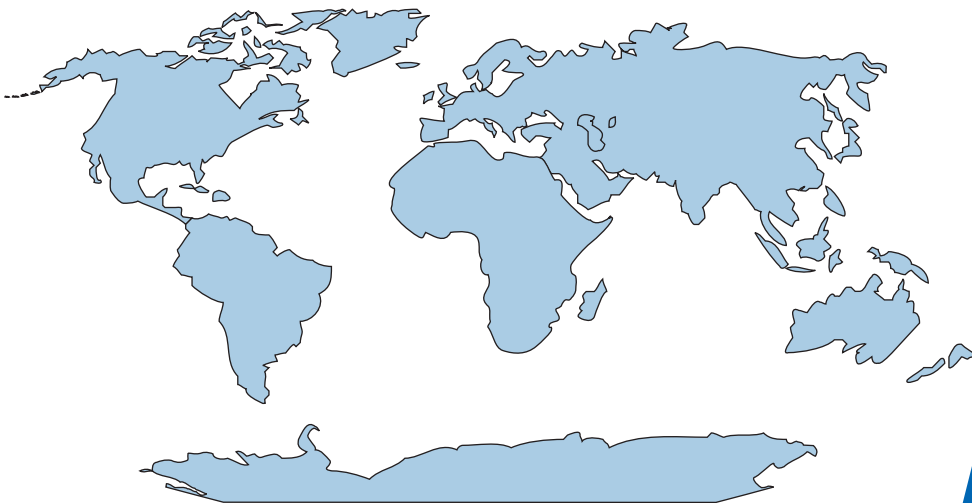


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A COMPARATIVE STUDY OF SOCIO-ECONOMIC STATUS AND DEMOGRAPHIC PATTERN OF THE SUBANSIRI RIVER BASIN OF EASTERN HIMALAYAS AND THE ALAKNANDA RIVER BASIN OF WESTERN HIMALAYAS

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ABSTRACT

This paper aims to study and compare the socioeconomic and demographic profiles of two representative Himalayan river basins viz. the Subansiri of eastern Himalaya and the Alaknanda basin of western Himalaya. Though both the basins are mostly comprised of hilly area and located in opposite ends of the same great Himalayan arc, still there are some contrasting features in regard to their geoenvironmental condition, demographic pattern as well as socioeconomic status. Keeping these issues in mind, an attempt has been made here to study both the representative Himalayan basins based on selected socio-economic and demographic parameters. It is found from the study that the Alaknanda basin of western Himalaya is comparatively more developed in regards to its economy than the Subansiri basin of eastern Himalaya. However, in respect of their social make up and demographic pattern, there exists considerable variation. There is an urgent need to evolve suitable paradigm and strategy for the proper management and sustainable development of both the Himalayan basins.

Keywords: socio-economy, population, Himalaya, Subansiri basin, Alaknanda Basin, hydropower

INTRODUCTION

The Indian Himalayan region occupies a special place in the mountain ecosystems of the world. Among the global mountain system, the Himalaya is the most complex and diversified mountain system. The traditional definition of the Himalaya, *sensu stricto*, is that great range of mountains that separates India, along its north-central and north-eastern frontier, from China (Tibet), and extends between latitudes 26°20' and 35°40' North, and between longitudes 74°50' and 95°40' East (Ives and Misserli 1989). Based on the geomorphological factors like rock types, structure, tectonics, geographical location and prevailing climatic conditions the Himalaya is broadly divided into four major regions (Sah, 1993) viz. Higher Himalaya, Lesser Himalaya, Outer Himalaya and Bhabar and Tarai. The outer Himalaya is highly dissected range with average elevations ranging from 600-1200 meters. In this belt Dun valleys are situated. Lesser Himalaya is inhabited by majority of population and is an important area of Himalayan belt which receives winter snow. Lesser Himalaya is a 50-80 km wide mountain belt with elevations ranging from 2000-3500 meters. Higher Himalaya or Himadri is covered by permanent snow and ice throughout the year in the form of glaciers. Higher Himalaya is again divided into Inner Higher Himalaya and Outer Higher Himalaya or Main Higher Himalaya. The Inner Higher Himalaya is also called as cold deserts. Bhabar area is 15-30 km wide with an elevation of 300-600 meters. The adjoining area to the south of Bhabar with an average slope of 5-6 degree where the sub-surface flow re appears is known as Tarai which has elevations ranging from 100-300 meters. The great variation in topographical features causes immense diversity in climate and habitat conditions within the region. Temporal and spatial variations caused by diversity in geological orogeny have resulted into a marked difference in climate and physiography and consequently in the distribution pattern of biotic elements (Singh, 2006). This mountain range has a significant influence on the life and living of the people and shaped the destiny of the nation. The population, settlement, and economic patterns within the Himalayas have been greatly influenced by the variations in relief and climate, which impose harsh living conditions and tend to restrict the population movement and their communications (Karan, 1966). The Himalaya is a unique mountain system in the world with their lofty snow capped summits, deeply-dissected topography, youthful drainage, complex geological structure and rich biodiversity. The Himalaya is the main source of water for the rivers in the Indo-Gangetic plains, and all the major river systems of north India- the Ganga, Brahmaputra and Indus originate from the Himalayan snow and ice fields (Singh et al., 1998). The great mountain range of the Himalaya is one of the most attractive areas of research from early time of history. This study will attempts to examine and assess the existing knowledgebase of specific aspects of socio-economic, demographic and landuse characteristics as well as hydropower potential of both the eastern and western Himalayan basins.

STUDY AREA

The study area covers parts of the western Himalayan region represented by Alaknanda river sub-basin of the Ganga River and parts of the eastern Himalayan region represented by the Subansiri river sub-basin of the Brahmaputra River in India (Figure1). Besides the Tibetan part, most of the Subansiri basin falls in the states of

Arunachal Pradesh and Assam. The basin with its different geographical and socio-economic characteristics comprises of the Lower Subansiri district, the Upper Subansiri district, and the Kurung Kumey district (created by bifurcating Lower subansiri district in April, 2001) of Arunachal Pradesh while the lower portion of the basin covers large areas under in Lakhimpur and Dhemaji districts and a smaller part under Majuli sub-division of Jorhat district of Assam. On the other hand, Alaknanda basin of western Himalayas with its different geographical and socio-economic characteristics covers part of Bageshwar district, whole of Chamoli and Rudraprayag districts in upper part, while the lower part of the basin comprises of parts of Tehri Garhwal and Pauri Garhwal districts of the state Uttarakhand.

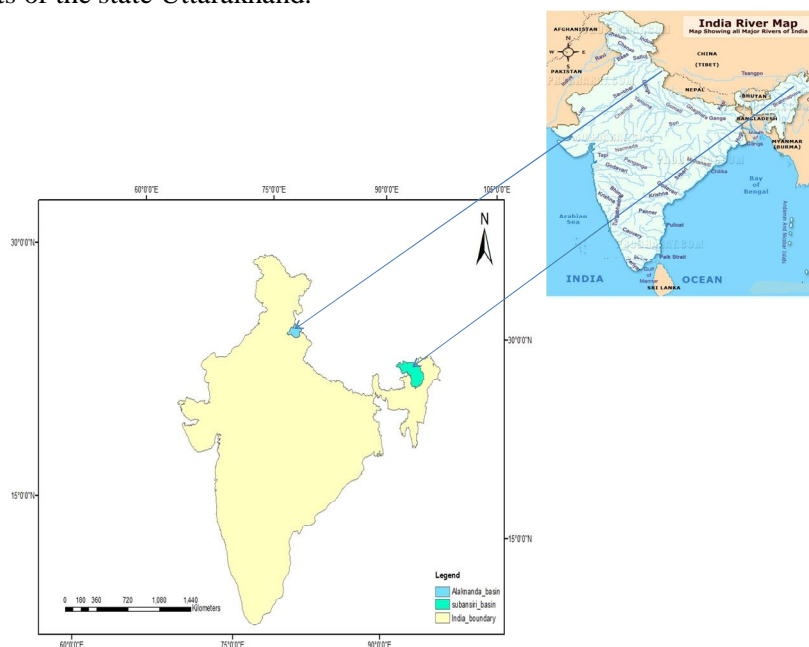


Figure1: Location map of the study area

(a) PHYSIOGRAPHY OF THE SUBANSIRI BASIN

The river Subansiri originates in the south of the Po Rom Peak in Tibet (China) at an elevation 5059 meters. The extension of the basin in India is $26^{\circ}57' - 28^{\circ}40' \text{ N}$ and $92^{\circ}40' \text{ E} - 94^{\circ}47' \text{ E}$. The Subansiri is called Lokong Chu (Tsari Chu) at its source. It is a major tributary of the river Brahmaputra. It is a perennially snow fed trans-Himalayan river that passes through the Miri Hills in Arunachal Pradesh, enters the plains in Assam and flows through them before meeting the mighty river Brahmaputra near Jamuguri. The Subansiri has several tributaries such as the Kamla, Ghagar, Sampara, Kurung, Gayang, Dulung, Ranganadi etc. The drainage area of the Subansiri River in India covers approximately 27,280 sq.km. and it contributes about 10% flow of the river Brahmaputra estimated at Pandu near Guwahati

(b) PHYSIOGRAPHY OF THE ALAKNANDA BASIN

The Alaknanda is a Himalayan River in the state of Uttarakhand. It is one of the major headstreams of the Ganga and originates at the water divide between Satopanth and Bhagirath glaciers situated in the southern slopes of the outer Himalayas. The river Basin is bounded between $30^{\circ} 0' \text{ N} - 31^{\circ} 3' \text{ N}$ and $78^{\circ}37' \text{ E} - 80^{\circ}2' \text{ E}$ covering a basin area of 10,936 sq. km. and carrying an average discharge of $439.36 \text{ m}^3/\text{s}$. The Alaknanda has several tributaries like the Saraswati, Pindar, Mandakini, Dhauliganga, Rishiganga, etc. Several high mountain peaks such as Nanda devi, Kamet, Trisul, Chaukhamba etc. are located here.

DATA BASE AND METHODOLOGY

The databases used for the study are the various govt. documents and published /unpublished reports and various research publications. Graphs related to demography, literacy etc is prepared based on the Census India reports available in Census India website <http://censusindia.gov.in>. The database used cover only the years for which data are available in the public domain.

RESULTS AND DISCUSSION

Socioeconomic profile of the Subansiri and the Alaknanda basins

Land management is a crucial issue in the Himalayan region. Less than 10% land is cultivable with high population pressure and cropping intensity. It is also used for diverse activities. The main occupation of the people in the plains of the Subansiri sub-basin is agriculture. Rice is the principal crop grown there. Besides rice

cultivation, mustard, potato, vegetables etc. are also grown in the fertile flood plains of the basin. As the upper portion of the Subansiri basin falls in Arunachal Pradesh, the ethnic people belonging to the Apatani tribe practice wet rice cultivation in the valley area enclosed by hills, while the other tribes practice shifting cultivation on the hill slopes. Jhum or shifting-cultivation is the most common method of agriculture practised widely by the different tribes throughout the state Arunachal Pradesh.

Agriculture practices are the main occupation of inhabitants of the Alaknanda basin. It is also a main source of livelihood of majority of the people. About 80% population is engaged in the production of cereal crops and livestock farming. Livestock rearing plays a significant role in the livelihood as it is the second main occupation after farming of subsistence crops. Recent study on livestock farming reveals that the numbers of domesticated animals are decreasing (Sati and Singh, 2010). The main crops of the basin are paddy and wheat. Other important crops of the basin are pulses, barley, millets and oilseeds which are environmentally sound and suitable. In the Alaknanda basin, the production of potato, onion and tomato is noteworthy and the region exports potato to the regional markets. The other vegetables cultivated here are pumpkin, cucumber, beans, reddish, carrot, coriander and green leafs but these are grown at a domestic level. Among the spices ginger, turmeric, chilli, bay leaf, coriander and garlic are grown extensively because of the suitable agro-climatic conditions of the basin. Livelihood options have also changed in the uplands as outward migration is increasing and this creates a situation where the major source of income is from remittances received from locals working outside the state. As a result of this, the agricultural practices and livestock are showing a decline in recent times.

Though the plain areas of the Subansiri basin contain high population density i.e. in Lakhimpur and Dhemaji districts, but the size and density of population is less in the upper part of the basin which covers the Lower Subansiri, Upper Subansiri and Kurung Kumey districts. On the other hand, the population is almost uniformly distributed from Garhwal district lying at lower elevation to Chamoli district at higher elevation in the Alaknanda basin of western Himalaya (Figure 2). Number of urban population in the Subansiri basin is comparatively less than the Alaknanda basin (Figure 3). In case of the female/male population ratio it is significantly high in the Alaknanda basin than the Subansiri basin of eastern Himalaya (Figure 4). Temporary and semi temporary types of houses (% of households) are more in the Subansiri basin than the Alaknanda basins (Figure 5). Scheduled Caste population is more dominant in the Alaknanda basin while the Scheduled Tribe population is more in the Subansiri basin (Figures 6 and 7).

