fully depending on it. No state-level administration will be able to meet the requirements of communities, unless communities come forward to solve their own problems.[1]

The PRI is a statutory body elected by the local people through a well defined democratic process with specific responsibilities and duties. The elected members are accountable to the people of the ward, rural community, block and the district.

Keeping the above in view, the PRI, the representative body of the people, is the most appropriate institution from village to the district level in view of its proximity, universal coverage and enlisting people's participation on an institutionalized basis. Their close involvement will go a long way in getting people prepared for countering natural disasters as well as involve them in all possible preventive and protective activities so that the impact of the disasters are mitigated and the people are able to save their lives and property. The PRIs can act as catalysts to social mobilization process and tap the traditional wisdom of the local communities to complement the modern practices in disaster mitigation efforts. Besides PRIs will also provide a base for integration of various concerns of the community with that of the NGOs and CBOs which are engaged in various developmental activities at the grassroots level.

Hence there is a need to define the role of PRls in Disaster Management and sensitize local communities through them to develop coping mechanism in preparedness and mitigation measures of disaster to minimize its destructive effect on life and property at local level. The proposed national workshop will therefore address the relevant issues relating to role of Panchayats in disaster and providing a forum to discuss and evolve strategies to manage crisis situations effectively by these institutions. The disaster management cycle requires massive efforts in all its aspects like prevention, mitigation, preparedness, response, restoration, rehabilitation reconstruction work. These include addressing situations like lack of coordination at all levels in the restoration and relief work, non-involvement of the people, over dependency on government, inadequate relief and restoration work, lack of awareness among people regarding potential danger of cyclones and other disasters, lack of knowledge on availability of funds and resources etc,. Thus, the entire preparedness with regard to meeting emergencies like cyclone, flood and drought etc., calls for a constructive role and greater commitment on the part of the PRIs.[2]

NEED FOR INVOLVING THE PRI BODIES

In general, if the local bodies like Panchayats are not consulted for preparedness-planning, relief and rehabilitation work, it leads to absence of transparency and accountability in the mitigation efforts. The whole approach towards rehabilitation work may end up being 'top down' in nature. As the relief and restoration efforts involve investment of hundreds and thousands of cores rupees, there should be satisfaction of having utilized them properly and efficiently. Activities like distributing immediate relief in the form of money, food grains, medical care, cloths, tents, vessels drinking water and other necessities, activities of restoration, rehabilitation and reconstruction efforts of damaged villages and towns can be implemented better with the involvement of local bodies.

There is a view that local bodies like Panchayats should be encouraged and empowered to manage the local affairs with the available local resources. The elected leaders and officials of Panchayats should be trained to develop capabilities to handle crisis situation in preparedness, warning, rescue, relief, medical assistance, damage assessment, counseling, water and sanitation and rehabilitation operations. It is felt that in biggest disasters the role assigned to Panchayats was meager in handling the problems of various types at the grassroots level.

The 73rd Constitution Amendment (1992) heralded a new phase in the country's quest for a democratic decentralized set-up; more so, in matters pertaining to devolution of powers, functions, functionaries and finances. One of the objectives of Panchayati Raj (PR) is to promote popular participation through an institutional framework. The articles 243(G) of the Constitution visualises Panchayats as institutions of self-government. It subjects to extent of devolution and powers and functions to the will of the state legislatures, it also outlines the role of Panchayats in respect of development, planning and implementation of programs of economic development and social justice. A comprehensive list covering 29 subjects which are mostly related to development has also been provided in the Eleventh Schedule to the constitution. The success of this depends upon adequate devolution of powers, functions, personnel and finances on these bodies, which is yet to make significant progress. Mostly the disaster activities of restoration, rehabilitation and reconstruction fall within the ambit of these development activities. Hence there is an imperative need to involve local bodies in disaster management.[3]

HOW PRI BODIES CAN LEAD

It must be conceded that wherever it has strong roots, PRI has played a crucial role in mobilizing people in various situations of crisis. However, it is a fact that it is difficult to pre empty disasters

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

and also to predict their magnitude. But the impact of disasters on people living in vulnerable areas and losses to their property can be minimized by a pro-active role played by PRIs at the grassroots level. Apart from great organizing skills, it may call for courage and leading from the front. The PRI members can play a role of leadership in Disaster Management at all stages. Right from the preparatory stage up to the handling of the long term development activities for risk reduction, PRI can lead in several ways. A broad outline may include activities like:

PRE-DISASTER

- Organising awareness campaign and promoting community education on disaster preparedness.
- Articulation of community need for developing preparedness plan through community involvement and Panchayat ownership.
- Identifying the resource gaps both physical and manpower and replenish the same through capacity building.
- Establishing synergy with local agencies including NGOs/ CBOs.
- Dovetailing Risk Reduction into various development programs of national and state governments.
- Encouraging people to insure assets and livestock.
- Establishing convergence with local institutional structures created for implementing education, health, livelihood, social justice and so on.
- Activating the DM Plans with the participation of the community.
- Formation of Task forces and their capacity building.

DURING DISASTER

- Arranging emergency communication through available resources.
- Evacuation to temporary shelter and running relief camps.
- Supplementing rescue and relief efforts in coordinating different agencies.
- Monitoring of Relief distribution.
- Safe disposal of carcass and arranging safe drinking water and sanitation.

POST DISASTER

- Damage assessment particularly assisting in identifying victims for compensation and its distribution.
- Formulating rehabilitation and reconstruction plan of houses and other local infrastructures.
- Enforce minimum specification for safe reconstruction.
- Supervise and monitor long term reconstruction and mitigation projects.

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

- Mobilising special funds to use disaster resistant construction technology in vulnerable areas.[4]

MODES OF DISASTER MANAGEMENT

Disaster Management in a broad framework covers all aspects of preventive and protective measures, preparedness and systematic organization of rescue, relief and rehabilitation operations to mitigate the impact of disasters on the human beings and all socio-economic aspects of the disaster-prone areas. The whole process of disaster management can be divided into three broad phases and each phase has a number of inter-related activities:

I. PREPAREDNESS PHASE

Preparedness for an eventuality of the occurrence of a disaster helps its mitigation to a large extent. Therefore this is a continuous phase, when a number of activities are in place. These could include awareness generation, identification of vulnerable groups, identification of resources and assets, household preparation, formation of various task forces and their capacity building and developing a disaster management plan etc. This needs a sustained effort on the part of the community.

II. RESPONSE PHASE

This has two sub-phases;

EARLY- WARNING

This phase begins with Early Warning System. In cases where the disasters are predictable, such as Drought, Floods and Cyclone, as soon as there is indication of the on-set of a disaster, early warning is issued to keep people alert. The warnings continue till the actual impact. The interval at which warnings are issued depends on the type of the disaster. In the case of drought, the intervals for warning could be a week to a month but for Floods and Cyclones, it could be just every half-an-hour.

POST- WARNING

This is perhaps the most crucial phase and needs high alertness. The earlier preparedness helps a lot during this phase in reducing risk and damage and taking mitigation actions. This includes activities like Control room management, shelter management, inter-agency coordination, search, rescue and medical aid, public health measures, sanitation and hygiene, damage assessment, relief distribution, disposal of carcass and mobilization of resources and their optimal utilization.

III. REHABILITATION AND RECONSTRUCTION PHASE

After the impact of a natural disaster, particularly those which are devastating in nature leave behind large scale destruction such as loss of lives, damage to houses and properties, crops, livestock and the physical infrastructure.

Thus the activities to be attended in this phase are as follows:

- Provision of temporary shelters for those who have lost their houses completely, till construction of permanent housing is completed.
- Providing minimum household utility goods for all those who lost everything.
- Provision of food and clothing.