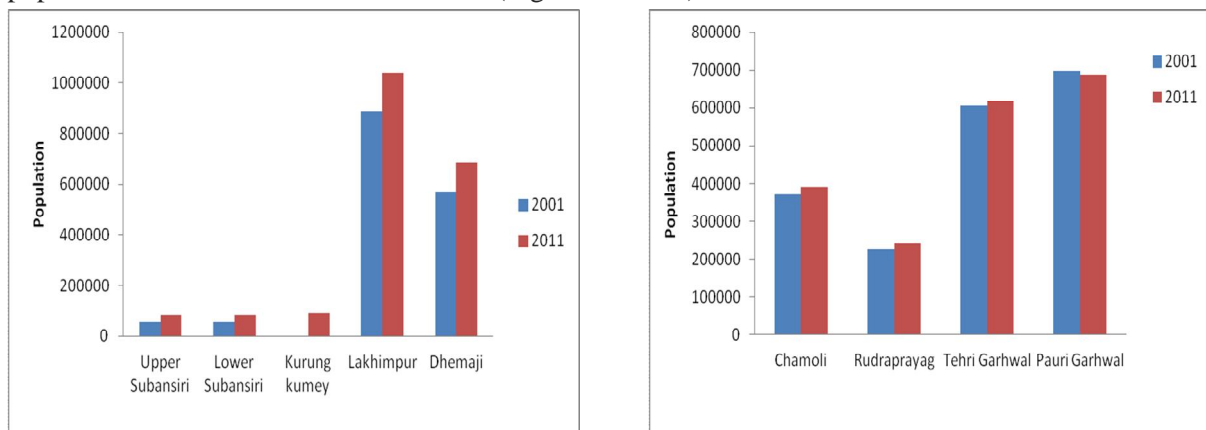


Figure 2: Populations in the Subansiri and the Alaknanda basins in 2001 and 2011

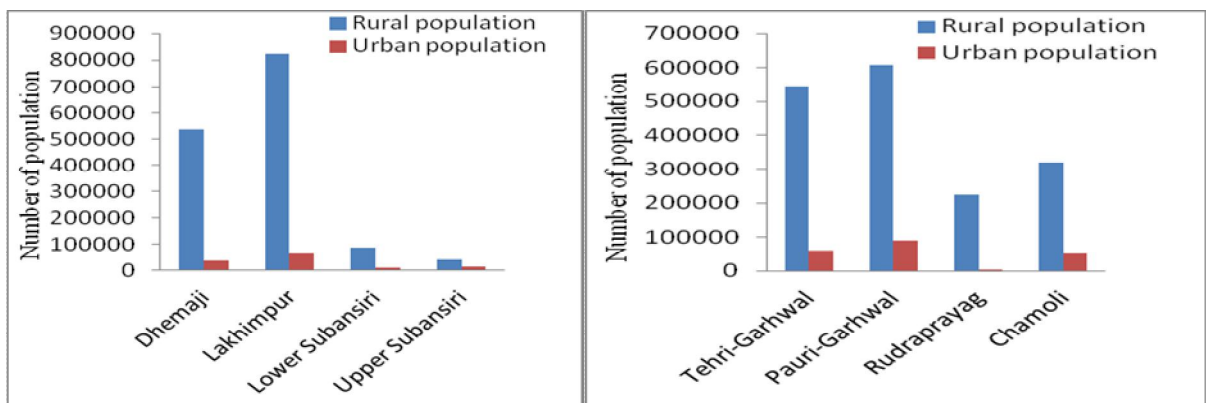


Figure 3: Number of rural and urban population in the Subansiri and the Alaknanda basins, 2001

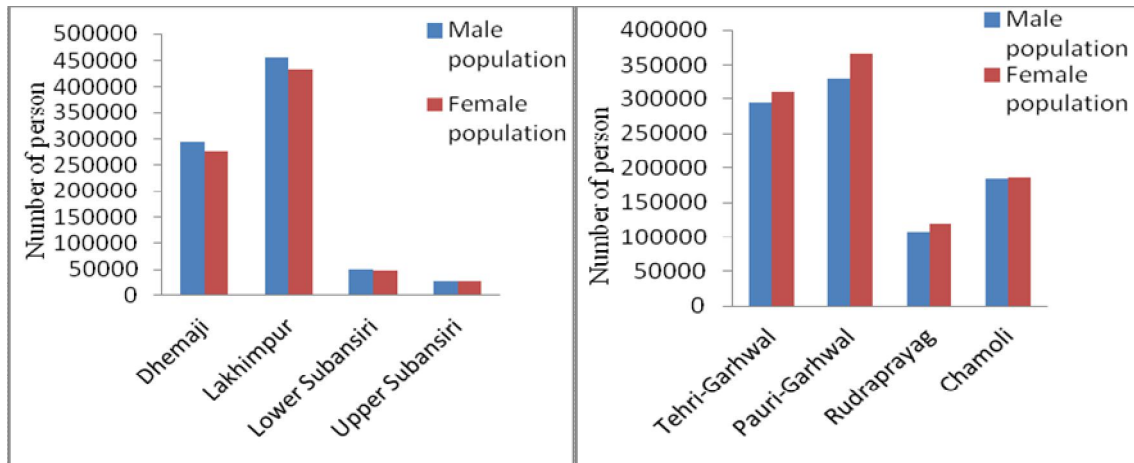


Figure 4: Number of male and female population in the Subansiri and the Alaknanda basins in 2001

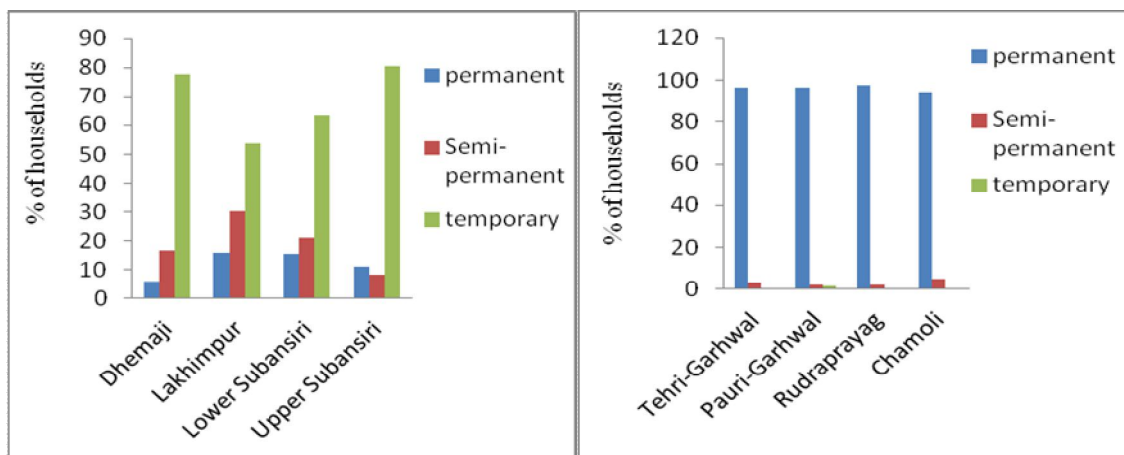


Figure 5: Type of house (% of households) in the Subansiri and the Alaknanda basins in 2001

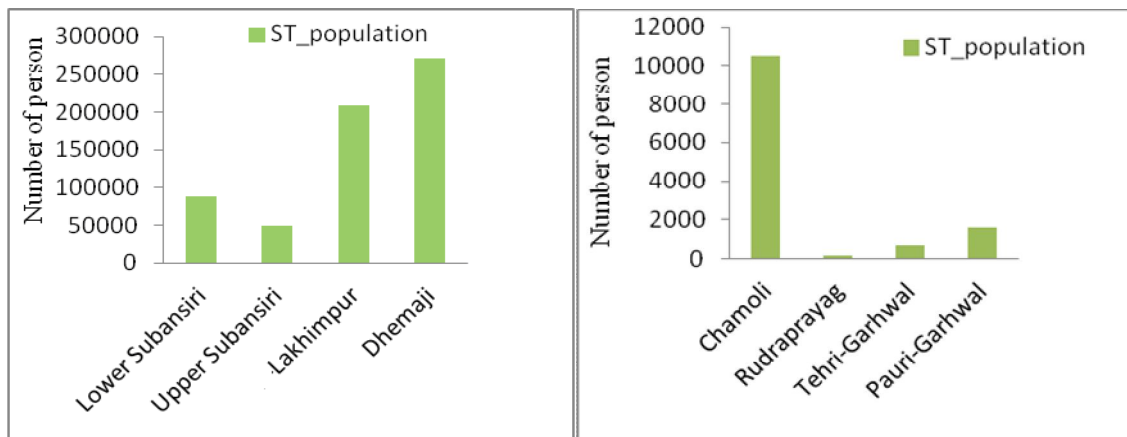


Figure 6: Scheduled Tribe Populations in the Subansiri and the Alaknanda basin, 2001

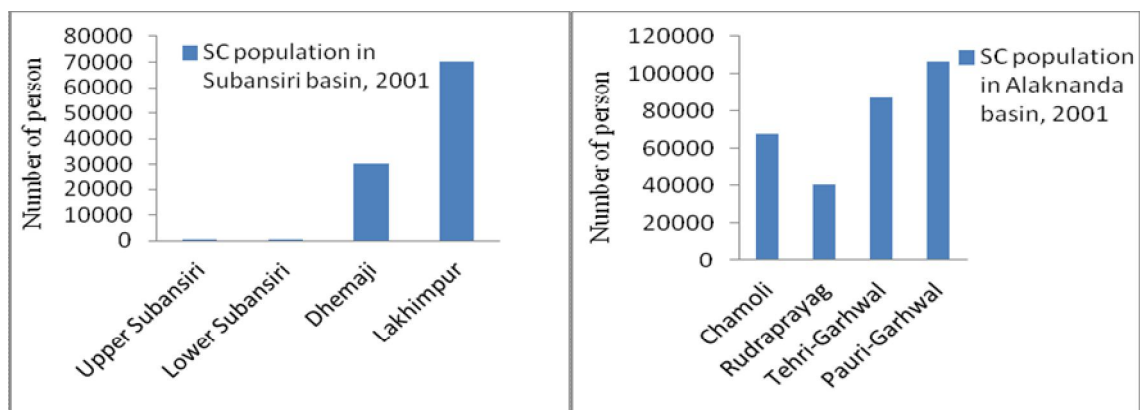


Figure 7: Scheduled Caste Populations in the Subansiri and the Alaknanda basin, 2001

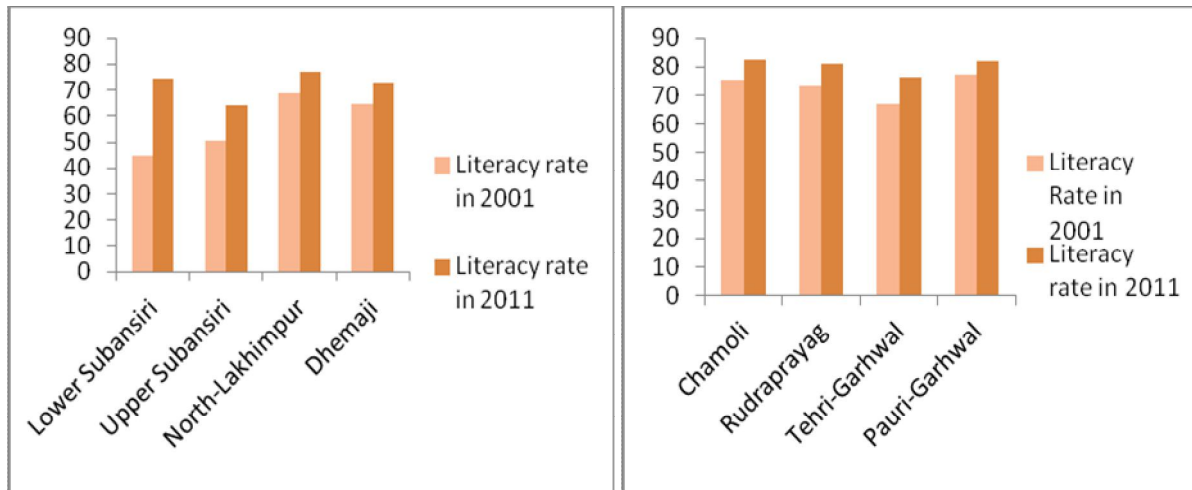


Figure 8: Literacy rate in the Subansiri and the Alaknanda basin in 2001 & 2011

It is revealed that the literacy rate is relatively more in the Alaknanda basin than in the Subansiri basin of eastern Himalaya (Figure 8). Though the literacy rate is seen increasing in 2011 than 2001 in the Subansiri basin, still is comparatively less than the Alaknanda basin of western Himalaya. Hence, the number of total workers is much more in the Alaknanda basin compared to the Subansiri basin (Figure 9). Number of villages having drinking water facilities is found to be much better in the Alaknanda basin compared to the Subansiri basin (Figure 10). Number of villages having medical facilities (Figure 11), power supplies (Figure 12), bus services (Figure 13) and post, telephone and telegraph facilities (Figure 14) are also seen to be comparatively more in the Alaknanda basin than in the Subansiri basin.

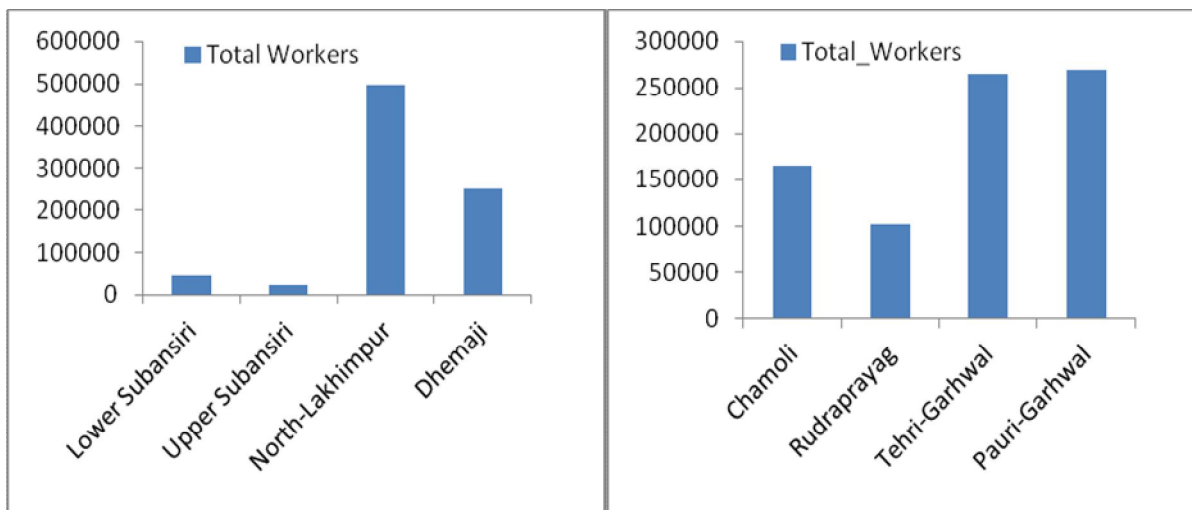


Figure 9: Total workers in the Subansiri and the Alaknanda basin in 2001

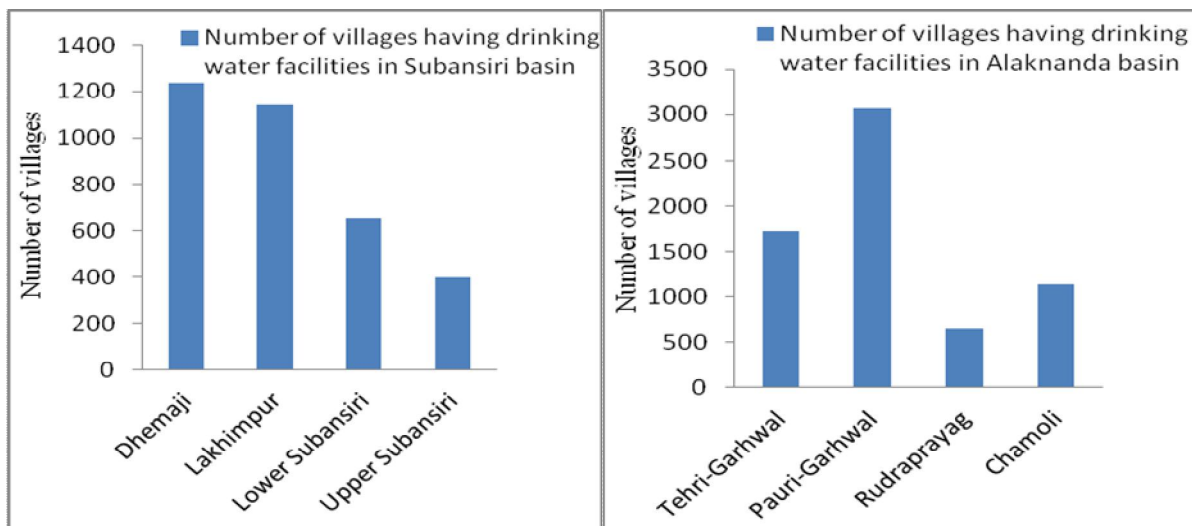


Figure 10: Number of villages having drinking water facilities in the Subansiri and the Alaknanda basins, 2001

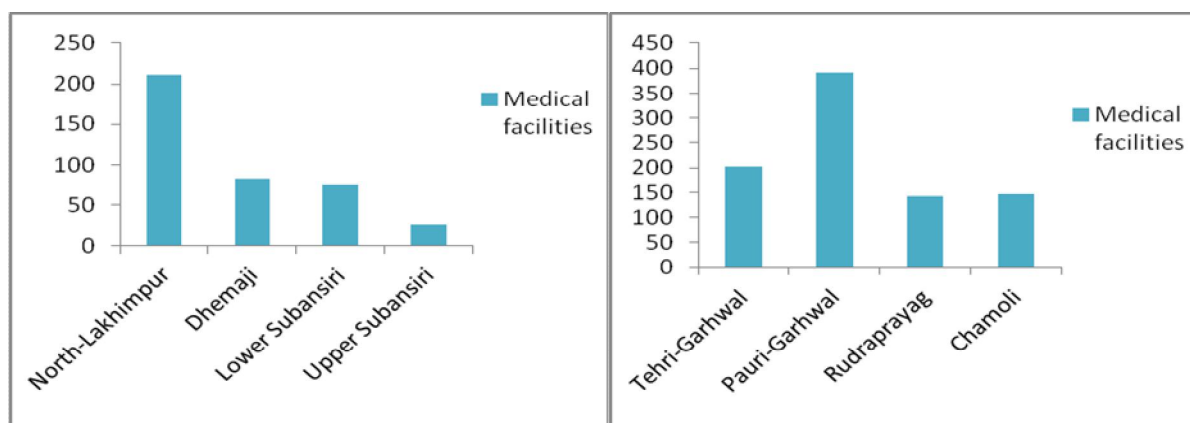


Figure 11: Medical facilities in the Subansiri and the Alaknanda basin in 2001

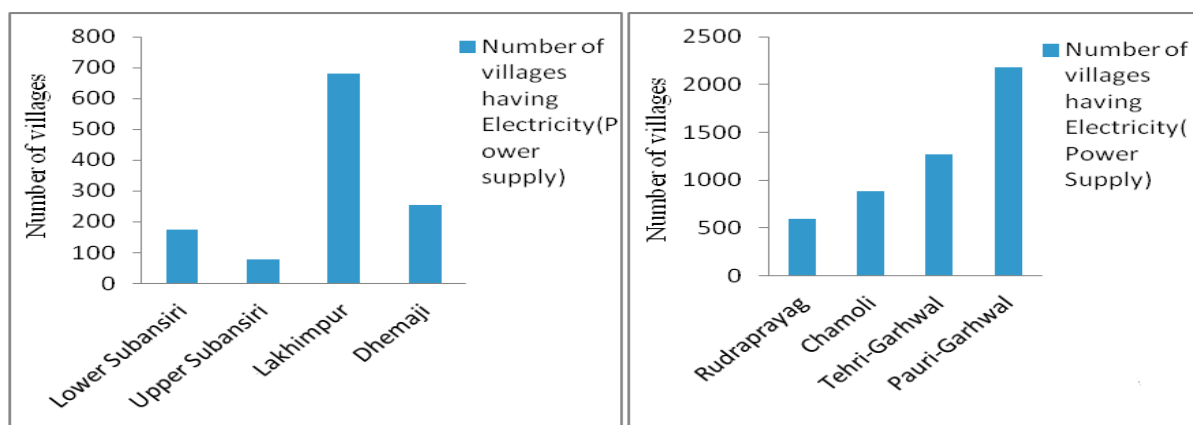


Figure 12: Number of villages having electricity (power supply) in the Subansiri and the Alaknanda basins in 2001

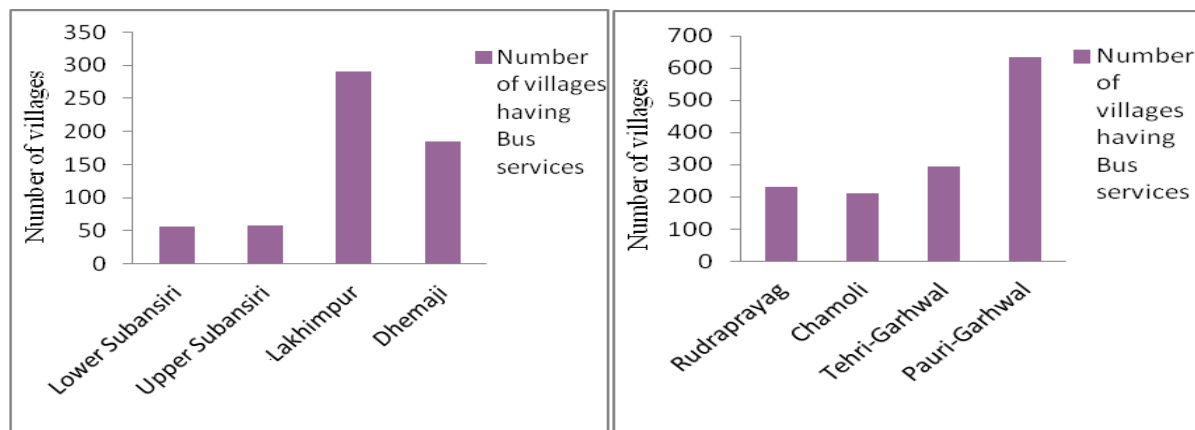


Figure 13: Number of villages having bus services in the Subansiri and the Alaknanda basins in 2001

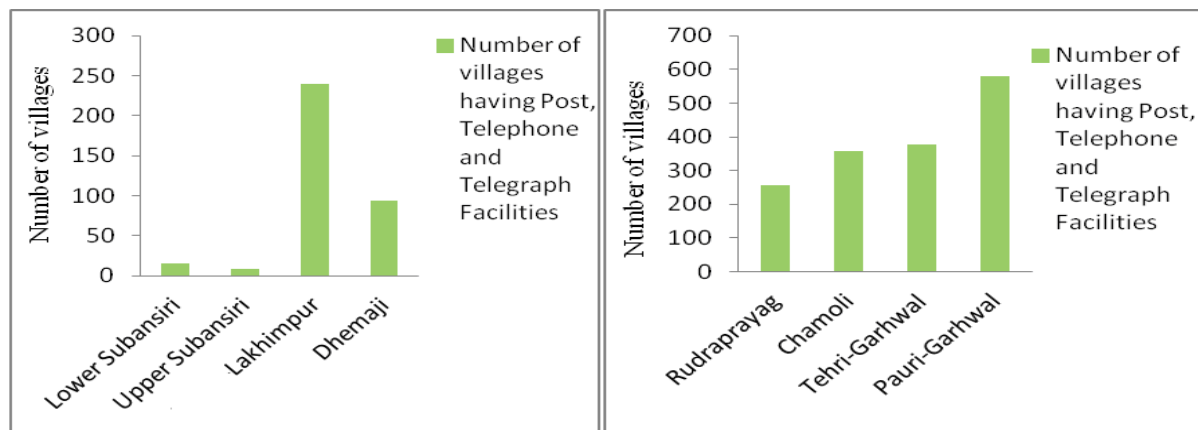


Figure 14: Number of villages having post, telephone and telegraph facilities in the Subansiri and the Alaknanda basins in 2001

HYDROPOWER PROSPECT IN THE SUBANSIRI AND THE ALAKNANDA BASINS

In modern time, dams are built in rivers to harness energy or generate electricity. It has a great influence in the socio-economy of a region. A good number of hydel projects are in operation, being proposed or under construction in both the rivers, Subansiri and the Alaknanda of eastern and western Himalayas respectively.

The Subansiri River originates in the high Himalayas of Tibet in China. It flows east and southeast into India, then south to the Assam Valley, where it joins the Brahmaputra River in Lakhimpur district. Subansiri has tremendous potential of HEP because of its topography, rainfall and significant discharge. Out of 19 hydel projects planned in the Subansiri basin, seven pre-feasibility study reports and two detailed project reports are presently available, of which the 2,000MW Lower Subansiri project is already under construction.

Geological features in the Subansiri Basin show marked variation ranging from Higher / Lesser Himalayas, foothills and plains falling in Bomdila group, Miri Group, Gondwana Group and Siwalik Group as well as Alluvium. As the basin has different geological formation with very significant slopes, the river has the tendency of bringing down material for deposition. There are historical records of earthquake of magnitude 8.7 in 1897 and Assam earthquake, 1950. Since the basin has the fragile geological nature and falls under highly active seismic zone (V), so the basin warrants strong safety factor in any considered project intervention. The lower part of the basin in Assam is particularly vulnerable to the potential hazards associated with the dam.

There are a total of 37 hydroelectric dams in operation, under construction or being planned to be developed in the Alaknanda river and its tributaries to generate hydropower. Of these, 14 hydel projects on the river Alaknanda are presently in operation. There are 23 other proposed projects in the Alaknanda River Basin through which the power-potential of the Alaknanda and its tributaries can be harnessed.

CONCLUSION

From the socioeconomic and demographic study, it is observed that the Subansiri basin is sparsely populated specially in the higher altitude that falls in the state Arunachal Pradesh while a quite opposite scenario is revealed in the Alaknanda basin of western Himalaya. Scattered and sparse pattern of habitation of the state is indicative of an environment not conducive for rapid economic development. In terms of per capita State Domestic Product and other development indices such as power, road length etc., Arunachal Pradesh ranks below the national average. The poverty level is much higher than the national average. The low per capita income, lower growth rate of income and higher poverty ratio are causes of concern. Vast natural resources, particularly enormous water resources potential, oil and forest resources, and tourism potential offer a strong advantage to transform this strategically located State into one of the richest States of the country (Annual Plan 2010-11, Arunachal Pradesh). Both the Alaknanda and the Subansiri basins of the western and eastern Himalayas have hilly and complex terrain, still it is seen that the habitation is relatively more dense in the Alaknanda basin even in the higher altitudes and the region is comparatively developed in many aspects such as literacy and its related facilities, transport and communication, health services and agricultural production etc. compared to the Subansiri basin of the eastern Himalaya. Despite the abundance of natural resources in the Himalayan region, most of its people are marginalized and still live on subsistence level. The unscientific exploitation of natural resources is leading to increasing environmental degradation and aggravating impact of natural hazards (Singh, 2006). So, there is an urgent need to pay special attention to this unique region to maintain a sustainable livelihood.

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CONTRIBUTION OF ANGULAR VELOCITY ON DRAG FLICK
A THREE DIMENSIONAL STUDY

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ABSTRACT

The drag flick is one of the most offensive weapon in the field hockey used by skilled players all over the world, from international level right down to local leagues, as a set play during penalty corners. The aim of the study was to determine the contribution of kinematics elements of angular velocity on the ball velocity and accuracy. Six drag flick specialist from All India Interschool male hockey players were selected for the study. Their age, height and weight ranged 18-24 years, 174-182 cm and 59.4-66.8 kg respectively were destined for this study. Three dimensional (3D) set up was established for the study. The kinematic parameters and the ball velocity were considered as the Kinematic data obtained by using two Canon Legria SF-10 camcorders. Each subject were provided 15 consecutive drag flick trails from stationary ball position and 6 best successful trails were selected and considered for analysis. The data was obtained with the help of Max TRAQ 3D motion analysis software. The statistical analysis was done by using SPSSv.16 and level of significance was set at 0.05. The result of the statistical analysis illuminated that five selected parameters have significant correlating with ball velocity whereas (Ankle left angular velocity, Wrist right angular velocity, Ankle right angular velocity, Knee right angular velocity, Elbow left angular velocity).

Keyword: Drag flick, Kinematics analysis, Motion Analysis Software, Performance, SPSS.

INTRODUCTION

The drag flick is one of the most offensive weapon in the field hockey used by skilled players all over the world, from international level right down to local leagues, as a set play during penalty corners. Drag flick technique has provided new dimension for the execution of penalty corner. There is a scoring technique in the area of sport of field hockey. It was first seen in the early 90's in the Netherlands. It is applied as an attacking technique, mainly within the penalty corner involving two main components known as the scoop and flick.

In sport, competitive athletes are required to perform to the best of their ability. Hockey players are required to perform at peak physical function whilst executing specialized skills. The drag flick is an explosive sequential movement involving the player's pelvis, trunk and upper limbs, requiring the use of the spine to generate the speed of the distal segment (Lopez *et al* 2010).

The drag flick that takes place during a penalty corner (set play) is considered a specialized skill (Gallagher, 2013). Breaking the penalty corner down into possible routines, it is apparent that the drag flick is both the most frequently used, and most successful method for scoring goals (Laird and Sutherland, 2003; Mosquera *et al.*, 2007).

Only the few studies have analyzed the drag flick. Some of them have provided kinematic information about players from different levels (McLaughlin, 1997; Yusoff *et al.*, 2008; López De Subijana *et al.*, 2010). The drag flick is used for its ability for being able to aim at the whole goal whilst shooting with speed and accuracy as it (Yusoff *et al.*, 2008). McLaughlin (1997) aimed to describe the kinematic variables of the drag flick and found stance width and drag distance to be the variables most highly correlated with the principal criterion ball velocity.

(Hussain *et al.*, 2014) have studied on three dimensional biomechanical analysis of the drag in penalty corner drag flick performance between two different universities namely LNIPE, Gwalior and AMU, Aligarh level male hockey players and analyzed kinematics parameters whereas (wrist right angular velocity, ankle right angular velocity and elbow left angular velocity) and found significant influence on drag flick technique under accuracy condition.

Following from the above and prior researchers, three dimensional study has design to understanding about biomechanical analysis of specialized drag flickers technique from All India Interschool male hockey players. The aim of the study was to determine the contribution of kinematics elements of angular velocity on the ball velocity and accuracy during drag flick in field hockey.

METHODOLOGY

Six male drag flicker specialist (age, height and weight ranged 18-24 years, 174-182 cm and 59.4-66.8 kg) respectively were destined for this study. They were drag flicker from All India Intervarsity male hockey players. Three dimensional (3D) set up was established for the study. The Kinematic data obtained by using two Canon Legria SF-10 camcorders, placing at a distance of 13m and 17m away from the stationary ball position with at right side of subject, mounted at height from the ground. The speed of these cameras was set on 1/1000 and frame rate 50 hz. The requirement of subjects was proper kit up to shooting video clipping to give their best performance analysis. Each subject were provided 15 consecutive drag flick trails from stationary ball position and 6 best successful trails were selected and considered for analysis.

The data was obtained with the help of Max TRAQ 3D motion analysis software. The statistical analysis was done by using SPSSv.16 and level of significance was set at 0.05. In the direction to detect the determinant kinematics factors and correlation coefficient between kinematics variables with ball velocity was applied respectively.

RESULTS

The results of the mean and standard deviation are presented in the following tables.