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

- Making alternate arrangements for drinking water if the existing facility has been completely damaged.
- Restoration of road, transport, electricity and communication (where minor repairs are needed and temporary arrangements in the case of those need reconstruction, which takes long time).
- Salvaging the losses incurred due to damage to the crops and plantations.
- Arrangements for distribution of seeds, fertilizers and other inputs in initiating the process of agricultural activities.
- De-silting of agricultural fields, irrigation tanks, canals etc.
- Restoration of health and educational facilities, if the damage is repairable or making temporary alternative arrangements.
- Distribution of ex-gratia for the dead and compensation for the losses (wherever applicable).[5]

ROLE OF THE THREE-TIER PRI BODIES IN DISASTER MANAGEMENT

The major role of the Panchayati Raj Bodies in respect of disaster management is in the preparedness planning and its implementation during the impact and post- impact phase as this is the most crucial period for the people facing the disaster. The village people are the most vulnerable for disasters and therefore the Village Panchayats have to play a major role in association with the higher level bodies of PRIs as well as with the Government agencies.

The involvement of Panchayats is also necessary as this alone can provide quick response and also make people to withstand the threat of the disasters and minimize their dependence on Government response for rescue and relief operation at the time of any crisis. The most important tasks to be performed by the Village, Block and the District Panchayats along with the government machinery at the respective levels during the three phases of disaster management are listed hereunder:

PHASE – I

Tasks to be performed by 3- tier Panchayat bodies for Preparedness planning

GRAM PANCHAYATS

1. Convening meetings of ward members to ensure proper information regarding the warning signals reached the people through all media modes.
2. Updating information on Civic amenities Population Government and Panchayat properties Housing and cattle/ livestock population
3. Selection of location for shifting people/ livestock to safer places
4. Special arrangements evacuation of handicapped, children and expectant mothers
5. Medical sanitation requirements relief camps
6. Arrangements disconnecting lines during winds/gales
7. Stocking food grains, drinking water and other necessities

BLOCK/ PANCHAYAT SAMITIS

1. Supervise preparedness of the Gram Panchayats
2. Consolidate village wise information on items listed under GP
3. Engineering staff at the Block I Mandal level should repair drainage/canal/roads etc.
4. Contacting Ex-army/Security forces personal / volunteers to organize a taskforce to assist people in emergency.
5. Procure and keep rescue materials including boats ready.
6. Function as link between the district and village level counter disaster activities.

ZILLA PARISHADS

1. Before the onset of monsoon (May) and likely periods of cyclone (May- June & Oct-Nov), the District Collector should have a meeting of all District Heads of the Sectoral, Departments and the Members of the Z P for preparedness.
2. All the concerned departments, specially Roads & Buildings, Major and Minor Irrigation, PDS, Communication Police , Revenue Electricity, etc., to take up necessary repair and maintenance and related works for preparedness to counter Flood& Cyclone Disasters.
3. To organize 'Task Force' at District, Block and the Village levels.
4. To identify and enlist NGOs who are useful in extending help during disasters.
5. At the first warning, call the meeting of the Crisis Management Group and alert all concerned at Block and Village levels.
6. All the members of the Crisis Management Group (CMG) should be asked to keep their personnel in full preparedness, at all levels down the line.
7. The District Collector should be the Leader of the CMG and establish a control room which should be managed by senior officers round the clock during the crisis.[6]

PHASE - II

Tasks to be performed by Panchayats for rescue and relief before and during the impact of disasters:

1. At the on-set warning of a disaster, the Gram Panchayat Leaders, with the help of District and Block Level officers should start preparations for countering Disaster. Establishment of temporary shelters relief camps should start immediately.
2. With the final warning, operations for the evacuation of people and the livestock should start so that all are at safer places before the disaster strikes.
3. Along with evacuation of people and livestock, storage of food and water for the people and the livestock should be made.
4. The Volunteers and the task forces should be kept in full readiness to take rescue operation at the shortest notice.

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

5. Medical and other relief teams from the district and Block may be asked to take position at strategic points and coordinate with the village volunteers / task forces.

BLOCK/ PANCHAYAT SAMITIS

1. With the final warning of cyclone, flood disasters, identify the villages likely to be affected and send teams of Task Forces/ Volunteers to the villages to supervise counter disaster measures.
2. Arrange transport facilities to evacuate people from villages likely to be affected and help GPs to shelter them in temporary relief camps.
3. Arrange for emergency communication facility through Police wireless, Radio, etc.
4. Arrange and assist GPs to establish temporary shelters/ relief camps.
5. Supervise the rescue and relief activities along with District Level officers.
6. Inform the CMG in case specific help for rescue and relief operation is required from the Police and Security forces including Army, Navy and Air Force.
7. Supervise the rescue and relief operations and coordinate with various agencies like Task forces, NGOs and Volunteers engaged in rescue and relief operations.