Table 1: Descriptive analysis of twelve Kinematic Parameters

S. No.	Kinematic Variables	Code	Mean	SD
1.	Elbow left angular velocity	ELAV	-56.72	261.80
2.	Shoulder left angular velocity	SLAV	-5.45	169.39
3.	Pelvic left angular velocity	PLAV	102.80	135.33
4.	Knee left angular velocity	KLAV	68.54	123.76
5.	Ankle left angular velocity	ALAV	-7.16	98.57
6.	Wrist right angular velocity	WRAV	21.08	287.36
7.	Elbow right angular velocity	ERAV	-74.35	147.64
8.	Shoulder right angular velocity	SRAV	36.27	157.44
9.	Pelvic right angular velocity	PRAV	-59.59	272.14
10.	Knee right angular velocity	KRAV	13.40	223.13
11.	Ankle right angular velocity	ARAV	-105.32	200.15
12.	Ball velocity	Ball	87.57	148.48

Table 1: shows the descriptive statistics analysis of twelve kinematics variables of drag flicker. The mean and standard deviation (SD) of the kinematics parameter were taken for the study.

Table 2: Correlation of Kinematics Variables with Ball Velocity.

Correlations	
Variables	Ball
ELAV	0.31
SLAV	0.22*
PLAV	-0.11*
KLAV	0.00*
ALAV	0.46
WRAV	0.36
ERAV	-0.06*
SRAV	-0.14*
PRAV	0.04*
KRAV	0.32
ARAV	0.36

*Significant at 0.05 level of significant with 46 df, Tab. $r_{0.05,46} = 0.287$

The table -2 revealed that the different body segments of angular velocity and ball velocity during drag flick in hockey game have shown $|r|_{cal.}$ value was greater than $r_{0.05,46}$ value at 0.05 level of significance. These statistical finding exhibits that significant correlated with ball velocity whereas selected variables (ALAV, WRAV, ARAV, KRAV, ELAV).

Selected variables whereas (SLAV, PRAV) have shown $|r|_{tab.}$ value was greater than $|r|_{cal.}$ value, so these variables were insignificant positively correlated with ball velocity and selected variables whereas (SRAV,

PLAV, ERAV) were negatively correlative. Last but not least, (KLAV- 0.00) was neutral correlated with ball velocity during drag flick in hockey.

DISCUSSION

The main purpose of this study was to determining the contribution of kinematics elements of different angular velocity on the ball velocity and accuracy during drag flick in field hockey. The kinematics variables of angular velocity of selected (ALAV, WRAV, ARAV, KRAV, ELAV) were highly significant correlated with ball velocity. (Hussain et. al., 2014) have studied on three dimensional biomechanical analysis of the drag in penalty corner drag flick performance level of male hockey players and analyzed few kinematics parameters whereas (wrist right angular velocity, ankle right angular velocity and elbow left angular velocity) and found significantly hence and influence on drag flick technique under accuracy condition. The angular velocities of kinematics parameters (SLAV, PRAV) were insignificant positively correlated with ball velocity and few negatively insignificant correlated whereas (SRAV, PLAV, ERAV), and last one (KLAV- 0.00) was neutral correlated with ball velocity during drag flick in hockey.

CONCLUSION

The aim of the study was find out the contribution of angular velocity of different kinematics variables on drag flick and accuracy. Hockey players have their own specific skill techniques but it is recommended that coaches while training their trainees the findings of this study shall provide much orientation.

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EMPLOYEE EXCELLENCE THROUGH TRAINING AND DEVELOPMENT - A STUDY

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INTRODUCTION

In the world of training and development, impact measuring program is a frequent discussion topic. Everyone seems to be searching for the perfect measurement system to increase organizational capabilities, performance and link them with the business strategy. Human resource practitioners, organization development consultants, training managers, and senior managers realize that any training and development activities should eventually show a positive return and improve the bottom line. Hence, the training and development has an important role in the human resource management. It is generally agreed that human beings began amassing knowledge at the beginning of the stone-age. As they invented tools, weapons, clothing, shelter and language, the need for training became an essential ingredient in the march of civilization. However, our ancestors stumbled upon or invented the various facets of civilization, which are very little significance, they transmitted the knowledge and skills acquired by them from generation to generation. This was done through various methods. Through these methods, the development process called training came into operation. Before industrial revolution the methods of training in agriculture, trade and business, crafts were not very formal. The techniques were learnt from father to son gradually through practice. The experienced persons were highly recognized in these fields.

NEED FOR THE STUDY

HPCL Visakha Refinery consists of 1080 employees working at various levels in technical and administrative cadres. The work force involves various complicated work processes from its various departments viz, Operations, Maintenance, Technical, Safety, Projects, Materials, Finance, Hr. It is imperative for all the employees to have an overall idea of the Refinery units as they need to work in the running units at all times. Other important factor is the safety consciousness among all employees, as every job needs to be evaluated in safety angle to avoid incidents that brings irreparable loss to both the work forces as well as to units. This study mainly focuses on various training methods implemented in the HPCL Visakha Refinery in order to evaluate their relevance in work procedures. Actual benefits derived at individual, team and organizational level will be studied. Understanding the importance of safety, health and environment is one of the facets of this study. The study also aims at evaluating the practical implementation of training techniques undertaken by employees in their work environment to improve their working skills.

OBJECTIVES OF THE STUDY

1. To study the various training and development programmes were scheduled and conducted by HPCL at Visakhapatnam.
2. To analyze the perceptions of respondents regarding employee excellence through training development programmes conducting by HPCL at Visakhapatnam.

METHODOLOGY OF THE STUDY

I have collected data from different sources like primary and secondary. I have chosen 300 respondents as a sample size for collection of data. I have distributed and collected data from them through structured questionnaire.

DATA ANALYSIS AND INTERPRETATION

Further an analysis of employee's opinion on Training and Development practices

Table 1: Perception of the Respondents on the Overall Quality of Instruction

S. No.	Quality of instruction	No. of Respondents	% of the Respondents
1.	Excellent	123	41
2.	Good	90	30
3.	Fair	60	20
4.	Poor	27	09
	Total	300	100

INTERPRETATION

It is evident from the table and graph 4.1 that among all the respondents selected for this study, 41% of employees have opinioned that the instruction was excellent with the past instruction process. Besides 30% of employees in the total sample have opinioned that the present instruction process is good. But only 11% of

employees felt that it is excellent. Apart from it 9% of the employees opinioned that the instruction process was poor and 20% of employees have felt that it is fair. Finally though it appears that the majority of the employees in the selected unit have felt that the instruction process is excellent with that of past, but still an improvement in the overall instruction process is required in order to bring in the effectiveness in the employees of the selected unit.

Table 2: Perception of the Respondents on the Quality of the presenter

S. No.	Quality of Presenter	No of Respondents	% of the Respondents
1	Excellent	102	34
2	Good	156	52
3	Fair	06	02
4	Poor	36	12
	Total	300	100

INTERPRETATION

From the above data 52% of the employees agreed that the presenter had delivered the objectives very clearly in a good manner. Besides, 34% of the employees agreed that the delivery of the objectives is excellent. It means 18% of the employees felt that the presentation of objectives was good. Only 2% of the employees felt that the presentation of presentation was fair and 12% felt it is poor. It means 10% of the employees felt that the presentation was poor. From this analysis we can say that there should an improvement in the presentation of delivering the objectives to the employees in a very clear way which is understandable to them.

Table 3: Perception of the Respondents on Quality of the Session

S. No.	Quality of the Session	No. of Respondents	% of the Respondents
1	Excellent	28	28
2	Good	43	43
3	Fair	03	03
4	Poor	26	26

INTERPRETATION

From the above data 43% of Employees agreed that the session is alive and very interesting while 28% agreed that it is excellent. We found that from this 15% of them only felt that the presentation was alive and interesting. 3% of the employees felt it is fair and the remaining employees felt it is poor. So there should be an improvement in the quality of the session and make it more interesting and alive.

Table 4: Perception of the Respondents on Overall rating of Presenter

S. No.	Overall rating of Presenter	No of Respondents	% of the Respondents
1	Excellent	135	45
2	Good	135	45
3	Fair	0	0
4	Poor	30	10
	Total	300	100

INTERPRETATION

From the above data 45% of the employee strongly agreed that the presenter's overall is Excellent and 45% of the employees agreed that it the overall performance of the presenter is good. 10% agreed that it is poor. Since there is an equality in the feedback given by employees between excellent and good the company need to adopt new changes in the process that helps the presenter in performing much better.

Table 5: Perception of the Respondents on Usefulness of the Program

S. No.	Usefulness of the Program	No of Respondents	% of the respondents
1	Excellent	120	40
2	Good	180	60
3	Fair	0	0
4	Poor	0	0
	Total	300	100

ANALYSIS

From the above data more percentage of the employees are satisfied with the program that is accommodated with the needs and background of them. The programs need to be improved to a better extent in order to meet the background and needs of the employees to a better extent.

Table 6: Perception of the Respondents on Effectiveness of Handouts

S. No.	Effectiveness of Handouts	No of Respondents	% of the respondents
1	Excellent	174	58
2	Good	84	28
3	Fair	21	7
4	Poor	21	7
	Total	300	100

INTERPRETATION

From the above data 58% of the employees strongly agreed that the handouts were very effective and excellent in the organization and 28% of them agreed it is good. It is clear from the data that 30% of them were completely satisfied with the handouts and felt that it is excellent. The handouts in the organization should be more efficient than earlier in order the organization to function effectively.

Table 7: Perception of the Respondents on Convenience in Location

S. No.	Convenience in Location	No of Respondents	% of the percentages
1	Excellent	135	45
2	Good	120	40
3	Fair	0	0
4	Poor	45	15
	Total	300	100

INTERPRETATION

From the above data 45% of the employees believed that the work place was very much convenient for them and 40% of them have felt it is good. Only 5% of them agreed that the work location was excellent. 10% of them found it to be poor. So the company should make all the necessary to make the most of the employees satisfied in the work place of the company.

Table 8: Perception of the Respondents on Opinion on Behavioral Training

S. No.	Opinion on Behavioral Training	No of Respondents	% of respondents
1	Strongly Agree	153	51
2	Agree	126	42
3	Strongly Disagree	9	3
4	Disagree	12	4
	Total	300	100

INTERPRETATION

From the above data 51% of the Employee strongly agreed that Behavioral Training helps us to improve Team work, leadership, etc and only 42% agreed that it helps them. It means only 9% of them strongly agreed that training helps in the improvement of team work, leadership. 3 out of 7 has strongly disagreed it is not helpful for them and the remaining disagreed. The company should come out with innovative ideas to improve the behavioral training in the employees.

Table 9 : Perception of the Respondents on Satisfaction of Presentation

S. No.	Satisfaction of Presentation	No of Respondents	% of respondents
1	Yes	240	80
2	No	60	20
	Total	300	100

INTERPRETATION

From the above data 80% of the employees were satisfied with the presentation time for the topic allocated and 20% of them were not satisfied. 60% of the total employees were completely satisfied with the topic of the presentation.

Table 10: Perception of the Respondents on Effectiveness of Venue

S. No.	Effectiveness of Venue	No of Respondents	% of respondents
1	Internal	66	22
2	External	234	78
	Total	300	100

INTERPRETATION

From the above data 78% of the employees are accepted that venue for the training programs to be effective is External Training and 22% of them accepted that they want external. It means only 56% of the total employees preferred internal venue is giving them comfort for training.

Table 11: Perception of the Respondents on Usefulness of the program

S. No.	Usefulness of the program	No of Respondents	% of respondents
1	Yes	270	90
2	No	30	10
	Total	300	100

INTERPRETATION

From the above data 90% of the employees agreed that the program is very useful in gaining the knowledge and the remaining did not agree. Only 80% of the employees have accepted that the training provide is really helping them in gaining knowledge and it is helpful in their job.

Table 12: Perception of the Respondents on Tool to enhance knowledge

S. No.	Tool to enhance knowledge	No of Respondents	% of respondents
1	Strongly Agree	129	43
2	Agree	120	40
3	Strongly Disagree	0	0
4	Disagree	51	17
	Total	300	100

INTERPRETATION

From the above data 43% of the employees strongly agreed that E-learning is one of the best tools for professional knowledge enhancement for employees. Besides, 40% of them agreed it. From the analysis only 3% of the total employees agreed it very strongly that E-learning is very helpful. 17% of them disagreed that it is not helpful for them. The E-learning program should be better improved by giving proper training regarding E-learning to the employees. The company should make aware of it.

Table 4.13 : Perception of the Respondents on Type of Material

S. No.	Type of Material	No of Respondents	% of respondents
1	Hard copy	45	15
2	Soft copy	48	16
3	Both	207	69
	Total	300	100

INTERPRETATION

From the above data maximum percentage of the employees accepted that training material should be made available in both Hard copy and Soft copy.

Table 14: Perception of the Respondents on Exposure of Employees

S. No.	Exposure of Employees	No of Respondents	% of the respondents
1	Strongly Agree	29	29
2	Agree	51	51
3	Strongly Disagree	0	0
4	Disagree	20	20

INTERPRETATION

From the above data maximum percentage of the employees accepted that sufficient training is being provided periodically on work place safety and the next highest percentage is elected as strongly agreed. It means 22% of

the employees have agreed that training is needed in performance appraisal. Depending on the appraisal the training will be given to the employees and it helps them a lot in assessing the people to whom the training should be given.

Table 15: Perception of the Respondents on Preference of Faculty

S. No.	Preference of Faculty	No of Respondents	% of respondents
1	Strongly Agree	57	19
2	Agree	150	50
3	Strongly Disagree	30	10
4	Disagree	63	21
	Total	300	100

ANALYSIS: From the above data 50% of the employees agreed and 19% of them strongly agreed over external faculty for various technical trainings that they prefer In-house faculty. It means 31% of the employees have agreed that they will prefer in-house faculty. Only 10% have strongly disagreed and 21% have disagreed. It means 11% of them did not agree. In order to make employees strongly agree the company should make certain changes that grab the attention of the employees and which makes them feel free in the company.

FINDINGS

- The instruction process in the company is not upto the mark though majority of the employees felt that the overall quality of instruction was excellent.
- Majority of the employees felt that the objectives were not presented in an excellent manner besides majority of the employees felt that the presenter who is stating the objectives is good.
- HPCL conducts sessions to improve the quality of work of the employees. Most of the employees were not completely satisfied with the quality of the presenter. They are stating that the session is alive and interesting to some extent.
- The employees in the organization felt that the overall quality of the presenter is good and excellent. There is equality in the number of respondents for good and excellent.
- The program that is accommodated by the company is good and it is meeting the needs and background of the employees.
- The majority of the employees felt that the handouts provided by the company are excellent.
- The location provided to the employees is not that good. The employees are feeling it would be better if there is a change in the location.
- HPCL is a company that focuses on Team work, leadership, etc that helps in Behavioral training.
- The majority of the employees agreed that the length of the presentation was sufficient for them. The employees in the organization felt that the training provided in the internal venue is not better.
- The employees in HPCL believed that the knowledge and skills they are gaining form the training program is very useful for them in their job.
- Most of the employees felt that e-learning is the best tool for professional knowledge enhancement for them.
- The materials are provided to employees during training. Employees felt that the material should be in both hard copy and soft copy.
- The employees in the organization are being exposed to the training programs to meet the training needs in the annual appraisal.
- Most of the employees preferred that they need in-house faculty rather than external faculty to train them.

SUGGESTIONS

- In order to improve the effectiveness of the employees in the selected unit there should be an improvement in the overall instruction process.
- The presenter should adopt new methods of delivering the objectives in order to make the objectives very clear to the employees.

- To make the session more interesting and alive the presenter can adopt new changes like interaction or presenting videos or by having brain-storming programs in the sessions.
- There should be a change in the location for the employees so that they feel good and can work conveniently it means the company can allow its employees to complete their work from home itself in some cases.
- Since most of the employees have agreed that the external venue is better than the internal venue it would be better for the organization to prefer external venue. The venue can preferably be either in hotels, online sessions i.e they have their session when they are at their homes.
- Though the training materials are given in the form of hard copy it should also be given in the form of soft copy too because it helps the employees to refer the copy whenever it is required.
- The employees should be exposed to the training programs as mentioned in the training needs of annual appraisal because only then the company will come to know to whom the training should be given and in which area.
- The majority of the employees agreed that external faculty is better than in-house faculty to train the employees because external faculty people will exactly know what is happening in the outside and they will give updated information.

CONCLUSION

HPCL is conducting training programs regularly for their employees which are satisfied by the employees in HPCL. Majority of the employees preferred internal faculty for providing training to employees. The feedback provided by employees regarding training and development program is good but need a lot of modifications and also they required much more satisfied training for better performance. It is concluded that HPCL is a very big organization and for its better performance it must provide good training and development programs to the fresher as well as existing employees. The employees of HPCL highly value the goals and objectives and mission of the management and strive for the organization success with lot of gratitude for the concern always shown towards them.

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EMPLOYER-EMPLOYEE RELATIONSHIP IN THE TIRUPUR TEXTILE INDUSTRY

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ABSTRACT

The Indian textile industry is set for steady growth by both domestic consumption as well as export. Abundant availability of raw materials such as cotton, wool, silk and jute and skilled workforce has made India a major sourcing for the development of Indian textile industry. In the liberalized era, the industry is facing competition and also vast opportunities to grow themselves. Tirupur is called as the textile city. Tirupur is a place for getting more employment opportunities to the labor force in the Indian Textile industry because the textile industry is based mainly on unskilled labor only. So the textile industry should concentrate on the QWL factor to retain the employee in their industry. Because high Quality of Work Life provides happiness among the employee in their workplace. It leads to improve moral and better relationship among them. Among the QWL factor, employer and employee relationship is a very basic factor because the relationship among the employees and employer helps the employee face easily all the difficulties occur within the organization. So the researcher wants to know the present position of employer and employee relationship in the Tirupur Textile Industry.

Keywords: QWL, Knitwear Capital, employer and employee relationship

INTRODUCTION

Indian Textile industry's growth is reflected in the national economy. Because Textile industry contributes a predominant percent in the GDP. Tamil Nadu is one of the main states for the development of Textile Industry in India. Tirupur is one of largest and fastest growing district in Tamil Nadu. Tirupur creates employment opportunities for not only Tamil Nadu state's labor, but also provide employment opportunities in Kerala, Orissa, Bihar and the North-East States. QWL means having good supervision, good working conditions, good pay and benefits and an interesting, challenging and rewarding job. High QWL is sought through an employee relations philosophy that encourages the use of QWL efforts.

When an employee joins an organization, there is a "psychological contract" that is established between that individual and the organization. That is, there are certain mutual expectations tacitly set between the two. For instance, the organization expects the employee to put forth his best effort, have organizational loyalty and work towards the goals of the organization, similarly, the employee who joins the organization also has certain expectations of the organization that it will care for his well-being, be fair in its dealings, reward adequately and offer opportunities to develop and advance in the system. Proper assessment of employees will be helpful to know the Quality of Work Life of employees.

REVIEW OF LITERATURE

Manga M.L. and Maggu A.(1981) in their study on " Quality of Work Life: A study of the public sector in India", the influence of Quality of Work Life on the health of the public sector organizations. They have concluded that Quality of Work Life in the public sector is poor and there exists a significant gap between what managers expect and what they have. They also point out the nature of obstructions of Quality of Work Life efforts like too much bureaucratization, rule-orientation, and adherence to traditional management styles.

Dwivedi. R.S (1977)² carried out a case study on "Quality of Work Life in Volvo automobile plant located in Sweden". There were demands by the employees for meaningful work, embracing better pay and scarring, as well as participation in the decision making process and self-regulation. Autonomous work groups with five to twelve workers were made and asked to select a supervisor. These groups were made responsible for scheduling, assign and inspect their own work. 25 groups were established to perform different modules in the manufacture of an automobile. These groups had complete control over their work, including inspection. In addition, a human work climate was evolved. This led to substantial improvements in quality of work life and reduced the turnover and absenteeism. Till date, Volvo continues to innovate in its application of Quality of Work Life activities, discussions on interpersonal relationships, the group working and problem-solving.

STATEMENT OF THE PROBLEM

Tirupur textile industry is in a boom stage. This is a right stage to know the employee QWL because low QWL leads to a negative impact on the industry. Everyone has to deal with three sets of people in the workplace. Those are namely superior, co-workers in the same level and subordinates. These situations demand the high level of prudence, cool temper, tactfulness, humor, kindness, diplomacy, and sensitiveness. Generally, in the present era, the textile industry is facing a severe competitive all over the world. Hence, the researcher wants to

know the present position of employer and employee relationship within the organization. The basic QWL factor of employer and employee relationship is the very important role to survive or retain the employee in the organization.

OBJECTIVES OF THE STUDY

- To study the personal and occupational profile of the employees' of Textile Industry in Tirupur.
- To know the present level of employer and employee relationship in Textile Industry at Tirupur.

RESEARCH METHODOLOGY

The present study is based on convenient random sampling methods. The data collected through questionnaires. The size of the sample study is 500. Primary and secondary data are used in the study. The data collected from the Tirupur Textile Industry employees are analyzed with simple percentage, t-test, and F-test.

ANALYSIS AND INTERPRETATION

In this section, an attempt has been made to examine the association between the employee's opinion towards the employer-employee relationship with their personal and occupational profile. T-test and F-test have been applied to find the association by formulating the null hypothesis.

Ho: There is no significant association between employees' opinion towards employer-employee relationship and their personal/occupational profile.

i) Personal profile and employer-employee relationship

Table 1 portrays the mean values of employees' opinion towards employer-employee relationship for all independent variables that determine the personal profile such as age, gender, marital status, educational qualifications, family size, family income and family debt.

Table 1: Distribution of respondents based on the association between personal profile and their opinion towards employer-employee relationships

Sr. No	Variables	Group	Mean	SD	No.	F test	T Test	df.	Table Value	Sig.
1	Age	18 - 25 yrs	32.06	2.24	113	152.242		499	4.684	**
		25 - 35 yrs	28.20	2.80	179					
		35 - 45 yrs	22.28	5.21	95					
		45 - 55 yrs	22.46	4.50	76					
		Above 55 yrs	21.16	3.62	37					
2	Gender	Male	26.72	5.54	289		0.821	498	1.968	Ns
		Female	26.32	5.18	211					
3	Marital Status	Unmarried	30.10	3.59	124	30.545		499	3.821	**
		Married	25.75	5.47	248					
		Divorced	25.27	5.10	85					
		Widowed	23.49	5.01	43					
4	Educational Qualifications	Illiterate	23.28	4.51	58	13.343		499	3.357	**
		Primary	26.13	5.57	283					
		Higher Secondary	28.76	4.45	137					
		Graduate	28.13	4.52	15					
		Diploma	24.43	5.77	7					
5	Family Members	1 - 3	25.49	5.44	120	5.658		499	4.648	**
		4- 6	26.61	5.48	315					
		Above 6	28.25	4.34	65					
6	Family Income	Rs.5001 - Rs.10000	26.79	4.39	33	1.828		499	2.623	Ns
		Rs.10001 - Rs.15000	26.51	5.08	71					
		Rs.15001 - Rs.20000	25.99	5.65	222					
		Above Rs.20000	27.25	5.30	174					
7	Family debt	No	26.41	4.96	88		0.278	498	1.968	Ns
		Yes	26.58	5.48	412					

Source: Primary Data

NS-Non-Significant, * - 5 % level of Significance, ** - 1 % Level of Significance

T-test and F-test results show that the calculated value is lower than the table value in the case of gender, family income and family debt at 1 percent significance level. The hypothesis is accepted and therefore, there is no association found between these personal variables and the employer- employee relationships. Eventually, *the calculated value is higher than the table value at 1 percent significance level in the case of personal variables such as age, marital status, educational qualifications and family members. Therefore, the null hypothesis is rejected* in these cases.

The influence of these variables on employee opinion towards the employer and employee relationship of the respondents those who are younger employees, Male employees, Unmarried respondent, Higher secondary level respondent, family member is above 6, family income is above Rs.20000 and have debt in their family are found to agree more on employer-employee relationship.

ii) Occupational profile and employer-employee relationship

Table 2 portrays the mean values of employees' opinion towards employer-employee relationship for all independent variables that determine the occupational profile such as unit size, type of job activity, work experience, wage, and work schedule.

Table 2
Distribution of respondents based on the association between occupational profile and their opinion towards employer-employee relationship

S.No	Variables	Group	Mean	SD	No.	F test	T Test	df.	Table Value	Sig.
1	Size of Unit	Small	22.93	4.45	200	128.669		499	4.648	**
		Medium	28.00	4.56	200					
		Large	30.91	3.85	100					
2	Type of Job Activity	Fabrication, Compacting and Calendaring	27.54	4.92	106	2.294		499	2.623	Ns
		Dyeing, Bleaching, and Printing	27.25	4.30	52					
		Cutting, Sewing, Embroidering and packing	25.99	5.49	205					
		Composite unit	26.38	5.85	137					
3	Total Experience in Textile Industry	Less than 5	31.75	2.50	59	106.084		499	3.357	**
		5 - 10	28.57	3.82	250					
		10 - 15	20.95	4.96	122					
		15 - 20	23.67	5.04	15					
		Above 20	25.02	3.01	54					
4	Wage (p.m)	Below Rs.3000	28.70	4.97	10	2.665		499	2.390	*
		Rs.3001 -Rs. 6000	27.47	4.71	49					
		Rs.6001 -Rs. 9000	27.62	5.02	107					
		Rs. 9001 -Rs. 12000	26.05	5.95	155					
		Above Rs.12000	25.98	5.18	179					
5	Work Schedule	Day shift	26.36	5.09	165	1.164		499	2.390	Ns
		Afternoon shift	25.48	5.02	29					
		Night shift	26.67	3.35	9					
		Irregular shift on Cal	25.98	6.83	93					
		Rotating shift	27.12	4.97	204					

Source: Primary Data

NS-Non-Significant, * - 5 % level of Significance, ** - 1 % Level of Significance.

F-test results show that the calculated value is lower than the table value in the case of the type of job activity and work schedule at either 5 percent or 1 percent significance level. The hypothesis is accepted and therefore, there is no association found between these occupational variables and the employer- employee relationship. At the same time, *the calculated value is higher than the table value at either 5 percent or 1 percent significance level in the case of occupational variables such as unit size, work experience, and wage. Therefore, the null hypothesis is rejected* in these cases.

The influence of these variables on employer-employee relationship has been high for the respondents who are working in large units, Respondents who are involved in fabrication, compacting and calendaring activities, the respondents who have less than 5 years' experience, the respondents who earn below Rs.3000, the respondents who are working in rotating shifts are found to agree more on employer-employee relationship.

FINDINGS

- There is no association of employees' opinion of the employer- employee relationships with their gender, family income and debt.
- There is an association of employees' opinion of the employer- employee relationships with age, marital status, educational qualification and family size is found.
- The respondents in younger age groups, Unmarried respondent groups, higher secondary level respondent groups, Respondents whose family has above 6 members are found to agree more with employer- employee relationship. Unmarried youth do not have much family responsibility and naturally tend to work hard leading to better relationships.
- There is no association of employees' opinion of the employer- employee relationships with the type of job activity and work schedule.
- There is an association of employees' opinion of the employer- employee relationships with unit size, experience and wage are found.
- Respondents who are working in large units, Respondents who are involved in fabrication, compacting and calendaring activities, the respondents who have less than 5 years' experience, and the respondents who earn below Rs.3000 are found to agree more on employer-employee relationship. Hence, employees who are working in large units with less than 5 years' experience and who earn below Rs.3000 have a better relationship with the employers.

SUGGESTIONS

- Most of the respondents have debt on their family. Employers can create awareness on various loan facilities provided by banks at low interest. Employers can also arrange for loans creating tie-ups with nearby banks.
- Employers should concentrate on building better relationships with dissatisfied married employees. Married employees tend to work permanently while the stability of unmarried is uncertain.
- The topographical life of married employees is much stable and they prefer an improvement in the jobs they hold for career growth and up-liftment of the family.
- Employers of their units should find ways to establish cordial relationships with their employees. The concentration of employers on these aspects shall certainly be a key asset in this type of industry.
- Employers can create the flexible personal vision for their employees. The employees shall review their vision at least twice in a year for better results. If any deviation is found in their vision, the employees can rearrange the goal to have a better QWL and best employer-employee relationship.
- The employers shall monitor their employee's goal by implementing the 3C model (Manager, Department Head, and employee) which will improve coordination to achieve the employee's goal. The Happy Employee will work efficiently.
- Employers and employees establish relationships to identify the causes of conflicts by themselves. The conflicts should be discussed in an open forum with co-workers, supervisors, and managers to get better solutions. The employers can use techniques like Quality Circle and Works Committee to discuss the problems affecting their performance of the units and work environment.

CONCLUSION

In the present era, every industry should focus on the QWL of the employees because they are the human asset of the organization. Better understanding between the employee and employer leads better QWL and provide cordial relationship. The study clearly identified that there is an association of employees' opinion of the employer- employee relationships with age, marital status, educational qualification, family size, unit size, experience, and wage are found. Most of the personal and occupational variables are identified to influence the employer and employee relationship. Hence the employer should focus more on the improving factor to improve the relationship and improve the QWL of employees. Human Resource Departments are involved with efforts to improve productivity through changes in employee relations. It will help the employer to retain the existing employees and attract the potential employees in their organization.

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FINANCIAL PERFORMANCE EVALUATION OF PRIMARY DAIRY CO-OPERATIVE SOCIETIES: A CASE STUDY OF GOA

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ABSTRACT

Financial soundness of primary dairy co-operative enterprise is prerequisite for strong dairy co-operative movement in the state. The study entitle "Financial Performance Evaluation of Primary Dairy Co-operative Societies: A Case Study of Goa" has considered 90 dairy societies out of 176 and covers the period from 2000-01 to 2014-15. For the purpose of present study, 50 percent of societies are considered from each talukas and to analyses financial statements of the society's different financial ratios are employed. The study reveals that no dairy society under study has been classified as excellent society whereas nine PDCSs were classified as very good societies on the financial parameters and remaining 81 dairy society's performance was average according to 'Z' score. The study concludes that financial performance of primary dairy co-operative societies is average.