ZILLA PARISHADS

1. In the event of on-set of a cyclone /flood disaster monitor the situation, identify the Blocks and villages most likely to be affected and issue warnings at close intervals to all concerned.
2. Activate control room and keep full watch on the situations.
4. Activate CMG and put them on job for assisting Block and Village Panchayats

   for taking counter disaster measures.
6. Arrange for temporary emergency shelters/ relief camps and supply and transport of all essential food and non- food items to relief camp.
7. Requisitioning of the assistance of the Armed Forces if the need arises.
8. Monitoring of the rescue and relief operations at the village level.
9. Assisting the Block and village Panchayats in mobilising task forces/ Volunteers/ NGOs for rescue and relief operations.
10. Maintain minute to minute information on the situation during and immediately after the impact and keep ready to meet any specific emergency.[7]

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

PHASE - III

Reconstruction and long term planning:

GRAM PANCHAYATS

1. Assist in the identification of the victims of the disaster and eligible for various types of compensations and assist in the distribution.
2. Formulate reconstruction plan for individual houses, community and Govt. buildings, roads and other physical infrastructure within the jurisdiction of the GP with the assistance of the technical departments from block and district levels.
3. Enforce minimum code or specifications for the construction of individual houses, community and Government buildings, roads and other physical infrastructure.
4. Help district and block level organizations in organizing awareness camps for management and mitigation of disasters and ensure the participation of the villagers.
5. Organize village level Task Force/ Volunteers and train them in counter disaster measures.
6. Assist block and district level agencies in all activities related to disaster management and mitigation.
7. Assist block and district level agencies in the supervision and the monitoring of the reconstruction and development projects within the village.
8. Encourage village people to use insurance cover for all their assets/ lives and other aspects. This should be made mandatory for all those who can afford and also take Govt. help for others who can partially / not afford it.

BLOCK/ PANCHAYAT SAMITIS

1. Assist in Planning and Implementation of Rehabilitation of affected people; Repair and reconstruction of damaged house, physical infrastructure etc. and return to normal economic activities including farming etc.
2. Assist GP Panchayats in identification of persons eligible for different types of compensation and its distribution.
3. Based on hazard and vulnerability prepare village and block level mitigation plan and consolidate and integrate into block plan.
4. Assist and execute repair and reconstruction activities.
5. Assist for enforcing the specified code or specification for the construction of houses and buildings, roads and other physical infrastructure.
6. Assist in the formulation of long term mitigation planning and its integration with the development plan of the block and the district.
7. Provide technical assistance to the GP for identifying preventive and protective measures required for countering disasters, planning for them and help in the execution of such projects.

8. Supervise and monitor all projects implemented by the GPs and block Panchayats relating to reconstruction and long term mitigation of disasters.

ZILLA PARISHADS

1. Planning and Implementation of Rehabilitation of affected people, repair and reconstruction of damaged houses, physical infrastructure, etc and return to normal economic activities including farming etc.
2. Compensation for loss of lives, properties of individuals should also begin.
3. Mapping of hazard and vulnerability should be initiated; if it is not available detailed maps should be prepared for each block and district and should be placed in both district and blocks.
4. The repair and reconstruction activities should be integrated with a long term mitigation planning so that the quality of the reconstruction and repair is in consonance with the specifications provided for disaster resistant structures.
5. The long term mitigation plan should integrate normal development plan in such manner that protective and preventive measures against the disasters adhered in the implementation of all development projects under each and every sector.
6. Special funding should be made available for the construction of physical infrastructure to include disaster resistant technologies particularly in the construction of houses, roads, electric transmission lines, drinking water facilities, culverts, telecommunication, irrigation canals, tanks and reservoirs etc for the sections which are most vulnerable.
7. Supervise all construction and development activities.[8]

ROLE OF PANCHAYAT IN PLANNING AND CAPACITY BUILDING

Community-based disaster preparedness (CBDP) approaches are increasingly important elements of vulnerability reduction and disaster management strategies. They are associated with a policy trend that values the knowledge and capacities of local people and builds on local resources, including social capital. CBDP may be instrumental not only in formulating local coping and adaptation strategies, but also in situating them within wider development planning.