Key Words: Financial Performance, Primary dairy co-operative societies, Ratio analysis and 'Z' Scores.

INTRODUCTION

The financial statements are summarized reports of historical accounting transactions of a business. They are prepared for presenting a periodical review on the progress of a business and plays vital role in accounting, reporting and evaluating the performance of entities. Evaluation of financial performance demands financial analysis, which study relationship among the various financial factors in a business. The financial performance is the important aspect for the operation and survival of any business entity and is mainly concerned with the decision making ability of financial manager. Here financial manager plays important role in channelizing the funds in most profitable ventures, which call for financial analysis. The analysis of financial statements can be done by employing various tools such as: Comparative Financial Statement, Common-size Statement, Cash Flow Statement, Accounting Ratios, Funds Flow Statement etc. Ratio analysis is one of the important analytical tools employed to measure the financial health and profitability of a business entities. Accounting ratio explains relation between two figures or two sets of accounting heads contained in financial statements. A cautious investigation of the financial statements can reveal important inferences of business organization irrespective of type of organization. Since ratio analysis is one of the best ways of indicating business performance, the ratio analysis technique is employed to evaluate the financial performance primary dairy co-operative societies under study. In this paper entitle "Financial Performance Evaluation of Primary Dairy Co-operative Societies: A Case Study of Goa" is attempt to evaluate financial performance of 90 primary dairy societies out of 176 societies in the state of Goa.

REVIEW OF LITERATURE

A host of studies have been undertaken by the National Dairy Development Board, Institute of Rural Management, different scientists & economist on economic of dairy and dairy development as well as other study related could provide a frame of reference for the current study and serve as a point of departure for the future empirical research to verify available findings below some the earlier studies are outlined for quick overview.

Thomas, H. Stafford in his article titled "Financial Performance of Dairy Co-operatives" analyzed financial performance of dairy co-operatives. He collected financial data for financial year 1981, from 291 co-operatives and classified them in to five types of dairy co-operatives considering size and types of dairy societies for the purpose of analyses. The study uses ratio analysis for evaluating financial performance. The variables considered are: Equity funds, Liquid assets, Total Liabilities, Income from milk, Operating expense and Total Expenditure.

The study finds considerable variation in different ratios based on types and size of dairy co-operative. Study further finds that the average total liabilities to equity ratio for all the groups of dairy is 0.78; average operating ratio for all dairies is 2.16; average liquid assets ratio is 1.21:1 and average income from milk to total income is 0.69. The study therefore concludes that amount of equity in dairy co-operatives considering types and size of dairy varies considerably as compare to other ratios. **Kale, N. K. et.al.** in his research paper "An Economic Enquiry in to working of Dairy Co-operatives in the Coastal Area of Maharashtra", attempted to assess financial position, working and efficiency of dairy co-operative societies. The study considered 23 dairy co-operatives

and uses ratio analysis for evaluating performance. The variables considered are: Owned Funds, Borrowed Funds, Working Capital, and Gross Profit. The study finds that owned fund were at lower side and dairies were heavily depended on borrowed funds; study reveals that large proportion of income flow was from trading activities and that the working capital structure of the dairy co-operatives under study was poor and hence dairy co-operative were unable to make payments to its milk supplying farmers. **Claudia Parliament, Zvi Lerman, et.al.** in their research paper "Performance of Co-operatives and Investor- Owned Firms in the Dairy Industry", attempt to assess financial performance of dairy co-operatives. Their endeavor was to study performance in term of investors' funds by comparing it with liquidity, leverage, assets turnover and coverage ratio. The necessary data pertaining to study was obtained through financial statement for the period from 1976 to 1987. The study uses ratio analysis for evaluating performance. The study concludes that the performance of co-operatives enterprises under study was significantly better then investors owned firms in terms of liquidity, leverage, assets turnover and coverage ratio. Further, study finds that there was no significant difference in rate of return on equity on investors owned firms and co-operatives firms. **Ahuja Usha Rani, Rawat B.S. et.al.** in their study "Economic Appraisal of Milk Plants of Haryana and Rajasthan Dairy", attempted to analysed the economic viability of dairy federations. The study was based on secondary data covering period from 1970-71 to 1983-84. The data is analyzed by using financial ratios, cost benefits analysis and annuity method. According to study, both the milk federation show does not depict satisfactory result in term of cost and benefits analysis. The study reveals that Rajasthan milk plant shows better result in terms of financial performance as compare to Haryana plant. Further study concludes that average capital per litres and fixed investment in plant was very low in Rajasthan milk plant as compare to Haryana plant.

DATA AND METHODOLOGY

For the purpose of evaluating financial performance of primary dairy co-operative societies, the study has considered 90 dairy societies out of 176 and covers the period from 2000-01 to 2014-15. For the purpose of present study, 50 percent of societies are considered from each talukas and for selecting samples criteria considered are: that the primary dairy co-operative societies must be registered prior to 2000-01 with the Registrar of Societies and dairy societies must be regular in preparing their accounts and auditing the annual statements.

In this study some of the relevant financial ratios are employed to examine the financial performance of primary dairy co-operative societies like: i) Gross Profit Ratio, ii) Net Profit Ratio, iii) Operating Ratio, iv) Milk Income To Total Income, v) Fodder Income To Total Income, vi) Business Income to Total Income, vii) Turnover Ratio, viii) Ratio of Fixed Assets To Owned Funds, ix) Current Ratio, x) Liquid Ratio, xi) Proprietary Ratio and xii) Ratio of Equity To Total Funds (Refer Annexure-1).

Again, based on average ratio for the above period and based on the value of Primary Dairy Co-operative Societies (PDCSs) are classified into five categories, namely, Excellent, Very Good, Average, Below Average and poor by using following methodology: If 'X' is a normal random variable with Mean μ and standard deviation σ , then $Z = \frac{x-\mu}{\sigma}$ is a standard normal variate with zero mean and standard deviation = 1. First, z scores

for each ratio variable are calculated and then by using the concept of Standard Normal Cumulative Distribution the Primary Dairy Co-operative Societies (PDCSs) are classified as shown in the Table below. For negatively interpreted ratios the table is reversed.

Table no:1

Value of Z score	Category of PDCSs	Score allotted for Aggregation
Above 80 %	Excellent	5
Above 60 % to 80 %	Very Good	4
Above 40% to 60%	Average	3
Above 20% to 40%	Below Average	2
Below 20%	Poor	1

Scores of each of the ratio are then again averaged to obtain aggregate score for each financial ratio parameter. The with average score 4.5 and above are classified as excellent, with score between less than 4.5 to 3.5 are classified as very good, between 2.5 to less than 3.5 as average, those between 1.5 and less than 2.5 as below average and less than 1.5 as poor. Finally, average scores of each Primary Dairy Co-operative Societies financial ratio parameter are aggregated and averaged to obtain composite score for each of the Primary Dairy Co-operative Society. Based on this score final classification of Dairy Co-operative Societies (PDCSs) into five groups is done by same methodology specified above.

DATA ANALYSIS

Table no: 1 below gives average scores for each parameter like profitability ratios (Gross profit, net profit and Operating Ratio) ; income ratios (Income from Milk, Income from Fodder, Other income and Business income) and efficiency, liquidity and stability (Turnover Ratio, Fixed Assets to Owned Funds, Current Ratio, Liquid Ratio, Stock- Working Capital Ratio, Proprietary Ratio and Equity to Total Fund) , by averaging these overall scores based on 'Z' scores each primary dairy co-operative societies is classified as depicted in the Table no: 2 below as Excellent; Very Good; Average; Below Average and Poor on current ratio parameter. Refer Appendix 1.

Table no: 2 AVERAGE SCORES OF PDCSs ON 'Z' SCORES PARAMETERS					
Code No. DMUs/PDCs	NAMES OF DMUS / PDCSS	AVERAGE SCORES OF PROFITABILITY	AVERAGE SCORES OF INCOME RATIOS	AVERAGE SCORES OF EFFICIENCY, LIQUIDITY AND STABILITY	TOTAL SCORE
1	Sarvan Karapur , Bicholim	4.00	4.75	3.29	4.01
2	Abhinav Sahakari, Bicholim	3.67	5	3.14	3.94
3	Shree Sateri , Maulinge- Bicholim	3.67	5	3.14	3.94
4	Shree Bhumika , Sal - Bicholim	3.67	4.75	3.29	3.90
5	Dugdh Sindu , navelim - Bicholim	3.67	4.75	3.43	3.95
6	Kisaan Utkarsh , Kudney - Bicholim	3.67	4.5	3.43	3.87
7	Rudreshwar, Harvalem - Bicholim	4.33	5	3.14	4.16
8	Shree Krishna , Pilgao - Bicholim	3.67	4.75	3.43	3.95
9	Shree Mahamaya, Mayem - Bicholim	4.00	4.5	3.57	4.02
10	Gopal , Surla - Bicholim	3.67	4.5	3.86	4.01
11	Gopal , Virdi - Bicholim	3.67	4.75	3.14	3.85
12	Janata , Aamona - Bicholim	3.67	5	3.14	3.94
13	Shree Agondeshwar -Cancona	3.67	4.75	3.29	3.90
14	Shree Mallikarjun , Cancona	4.00	4	2.57	3.52
15	Shri laxminarayan - Cancona	4.33	5	3.43	4.25
16	Shree Mahadevo , Ozray - Pedne	4.33	5	3.00	4.11
17	Shree Hanuman, Nagzar - Pedne	4.00	5	3.29	4.10
18	Shree Sateri , Ibrampur - Pedne	4.67	5	3.00	4.22
19	Shree Bhagwat, Tuye - Pedne	3.67	5	3.57	4.08
20	Shree Jai Durga Mahila - Pedne	3.67	5	3.57	4.08
21	Shree Bhoomika , Palya - Pedne	3.67	5	2.86	3.84
22	Tambowsay ,Tambowsay - Pedne	4.33	5	3.29	4.21
23	shree Satpurush ,Morji - Pedne	4.00	5	3.29	4.10
24	Mauli, Virnoda - Pedne	3.67	5	3.14	3.94
25	Gokul Aagarwada - Pedne	4.00	5	2.71	3.90
26	Shri Gayatri , Korgao - Pedne	4.33	5	3.00	4.11
27	Shree Mahadevo, Varkhan - Pedne	3.67	5	2.86	3.84
28	Shree Navadurga Borim - Ponda	3.00	4.75	2.86	3.54
29	Dhenu , Barazan Usgao - Ponda	3.67	4.75	2.71	3.71
30	Somnath, Kodar - Ponda	4.33	4.25	2.86	3.81
31	Shree Krushna , Madkai - Ponda	5.00	4.25	3.14	4.13
32	Pragati , Kapileshwar Ponda	5.00	4.25	2.43	3.89
33	Bandiwade , Bandiwade -Ponda	5.00	4.25	3.00	4.08
34	Shri Mahalaximi , Talavali -Ponda	5.00	3.25	2.57	3.61
35	Bataki , Bataki -Ponda	3.67	4.25	3.29	3.73
36	Shree Shantadurga , kumbharguvem -Ponda	5.00	4.25	3.43	4.23
37	Shri Sattya ,Savaiverm -Ponda	3.67	4.25	3.43	3.78
38	Threebhoovan , Mardola -Ponda	3.67	4.25	3.14	3.69
39	Shree Mahadav ,Btoeda -Ponda	3.67	4.25	2.86	3.59

40	Madhanand ,Savaiverem -Ponda	3.67	4.25	3.14	3.69
41	Gangeshwari , Ganja -Ponda	4.33	4.5	3.14	3.99
42	Navadurga , Kundai -Ponda	5.00	4.25	3.14	4.13
43	Molem , Molem - Sangem	3.67	5	3.86	4.17
44	Jaibhavani , Dharbandoda - Sangem	3.67	5	2.43	3.70
45	Shree shantadurga , Shegao - Sangem	4.00	5	3.43	4.14
46	Doodsager t, Shegao - Sangem	3.67	5	3.29	3.98
47	Vijaaya , Dharbandoda - Sangem	3.67	5	3.00	3.89
48	Shree Shiddhanath , Villiam Bhatti - Sangem	4.33	5	3.14	4.16
49	Gopalkrishna, Kalaya - Sangem	4.67	4.5	3.00	4.06
50	Shree Kalnath, Vandevi Kalaya - Sangem	3.67	5	3.43	4.03
51	Netravali , Netravali - Sangem	4.00	5	3.14	4.05
52	Rushivan , Rivana - Sangem	4.33	5	3.29	4.21
53	Sangem - Sangem	3.67	4.5	3.00	3.72
54	Lotolim Loutolim Salcet	4.33	4.5	4.14	4.33
55	Banavalim banavalim Salcet Goa	4.00	5	3.14	4.05
56	Shree Sateri Raia - Salcete	4.33	4.75	3.29	4.12
57	Veroda , Veroda Cuncolim - Salcete	3.67	4.75	3.00	3.81
58	Cuncolim , Saverkata Cuncolim - Salcete	4.67	5	2.71	4.13
59	Seraulim , Seraulim - Salcete	4.67	4.5	2.86	4.01
60	Shree Shantadurga , Cuncolim - Salcete	3.67	4.75	2.71	3.71
61	Chidambaram, Bambar - Sattari	4.00	4.25	3.29	3.85
62	Godhan , Riva - Sattari	3.67	4.25	3.29	3.73
63	Nagargao ,Nagargao - Sattari	4.00	4.25	3.43	3.89
64	Rambrasad , Khadaki - Sattari	4.33	4.25	3.71	4.10
65	Goverdhangopal, Bhooipal - Sattari	4.33	4.25	3.14	3.91
66	Naneli , Thane - Sattari	4.33	4.25	3.43	4.00
67	Masodem , Valpoi - Sattari	3.67	4.25	3.86	3.92
68	Shree Rudresh , Nanus - Sattari	3.67	5	3.57	4.08
69	Maus , Dhabay - Sattari	3.67	5	3.71	4.13
70	Sateri , Ravan Parya - Sattari	4.00	4.25	3.00	3.75
71	Gulayli , Paikulay Gulayli - Sattari	4.33	4.25	2.86	3.81
72	Shantadurga , Khatoday - Sattari	4.00	4.25	3.29	3.85
73	Bheeronda , Bheeronda - Sattari	3.67	4.25	3.14	3.69
74	Shri Bramadev , Bramakamali - Sattari	4.00	4.25	3.71	3.99
75	Somnath , Adnem -Quepem	4.33	5	3.14	4.16
76	Shree mallikarjun , cavrem- Quepem	4.33	5	3.17	4.17
77	Shri Bhumipurish , Fatorpa - Quepem	4.67	4.5	3.43	4.20
78	Shantadurga, Balli - Quepem	4.33	5	3.00	4.11
79	Shree Sidhivinayak , Maina - Quepem	4.00	5	3.14	4.05
80	Shree Kital , mina - Quepem	4.00	5	3.00	4.00
81	Shree Sateri Mahamaya , Kotambi - Quepem	4.33	4.5	3.14	3.99
82	Kushaavati mahamaya , Shirvoi - Quepem	4.00	5	3.00	4.00
83	Wade , Kurdi - Quepem	3.67	4.75	3.86	4.09
84	Shubhalaxmi , Revoda - Bardez	4.00	5	3.00	4.00
85	Adarsh , Assnora - Bardez	3.67	4.75	2.86	3.76
86	Jai Shantoshi Mahila t, Sangold - Bardez	4.00	5	3.43	4.14
87	Shree Prabhu Bhagawati Mahila , Kamurli - Bardez	4.00	5	3.29	4.10
88	Pirna Sahakar, Pirna - Bardez	4.00	5	2.86	3.95
89	Chudamani , Chodan- Tiswadi	3.67	4.5	3.29	3.82
90	Shree Sateri Sahakari Dudh Utpadak Saunsthan Mayadit, Dhulpi-Tiswadi	3.67	4.5	2.86	3.67
Compiled & Calculated from PDCSs annual financial statement					

Prof Profitability is assessed by the three ratios namely gross profit ratio, net profit ratio and operating ratio. On the basis of the ratio average profitability the average score is depicted in above table no: 2. According to

profitability parameter, determined with the help of 'Z' score it is reveals that PDCSs namely Shree Mahamaya Utpadak Saunsthan Mayadit, Mayem - Bicholim; Gopal Utpadak Saunsthan Mayadit, Surla – Bicholim; Shree Bhagwati Sahakari Dudh Utpadak Saunsthan Mayadit, Tuye – Pedne; Shree Jai Durga Mahila Sahakari Dudh Utpadak Saunsthan Mayadit, Torsay – Pedn; Masodem Dudh Utpadak Saunsthan Mayadit, Valpoi - Sattari; Shree Rudresh Dudh Utpadak Saunsthan Mayadit, Nanus - Sattari; Maus Dudh Utpadak Saunsthan Mayadit, Dhabay - Sattari; Shri Bramadev Dudh Utpadak Saunsthan Mayadit, Bramakamali - Sattari and Wade Dudh Utpadak saustha maryadit, Kurdi - Quepem has shown excellent performance. In case of remaining 81 PDCSs it has shown average performance in terms of profitability. The study also reveals that no PDCSs were classified as excellent dairy society and further no societies were found in below average and poor category.

Under income analysis four different ratios namely income from milk; income from fodder; income from other source and business income were considered. The performance analysis as depicted in above table no: 2 reveal that 66 PDCSs out of 90 society's performance was excellent whereas 24 PDCSs has classified as very good societies on the income parameter.

Efficiency, Liquidity and Stability is assessed by seven ratios namely turnover ratio; fixed assets to owned funds ratio; current ratio; liquid ratio; stock-working capital ratio; proprietary ratio and equity ratio. According to the analysis depicted in the table no 2 three PDCSs namely Shree Hanuman Sahakari Dudh Utpadak Saunsthan Mayadit, Nagzar – Pedne; Pragati Sahakari Dudh Utpadak Saunsthan Mayadit, Kapileshwar Ponda and Jaibhavani Dudh Utpadak Saunsthan Mayadit, dharbandoda - Sangem has performance below average. Whereas eleven PDCSs namely Shree Mahamaya Utpadak Saunsthan Mayadit, Mayem – Bicholim; Gopal Utpadak Saunsthan Mayadit, Surla – Bicholim; Shree Bhagwati Sahakari Dudh Utpadak Saunsthan Mayadit, Tuye – Pedne; Shree Jai Durga Mahila Sahakari Dudh Utpadak Saunsthan Mayadit, Torsay – Pedne; Molem Dudh Utpadak Saunsthan Mayadit, Molem - Sangem; Rambrasad Dudh Utpadak Saunsthan Mayadit, Khadaki - Sattari; Masodem Dudh Utpadak Saunsthan Mayadit, Valpoi - Sattar; Masodem Dudh Utpadak Saunsthan Mayadit, Valpoi - Sattari; Shree Rudresh Dudh Utpadak Saunsthan Mayadit, Nanus - Sattar; Maus Dudh Utpadak Saunsthan Mayadit, Dhabay - Sattar; Shri Bramadev Dudh Utpadak Saunsthan Mayadit, Bramakamali - Sattari and Wade Dudh Utpadak saustha maryadit, Kurdi – Quepem shows very good performance and remaining 76 PDCSs performance in terms of efficiency, liquidity and stability was average.

Table No: 3		
OVERALL GRADING OF PDCS ON 'Z' SCORES PARAMETER		
CLASSIFICATION	NAMES OF PDCS/DMU CODE NUMBER	NUMBER OF PDCSs
Excellent	No DMUs/PDCS falls under excellent category	NIL
Very Good	Code no. DMUs/PDCs fall under very good category are: 9, 10,19,20,67,68,69,74 and 83.	9
Average	DMUs/PDCSs fall under average category are:	81
Below Average	No DMUs/PDCSs fall under below average category.	NIL
Poor	No DMUs/PDCSs fall under Poor category	NIL

According to overall grading of PDCSs as depicted in above table no: 3 no dairy society under study consideration has been classified as excellent society whereas nine PDCSs namely Shree Mahamaya Utpadak Saunsthan Mayadit, Mayem – Bicholim; Gopal Utpadak Saunsthan Mayadit, Surla – Bicholim; Shree Bhagwati Sahakari Dudh Utpadak Saunsthan Mayadit, Tuye – Pedne; Shree Jai Durga Mahila Sahakari Dudh Utpadak Saunsthan Mayadit, Torsay – Pedne; Masodem Dudh Utpadak Saunsthan Mayadit, Valpoi - Sattar; Shree Rudresh Dudh Utpadak Saunsthan Mayadit, Nanus - Sattari; Maus Dudh Utpadak Saunsthan Mayadit, Dhabay - Sattari; Shri Bramadev Dudh Utpadak Saunsthan Mayadit, Bramakamali - Sattari and Wade Dudh Utpadak saustha maryadit, Kurdi – Quepem classified as very good and remaining 81 dairy societies were classified as average societies on overall grading under 'z' scores parameters.

CONCLUSION

Present study relies mainly on ratio analysis which has many limitations. Some of these limitations are: firstly, it is difficult to generalize about whether a particular ratio is "good" or "bad"; secondly, large many enterprises use "window dressing techniques" to make their financial statements look stronger; thirdly, a firm may have some ratios looking "good" and others looking "bad" making it difficult to tell whether the enterprises is, on balance, strong or weak. However, according to 'Z' scores parameter the study concludes that no dairy society under study has been classified as excellent society whereas nine PDCSs classified as very good and remaining 81 dairy societies were classified as average societies.

ANNEXTURE

ANNEXTURE-1

AVERAGE RATIOS OF THE PDCS FOR THE PERIOD 2000-01 TO 2014-15

DMUs CODE NUMBERS	Gross Profit Ratio	Net Profit Ratio	Operating Ratio	Milk Income To Total Income	Fodder Income To Total Income	Other Income To Total Income	Business Income To Total Income	Turnover Ratio	Ratio Of Fixed Assets To Owned Funds	Current Ratio	Liquid Ratio	Stock-Working Capital Ratio	Proprietary Ratio	Equity To Total Fund
1	7.70	6.13	1.57	64.53	0.83	34.68	65.35	4.09	0.10	1.72	0.52	0.07	0.61	0.61
2	11.58	8.04	3.54	69.57	1.43	29.00	71.00	2.10	0.25	2.97	0.73	0.01	0.76	0.02
3	15.78	10.71	5.08	60.79	1.72	37.49	62.51	2.66	0.07	1.90	1.65	0.01	0.65	0.07
4	15.89	9.40	6.49	59.35	0.85	39.80	60.20	2.26	0.12	2.07	1.45	0.00	0.72	0.04
5	16.44	9.83	7.46	47.68	1.18	51.15	48.85	1.82	0.08	6.46	1.85	0.00	0.69	0.07
6	16.01	6.38	7.65	73.80	0.64	25.55	74.45	2.77	0.10	2.23	1.19	0.00	0.65	0.09
7	5.41	4.23	1.32	69.35	2.39	28.26	71.74	7.50	0.10	1.94	1.23	0.02	0.50	0.06
8	12.27	9.59	2.69	72.09	1.08	26.83	73.17	3.14	0.12	2.41	1.15	0.05	0.63	0.06
9	10.81	8.89	1.92	17.59	0.13	82.28	17.72	2.82	0.08	2.76	1.26	0.00	0.70	0.04
10	15.85	11.75	4.11	12.87	0.28	86.85	13.15	2.17	0.87	4.55	2.56	0.02	0.66	0.04
11	11.85	9.08	2.78	71.74	0.98	27.27	72.73	3.15	0.08	1.68	0.80	0.02	0.64	0.06
12	12.13	7.56	4.57	62.51	2.11	35.38	64.62	2.07	0.23	2.23	1.20	0.01	0.70	0.04
13	10.59	6.59	4.00	77.34	1.24	21.43	78.57	4.94	0.14	0.94	2.55	0.00	0.59	0.11
14	5.75	3.83	1.92	122.64	2.20	-24.84	124.84	4.52	0.54	1.91	0.91	0.01	0.65	0.02
15	5.58	4.07	1.50	69.84	11.57	18.59	81.41	4.88	0.48	1.91	1.78	0.01	0.62	0.04
16	6.69	5.46	1.23	79.70	2.63	17.67	82.33	11.05	0.11	1.44	1.20	0.01	0.45	0.01
17	10.40	11.10	2.11	72.77	1.32	25.90	74.10	3.19	0.06	0.72	2.72	0.00	0.62	0.05
18	6.67	4.38	1.06	72.03	2.69	25.28	74.72	8.80	0.07	1.12	1.10	0.01	0.56	0.03
19	9.78	9.51	2.13	64.26	2.08	33.66	66.34	6.75	0.19	1.09	2.80	0.03	0.52	0.15
20	7.70	5.86	2.29	73.18	1.45	25.37	74.63	4.30	0.32	2.95	1.45	0.09	0.67	0.02
21	8.68	6.56	2.45	72.73	1.67	25.61	74.39	4.04	0.12	0.60	0.87	0.09	0.62	0.04
22	6.09	4.46	1.32	76.72	1.39	21.89	78.11	5.94	0.36	1.21	1.71	0.00	0.63	0.03
23	6.98	6.40	2.13	65.30	2.18	32.52	67.48	3.27	0.19	0.98	2.04	0.02	0.72	0.03
24	8.72	3.59	2.43	74.20	2.03	23.78	76.22	4.92	0.08	1.06	1.09	0.03	0.67	0.03
25	7.99	3.84	1.59	80.03	4.37	15.60	84.40	9.02	0.49	0.84	0.78	0.00	0.56	0.06
26	8.30	7.23	1.07	73.53	2.66	23.81	76.19	6.62	0.08	0.88	1.77	0.01	0.56	0.03
27	12.06	9.42	2.64	56.99	1.70	41.31	58.69	2.33	0.07	1.49	0.90	0.02	0.70	0.06
28	2.15	6.15	2.00	5.81	1.02	21.90	78.10	3.02	0.59	1.23	1.21	0.96	0.58	0.05
29	12.27	3.01	3.45	78.35	1.24	20.41	79.59	2.40	0.11	1.50	1.14	1.02	0.66	0.09
30	6.28	4.97	1.31	75.54	0.02	22.82	77.18	5.88	0.25	1.49	0.83	0.04	0.57	0.04
31	18.31	17.13	0.01	25.64	0.01	73.48	26.52	4.15	0.95	1.51	0.29	0.08	0.41	0.05
32	12.62	8.70	0.04	71.65	0.01	27.65	72.35	2.07	0.07	1.22	0.57	0.66	0.65	0.03
33	5.13	3.65	0.01	72.28	0.06	21.55	78.45	7.92	0.16	1.06	0.56	0.08	0.61	0.04
34	8.59	14.73	0.07	0.50	0.24	1.46	76.36	1.47	1.11	1.19	0.53	0.09	0.59	0.10
35	7.41	5.20	2.21	70.92	0.02	27.20	72.80	3.88	0.21	2.12	0.52	0.05	0.64	0.05
36	10.82	7.91	0.03	76.36	0.01	22.97	77.03	3.50	0.05	2.34	1.15	0.03	0.65	0.02
37	10.20	5.95	11.57	75.62	0.05	19.28	80.72	3.10	0.74	1.92	0.65	0.08	0.49	0.02
38	10.37	8.04	2.33	63.22	0.02	35.25	64.75	3.47	0.75	1.06	0.59	0.05	0.62	0.02
39	4.22	2.43	1.79	73.88	0.01	25.01	74.99	3.52	0.36	1.50	0.73	0.19	0.60	0.03
40	6.61	4.07	2.53	78.46	0.02	25.01	79.96	4.65	0.12	1.66	1.08	0.02	0.61	0.08
41	6.70	5.42	1.28	68.60	0.68	20.04	69.28	6.21	0.56	1.70	0.66	0.05	0.48	0.03
42	5.63	2.94	0.03	64.25	0.02	33.29	66.71	2.89	0.09	2.02	0.98	0.08	0.67	0.06
43	10.44	7.45	2.99	69.44	3.10	27.46	72.54	7.24	13.01	2.47	0.52	0.05	0.45	9.15
44	11.29	5.53	5.76	69.88	7.84	22.28	77.72	3.01	0.43	0.59	0.71	0.66	0.60	0.05
45	18.36	16.30	2.06	49.20	2.88	43.21	52.08	11.59	0.32	1.31	2.15	0.01	0.35	0.09
46	22.84	20.57	2.27	60.64	5.08	33.38	65.73	5.18	0.67	1.37	0.91	0.00	0.35	0.03
47	9.52	6.38	3.14	78.16	1.59	19.89	79.75	3.26	0.16	0.85	0.45	0.04	0.55	0.03
48	4.84	3.74	1.10	67.72	1.32	30.96	69.04	9.89	0.23	1.19	0.56	0.02	0.51	0.03
49	10.75	9.69	1.06	56.20	0.55	43.25	56.75	2.96	0.07	0.80	1.03	0.00	0.66	0.02
50	19.71	16.89	2.82	58.88	3.32	37.80	62.20	8.29	0.45	2.43	0.72	0.01	0.21	0.09
51	10.76	9.11	1.66	72.22	3.40	24.38	75.62	7.04	0.78	0.89	0.96	0.01	0.47	0.05
52	12.07	10.68	1.39	74.13	2.30	23.57	76.43	4.01	0.01	2.52	0.65	0.00	0.60	0.03
53	13.67	10.51	3.15	51.95	0.54	47.50	52.50	2.89	0.11	0.79	0.76	0.11	0.53	0.06
54	14.21	12.65	1.56	77.19	0.27	22.54	77.46	7.36	0.25	3.55	3.13	0.00	0.43	1.05
55	10.84	8.79	2.10	69.28	33.99	26.49	73.51	5.63	0.11	0.75	1.31	0.01	0.46	1.07
56	6.48	5.06	1.42	73.14	0.86	26.01	73.99	5.44	0.33	0.91	2.21	0.00	0.67	0.02
57	8.16	5.45	2.72	55.75	0.95	43.30	56.70	1.90	0.36	2.03	1.28	0.02	0.74	0.04
58	3.08	2.13	0.96	59.17	4.87	35.96	64.04	10.14	0.10	0.82	1.18	0.14	0.60	0.03
59	5.72	4.88	0.84	69.29	0.52	30.19	69.81	7.29	0.23	1.01	0.61	0.02	0.54	0.02