Panchayats have a very important role to play in both preparedness and mitigation in mobilizing and organizing the people as well as facilitate their capacity building. Communities should be motivated to make their own short term and long – term DM plans for Disaster Mitigation for which Panchayat bodies need to lead from the front in building their capacities through regular training in this field. A sustained effort in this direction will not only reduce the dependency of the people on the Govt. but also help mobilize sizeable resources locally to counter disasters and reduce the burden of the Govt. to a great extent. .

ROLE OF PANCHAYAT IN MANAGING INFORMATION

Collection, analysis and dissemination are the three phases of managing information. This would not only help in predicting natural disasters, but also help communities plan their agricultural activities.

COLLECTION

Authentic information plays a vital role at the time of need like the disasters.

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

Panchayats should make an attempt to collect information from all relevant sources. In addition, they should make an attempt to check its authenticity and validity before passing it on to the community. Some of the sources from which Panchayats could collect information may be Radio, Television, Govt. sources, District Disaster Mitigation Cell and from Newspapers and News Agencies.

ANALYSIS

Panchayats can form a committee of responsible persons who have access to the sources mentioned above so that they can get the right information at right time In this respect, some of the senior citizens of the local communities should be made members of this committee, so that they can help in identifying certain local geographical indicators, which would enable people to predict future climatic conditions.

DISSEMINATION

Panchayat functionaries can disseminate the information to the people in several ways. This can be done through notice boards, radio, TV, telephone, appropriate signals, word of mouth, and volunteers of DMT teams as well as through the local NGOs.[9]

ISSUES IN ROLE OF PRIS IN DISASTER PREPAREDNESS AND MANAGEMENT

The role of Panchayats is important in view of their proximity to the local community, universal coverage and enlisting people's participation on an institutionalised basis. It is possible to ensure accountability and transparency through the institution of Gram Sabha.

Hence there is an emphasis to involve Panchayats in Disaster Management and sensitize local communities through them to develop coping mechanism in preparedness and mitigation measures to minimise its destructive effect on life and property at local level. In the event of a disaster all people in its impact zone are affected but the poor and vulnerable (disabled, widow, orphans and children) people suffer the most, as their ability to absorb losses is low. The specific benefits of community participation accrue from involving people in their own development, as can be seen from the following considerations:

- People can be sources of useful ideas, such as those from indigenous technical knowledge and skills;
- Also, the communities and people can participate in decision-making process with regard to implementation of development schemes, which are pertinent to disaster reduction measures. And thus, people's voices and choices can be more appropriately reflected in development programs and the commitment of the implementing functionaries like leaders, officials and NGOs can be reinforced further.[10]

PREPAREDNESS OF THE PRI MEMBERS

As already discussed, a disaster brings in a very critical situation in the community. As the leaders of people the PRI members need to take responsibilities and act, for which they need to be prepared with the right kind of knowledge, skill and attitude. The basic three aspects, therefore, are:

First of all it is necessary to take note of some of their 'must-do' activities.

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

I. WHAT THE PRI MEMBERS NEED TO 'DO'

BEFORE A DISASTER

- Getting to understand the vulnerability of the area and the people.
- Facilitation of Disaster Management Plans.
- Resource Mobilization.
- Building Capacity of self as well as Team members.
- Establishing linkages with other stakeholders Involving the DMC and DMTs
- Involvement of women in DM activities
- Inclusion of Disaster Management in the agenda of all meetings

DURING A DISASTER

- Involvement in 'response' activities
- Monitoring activities at all levels
- Management of Control Room
- Disbursement of compensation
- Maintaining coordination with related agencies

AFTER A DISASTER

- Rehabilitation activities
- Maintaining social structures and infrastructures
- Evaluation & Documentation
- Integrating development programs with mitigation of disasters

II. WHAT THE PRI MEMBERS NEED TO 'KNOW'

In order to carry out the aforementioned tasks the members need to gain a good knowledge about the following aspects:

- Concept of DM
- Approaches to capacity building
- Their own roles and responsibilities in DM
- All DM norms/ acts / schemes
- DMP(Process / operations / follow ups)
- Preparedness / awareness
- Technological knowledge / skills

- Process of coordination
- Knowing the stake holders
- DM initiatives taken at all levels
- Convergence & linkages
- Leadership skills
- Methods and approaches to creating dedicated volunteers
- Code of conduct [11]

III. WHAT 'ATTITUDE' THE PRI MEMBERS NEED TO DISPLAY

One's inner attitude towards a task or a person or towards one's own role counts a lot for the successful execution of a responsibility. This aspect is even more vital in a responsibility connected to the public domain like Disaster Management. Some of these attitudes could be enumerated as:

- Positive disposition towards preparedness activities
- Cognition of local coping mechanism
- Political neutrality
- No blame game and no passing the buck
- Need-based decision making on stakeholders
- Gender equity
- Social service above self
- Ownership of responsibilities
- Openness to learning
- Optimal utilization of resources
- Prioritization of activities
- Never-say-die attitude

SOME MORE GUIDELINES

Panchayats must adhere to the following principles during relief, rehabilitation and reconstruction activities in order to protect the rights and dignity of each and every victim of a disaster. Relief, they should remember, must be treated as a right rather than as charity.

- Humanitarian imperatives come first.
- Aid should be given regardless of race, creed, nationality, caste and religion.
- Aid priorities must be calculated on the basis of need alone.
- Aid should not be used for a particular political or religious purpose.

- Respect must be shown towards culture and customs.
- Disaster response should build on local capacities.
- Beneficiaries should be involved in the management of relief programs.
- Relief must aim at reducing future vulnerability.
- Honesty, transparency and accountability must be emphasized.
- The dignity of victims must be respected Attention should be paid to the issue of gender equity.
- The needs of the children, disabled and stigmatized groups should be addressed on priority.
- All activities should be guided by the principle of inclusiveness.
- Coordination amongst various actors, who come forward to support the disaster affected population, should be maintained.[12]

FINANCIAL RESOURCES AND CALAMITY RELIEF FUNDING FOR DISASTERS

In India, natural disasters of one type or the other continue to strike relentlessly and there is increase in the magnitude, complexity, frequency and economic impact. In the event of natural disasters, the State Governments are responsible for rescue, relief and rehabilitation operations. The Central Government's role is supportive in terms of physical and financial resources and complementary measures. Nevertheless, availability of adequate funds for meeting the expenditure on natural calamities is a very critical requirement.

RESOURCES FOR CALAMITIES

The scheme of funding calamity relief is governed by the guidelines laid down by the successive Finance Commissions constituted under provision of the Constitution. The Second Finance Commission was the first to use the terms 'margin money scheme'. Under the scheme, the revenue needs of each States is assessed and allocated as margin money for meeting the expenditure on natural calamities. A specified sum ranging from Rs 10 to 100 lakh was kept in separate fund and the annual balance was to be invested in readily encashable securities.

The contribution of the Central Government in the calamity relief expenditure of the states included a share in margin money, advance plan assistance in the form of grants and loans, and Special Central assistance as grants and loans, etc. To obtain the Central assistance, the procedure was that each state was required to submit a detailed memorandum on damages to life and property after a particular disaster, and the fund requirement for rescue, relief and rehabilitation.

The Commission has suggested for augmenting the resources of the Central Government by recouping through levying a special surcharge on Central Taxes. The amount collected from such surcharge/cess should be kept in a separate fund created in the public account of the Central Government and the Center's contribution would be Rs 500 crore as the initial core amount.

By and large, the recommendations of the EEC on Calamity Relief Expenditure been accepted by the government as per the Action Taken Report of the government.[13]

THIRTEENTH FINANCE COMMISSION

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

The Thirteenth Finance Commission (FC) recommended that the existing National Calamity Contingency Fund (NCCF) be merged into the National Disaster Response Fund (NDRF) proposed under the DM Act 2005, with effect from 1 April 2010, and that the balances in the NCCF at the end of 2009-10 be transferred to the NDRF. As far as financing of the NDRF is concerned, as per the Act it should be credited with amounts that the Central Government may provide, after due appropriations made by the Parliament. It recommended that the Calamity Relief Fund or CRF be merged with the State Disaster Response Funds (SDRFs) of the respective states. The contribution to the SDRFs is to be shared between the centre and states in the ratio of 75:25 for general category states and 90:10 for

special category states. The Thirteenth FC emphasized that effective disaster response requires trained manpower to deal with complex situations where effective and speedy handling can reduce the impact of a disaster on human life and property. It is necessary to continuously undertake measures to build capacity amongst those handling response and creating awareness amongst people. It recommended an additional grant of Rs. 525 crore, on the basis of the overall size of the SDRF of a state. This amount may be used for taking up activities for building capacity in the administrative machinery for better handling of disaster response and for preparation of district and state level disaster management plans, as envisaged in the DM Act 2005. It also recommended an assistance of Rs. 250 crore to National Disaster Response Force to maintain an inventory of items required for immediate relief. It suggested that mitigation and reconstruction activities to be kept out of the schemes funded through FC grants and be met out of overall development plan funds of the Centre and the states. [14]

OTHER FINANCIAL RESOURCES FOR CALAMITY RELIEF

In addition to the outflows from the CRF, substantial budgetary resources are invested annually by both the Central and the State Governments mainly on structural measures (engineering and non-engineering). The State Flood Control Departments and the Central Water Commission also provide funds for structural projects such as dams and reservoirs, dykes and embankment, drainage and river training. Considerable amounts are also spent on publicity on disaster awareness, communications, training and warning systems for floods, cyclones, tidal waves, etc. Data on such budgetary allocation for these purposes are not easily available

for estimates. Besides, after the occurrence of disaster events, remission of land revenues and interest components of agricultural loans are granted, along with the rescheduling of all such loans. These measures are not usually included in the expenditure statements of disaster relief funds.

However, the integration of Village Disaster Mitigation Plan with the long term development plan of the area can be made possible by tapping funds from following sources:

- Plan Funds from Sectoral Departments of the State Government
- Funds available under various centrally sponsored rural development Programs/schemes, such as Integrated Wasteland Development Program (IWDP), Sampoorna Gram Rojgar Yojna (SGRY), National Rural Employment Guarantee Act (NREGA), Prime Minister’s Grameen Sadak Yojna (PMGSY) and Rural Water Supply and Sanitation Program etc.
- Local Resource Mobilisation.

- Funding from Central Budget for disaster management.[15]

CONCLUSION

PRIs institution has been effective management for all phase of disaster management process at grass root level since act, 1992. While some challenges were prevalent their like financial problem, no proper plan & policy, training facilities etc. Their need a proper mechanism for manage of disaster like hazard calendar, village disaster management authority (VDMA), proper training, plan & policy at grass root level.

RFERENCES

1. GOI-UNDP (2002-2009) “Disaster Risk Management Programme” New Delhi, p-21.
2. Goel, S. L. (2006) “Policy and Administration” Deep & Deep Publications, New Delhi, p-404.
3. Goel, S. L. (2006) “Policy and Administration” Deep & Deep Publications, New Delhi, p-405.
4. Training Manual (2012) “Capacity Building in Disaster Management for Government Officials and Representatives of Panchayati Raj Institutions & Urban Local Bodies at District Level”, Initiative of National Disaster Management Authority and Indira Gandhi National Open University, New Delhi, p-17.
5. Handbook for Effective Disaster Management at Micro Level (2012) “Capacity Building in Disaster Management for Government Officials and Representatives of Panchayati Raj Institutions & Urban Local Bodies at District Level”, Indira Gandhi National Open University and National Disaster Management Authority, New Delhi, p-17-42.
6. Training Manual (2012) “Capacity Building in Disaster Management for Government Officials and Representatives of Panchayati Raj Institutions & Urban Local Bodies at District Level”, Initiative of National Disaster Management Authority and Indira Gandhi National Open University, New Delhi, pp-25-26.
7. Handbook for Effective Disaster Management at Micro Level (2012) “Capacity Building in Disaster Management for Government Officials and Representatives of Panchayati Raj Institutions & Urban Local Bodies at District Level”, Indira Gandhi National Open University and National Disaster Management Authority, New Delhi, pp40-48.
8. GOI-UNDP (2002-2009) “Disaster Risk Management Programme” New Delhi, pp-27-29.
9. Goel, S. L. (2006) “Policy and Administration” Deep & Deep Publications, New Delhi, pp-415-416.
10. GOI-UNDP (2002-2009) “Disaster Risk Management Programme” New Delhi, pp-29-30
11. GOI-UNDP (2002-2009) “Disaster Risk Management Programme” New Delhi, pp-31-32.
12. Handbook for Effective Disaster Management at Micro Level (2012) “Capacity Building in Disaster Management for Government Officials and Representatives of Panchayati Raj

Institutions & Urban Local Bodies at District Level", Indira Gandhi National Open University and National Disaster Management Authority, New Delhi, pp42-48.

13. GOI-UNDP (2002-2009) "Disaster Risk Management Programme" New Delhi, pp-32-33.

14. Training Manual (2012) "Capacity Building in Disaster Management for Government Officials and Representatives of Panchayati Raj Institutions & Urban Local Bodies at District Level", Initiative of National Disaster Management Authority and Indira Gandhi National Open University, New Delhi, pp58-60.

15. Government Of India Planning Commission (2006) " Report Of The Working Group Disaster Management For The Eleventh Five Year Plan (2007-2012)" ,New Delhi, pp- 15-18.

AJMR
Asian Journal of Multidimensional Research
Vol. 2 Issue 6, June 2013, ISSN 2278-4853

Editorial Board

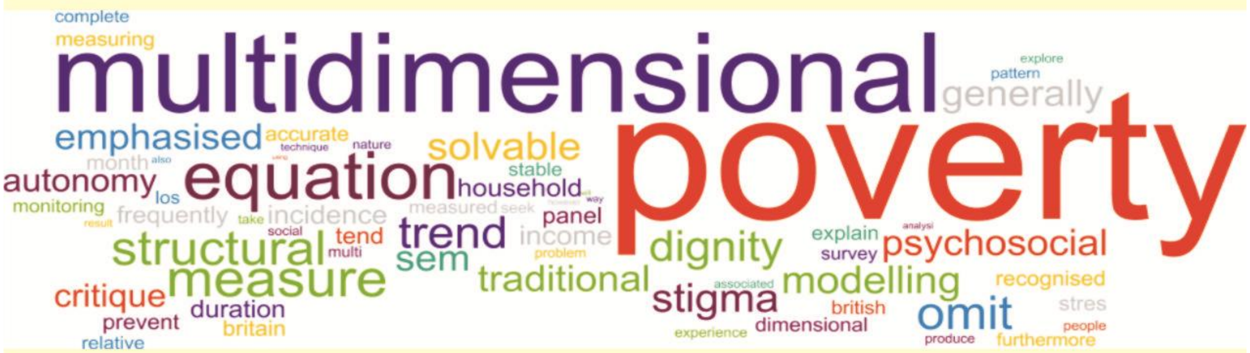
Review Process

Each research paper/article submitted to the journal is subject to the following reviewing process:

1. Each research paper/article will be initially evaluated by the editor to check the quality of the research article for the journal. The editor may make use of ithenticate/Viper software to examine the originality of research articles received.
2. The articles passed through screening at this level will be forwarded to two referees for blind peer review.
3. At this stage, two referees will carefully review the research article, each of whom will make a recommendation to publish the article in its present form/modify/reject.
4. The review process may take one/two months.
5. In case of acceptance of the article, journal reserves the right of making amendments in the final draft of the research paper to suit the journal's standard and requirement.

Categories

- Business Management
- Social Science and Humanities
- Education
- Information Technology
- Scientific Fields



Published by

Trans Asian Research Journals
SCO 34, Ist Floor, HUDA Market,
Near Red Cross, Jagadhri - 135 003 (Haryana) INDIA
Website : www.tarj.in

Our other publications :
Trans Asian Journal of Marketing & Management Research (TAJMMR)
ISSN (online) : 2279-0667