60	9.66	6.49	3.16	70.69	0.85	28.46	71.54	2.56	0.07	1.34	0.61	0.43	0.67	0.001
61	7.45	4.91	2.11	64.57	0.04	31.71	68.29	7.10	0.40	1.13	0.97	0.03	0.50	5.40
62	6.44	4.22	2.22	81.15	0.02	17.24	82.76	6.15	0.90	0.73	0.65	0.07	0.40	4.50
63	7.27	5.35	1.92	67.51	0.03	17.35	84.87	5.88	0.46	1.97	1.02	0.04	0.54	7.02
64	6.67	5.18	1.49	78.42	0.03	19.05	100.22	6.24	0.11	2.94	0.99	0.03	0.55	3.10
65	2.44	1.71	0.01	61.09	0.09	33.16	66.84	16.21	0.09	1.62	0.48	0.08	0.46	0.27
66	3.76	2.67	1.08	74.56	0.04	21.32	78.68	11.54	0.35	1.65	0.98	0.11	0.49	8.59
67	11.40	8.30	3.09	75.00	0.02	22.87	77.13	3.49	0.10	2.31	1.48	0.02	0.66	5.18
68	7.04	4.88	2.16	69.88	2.69	27.43	72.57	8.61	0.37	2.24	0.99	0.02	0.50	5.63
69	7.22	4.89	2.33	73.46	1.89	24.65	75.35	4.97	0.19	2.09	1.54	0.01	0.55	9.58
70	8.12	6.41	1.71	74.38	0.02	23.76	76.11	6.35	0.17	1.91	0.53	0.03	0.51	0.05
71	6.28	4.85	1.44	64.83	0.03	59.02	68.29	5.36	0.19	1.47	0.74	-0.02	0.51	0.06
72	9.38	7.50	1.87	67.04	0.04	65.44	70.60	3.67	0.04	1.68	1.88	0.01	0.66	0.09
73	9.00	1.77	3.28	68.88	0.01	29.75	70.25	2.08	0.06	0.79	1.38	0.03	0.73	10.57
74	8.79	6.82	1.97	69.03	0.04	27.19	72.81	4.04	0.12	0.83	2.86	0.04	0.56	6.35
75	6.90	5.76	1.14	64.45	2.15	33.40	66.60	3.60	0.10	0.81	1.72	0.01	0.67	0.02
76	5.74	4.50	1.24	58.49	2.44	39.07	60.93	4.18	0.34	1.31	0.74	0.01	0.64	0.02
77	19.64	18.85	0.79	24.32	0.48	75.20	24.80	6.55	0.02	2.75	1.11	0.07	0.42	0.14
78	12.44	11.07	1.36	59.60	2.84	37.56	62.44	3.89	0.11	1.17	1.67	0.01	0.57	0.04
79	8.11	6.23	1.88	72.32	1.60	26.08	73.92	5.98	0.60	1.97	1.04	0.01	0.49	0.00
80	5.83	3.87	1.96	73.88	1.38	24.74	75.26	8.48	0.22	1.14	1.39	0.02	0.51	0.11
81	7.77	6.57	1.20	76.47	0.58	22.95	77.05	6.89	0.56	1.15	1.63	0.01	0.47	0.03
82	2.62	0.62	2.00	68.23	1.32	30.44	69.56	4.03	0.42	0.71	1.42	0.03	0.74	0.06
83	8.01	5.34	2.67	75.56	1.16	23.29	76.71	3.49	0.68	3.22	1.91	0.00	0.69	0.02
84	6.23	4.35	1.87	76.38	2.50	21.12	78.88	4.41	0.37	0.91	1.19	0.01	0.62	0.02
85	11.62	8.09	3.52	74.88	0.78	24.34	75.66	3.14	0.11	0.77	0.87	0.04	0.68	0.02
86	8.36	6.47	1.88	64.82	3.84	31.34	68.66	9.81	0.29	1.54	2.10	0.02	0.38	0.19
87	5.05	3.32	1.73	66.57	3.29	30.14	69.86	3.58	0.06	1.85	1.63	0.05	0.72	0.03
88	7.46	5.90	1.57	66.73	2.23	31.04	68.96	4.25	0.15	0.67	0.79	0.09	0.63	0.02
89	19.19	14.64	4.55	85.68	0.22	14.10	85.90	2.29	1.02	0.80	2.10	0.01	0.64	0.08
90	9.36	5.44	3.91	72.91	0.35	26.74	73.26	3.70	0.13	0.43	0.84	0.05	0.61	0.07
AVG	9.43	6.75	2.31	66.34	1.83	30.08	70.48	5.05	0.42	1.62	1.21	0.07	0.58	0.91
STD	4.19	4.40	1.76	16.79	3.86	15.25	14.52	2.70	1.36	0.91	0.62	0.18	0.10	2.36
Compiled & Calculated from PDCSs Annual Statement.														
AVG: Mean														
STD : Standard Deviation														

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IMPACT OF AGRICULTURE INSURANCE SCHEME ON FARMING UNDER DIFFERENT SOURCES OF IRRIGATION IN ANDHRA PRADESH

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ABSTRACT

The economy of Andhra Pradesh State is basically an agrarian in character. Ironically the percentage of irrigated area is only 40 per cent. Total irrigated area has decreased from 48.54 lakh hectares to 41.54 lakh hectares from 2008-09 to 2013-14. The reasons for poor productivity might be owing to the intensive dependency on poor monsoon conditions prevailing in India in addition to severely impacted by its vagaries and attacked by pests and diseases. Due to these poorly manageable controllable risks on the one hand and uncontrollable extraneous perils on the other hand made agriculture as risky enterprise. Hence now-a-days agriculture makes the farmers more vulnerable to impoverishments; debt traps and destitution resulting farmers to commit suicides on their ravaged fields. So there is a dire need to have some measures to hedge their risks against all sorts of uncertainties in the present scenario. The emergence of Crop Insurance is one amongst in the direction to anchor a stable growth of agriculture produce to agriculturists. In this backdrop the study of Modern National Agriculture Insurance Scheme (MNAIS) in Andhra Pradesh is more significant and its role in improving the operational performance of Indian farmers is commendable. The study further intends to compare the MNAIS scheme with other schemes of similar nature and suggests modifications to the scheme for attaining best risk hedging results to the Indian farmers.

Key words: MNAIS, Insurance, Premium, Subsidy. Claims

INTRODUCTION

India is an agricultural country. The Indian economy is basically agrarian. Agriculture is the backbone of the Indian economy. As Mahatma Gandhi said, "India lives in villages and agriculture is the soul of Indian economy". Nearly two-thirds of its population depends directly on agriculture for its livelihood. Agriculture is the main stay of India's economy. But agriculture sector has been continuously falling from 55.1% in 1950-51 to 37.6% in 1981-82 & further to 18.5% in 2006-07. But agriculture still continues to be the main sector because it provides livelihood to a majority of the people. In 1951, 69.5% of the working population was engaged in agriculture. This percentage fell to 66.9% in 1991 & to 56.7% in 2001. However, with rapid increase in population the absolute number of people engaged in agriculture has become exceedingly large.

The above importance of agriculture in India is one side of the coin and the another side, agriculture is an uncertain business because this sector is dependent largely on the weather and is severely impacted by its vagaries as also by attack of pests and diseases. These unpredictable and uncontrollable extraneous perils render Indian agricultural and extremely risky enterprise, so this main employment provider and the backbone of Indian economy, requires the most care and protection against all sort of uncertainties.

NEED FOR CROP INSURANCE

Crop insurance is one alternative to manage risk in yield loss by the farmers. It is the mechanism to reduce the impact of income loss on the farmer (family and farming). Crop insurance is a means of protecting farmers against the variations in yield resulting from uncertainty of practically all natural factors beyond their control such as rainfall (drought or excess rainfall), flood, hails, other weather variables (temperature, sunlight, wind), pest infestation, etc. (1 & 3). Crop insurance is a financial mechanism to minimize the impact of loss in farm income by factoring in a large number of uncertainties which affect the crop yields. As such it is a risk management alternative where production risk is transferred to another party at a cost called premium. The weather based crop insurance uses weather parameters as proxy for crop yield in compensating the cultivators for deemed crop losses (4). It provides a good alternative both to farmers and government. Farmers get on actuarially fair insurance with swift payments at little administrative costs to the government (5).

Rainfall insurance is a specific form of weather insurance. As such weather insurance is not yield insurance while crop insurance is. In both the cases cultivators pass risk in yield to another party for a premium. The insurance need for agriculture, therefore, can not be over emphasized as it is a highly risky economic activity because of its dependence on weather conditions. To design and implement an appropriate insurance programme for agriculture is therefore very complex and challenging task. There are two approaches to crop insurance, namely, individual approach where yield loss on individual farms forms the basis for indemnity payment, and homogeneous area approach where a homogeneous crop area is taken as a unit for assessment of

yield and payment of indemnity. In both the cases reliable and dependable yield data for past 8-10 years are needed for fixing premium on actuarially sound basis. Homogeneous area approach has the advantage of availability of data on yield variations.

The government of India, having historically focused on crop insurance as a planned mechanism to mitigate the risks of natural peril on farm production, is responsible for the world's largest crop insurance program with 25 million farmers insured. The national agriculture insurance scheme (NAIS) is the main crop insurance program in the country; it is started in the year 1999.

CROP INSURANCE PROGRAMMES IN INDIA

1. First Ever-Individual Approach Scheme
2. Pilot Crop Insurance Scheme (PCIS) – 1979
3. Comprehensive Crop Insurance Scheme (CCIS)
4. Experimental Crop Insurance Scheme (ECIS)
5. Pilot Project on Farm Income Insurance Scheme
6. Sookha Suraksha Kavack (Drought Risk Insurance)

7. Products in the Market

- 7.1 .National Agricultural Insurance Scheme
- 7.2. Weather Based Crop Insurance Scheme
- 7.3. Varsha Bima-2005
- 7.4. Rabi Weather Insurance
- 7.5. Rabi Weather Insurance

MODIFIED NATIONAL AGRICULTURE INSURANCE SCHEME

In the year 2010, the Government approved some new changes in NAIS renaming it as the *Modified National Agriculture Insurance Scheme* or MNAIS. This new Insurance Scheme which is yet to be implemented embraced provisions like – reducing the insurance unit to village panchayat level and Provide insurance coverage and financial support to the farmers in the event of failure of any of the notified crop as a result of natural calamities, pests & diseases, encourage the farmers to adopt progressive farming practices, high value inputs and higher technology in Agriculture and to help stabilize farm incomes, particularly in disaster years are main aims of these schemes. In this regard the study on MNAIS (modified national agriculture insurance scheme) in India having more significant.

REVIEW OF LITERATURE

1. According to Raju and Ramess (2008) NAIS having limited coverage in different years 1999-2000 to 2005-2006 NAIS covered 9 to 15% farmers, 8 to 16 crop area and 2.14 to 3.57% crop output in terms of money.
2. Debdatta PAL & Tomojit (2010) stated that this scheme would also ensure quick settlement of claim attributed to the independently monitored weather indices besides protecting farmers for overall income rather than crop specific yield.
3. It is believed that these index based schemes are much more efficient than earlier indemnity based insurance schemes. However, implementing both area yield as well as weather index insurance face the huge challenge of inherent risk involved in these mechanisms.
4. It is argued that farmers' own measures to reduce the risk in farming in semi-arid tropical India were costly and relatively ineffective in reducing risk in farming and to adjust to drought and scarcity conditions. The riskiness of farming impinges upon the investment in agriculture leading to sub-optimal allocation of resources (Jodha 1978). Jodha finds that official credit institutions are ill equipped to reduce the exposure of Indian farmers to risks because they cannot or do not provide consumption loans to drought-affected farmers.
5. It absorbs the shock of crop failure by providing cushion wherein farmer is assured of minimum protection against various natural calamities. Moreover, crop insurance provides right to seek compensation rather than requesting for gratis from the government in the event of crop failures. Thus, crop insurance will help maintain

the dignity of the farmer. Even in the years of crop failures, crop insurance assures farmers decent living from their own efforts and not by charity (Ahsan 1985).

6. In India, more than two third of the land holdings are less than 2 hectares. The average size of holding is less than 1.55 hectares and more than half of the arable area is rain-fed and output from agriculture is largely conditioned by the monsoon. A properly designed and implemented crop insurance programme will protect the numerous vulnerable small and marginal farmers from hardship, bring in stability in the farm incomes and increase the farm production (Bhende 2002).

However, the existing model reduces the burden of debt repayment in the event of crop failures and it neither provides any help to meet the consumption needs nor augment income due to crop loss. The present scheme helps to sustain the viability of the credit institutions rather than the farmers. Nevertheless crop insurance enhances the confidence of the farmers and encourages adoption of improved technology and investment in agriculture.

Richards (2000) has studied crop insurance proposals concerned with reforms in the US federal Multiple-Peril Crop Insurance Program for specialty crops. It has raised concerns that a higher cost for catastrophic-level coverage would significantly reduce program participation. The demand estimates for three levels of insurance coverage (50%, 65%, 75%) based on aggregate data from grape producers in 11 California counties for the period 1986-96 indicated that the

SIGNIFICANCE OF THE STUDY

The economy of Andhra Pradesh State is basically an agrarian in character. Ironically the percentage of irrigated area is only 40 per cent. Total irrigated area has decreased from 48.54 lakh hectares to 41.54 lakh hectares from 2008-09 to 2013-14. The reasons for poor productivity might be owing to the intensive dependency on poor monsoon conditions prevailing in India in addition to severely impacted by its vagaries and attacked by pests and diseases. Due to these poorly manageable controllable risks on the one hand and uncontrollable extraneous perils on the other hand made agriculture as risky enterprise. Hence now-a-days agriculture makes the farmers more vulnerable to impoverishments; debt traps and destitution resulting farmers to commit suicides on their ravaged fields. So there is a dire need to have some measures to hedge their risks against all sorts of uncertainties in the present scenario. The emergence of Crop Insurance is one amongst in the direction to anchor a stable growth of agriculture produce to agriculturists. In this backdrop the study of Modified National Agriculture Insurance Scheme (MNAIS) in Andhra Pradesh is more significant.

OBJECTIVE OF THE STUDY

- To examine the operational performance of existing Modified National Agriculture Insurance scheme in Andhra Pradesh.
- To assess impact of MNAI programme on farmers' in Andhra Pradesh

METHODOLOGY

The data collected from primary as well as secondary sources of information. The primary data collected from the field survey and secondary data collected from government of India official websites <http://www.aicindia.com/AICEng/pages/default.aspx>. Simple statistical tools like percentages and averages are used to analyze data. Purposive random sampling method is used in the present study.

The sample consists of 250 farms covering an extent of 702 acres of irrigation under the canal sources for rice in the Guntur district of Andhra Pradesh state.

OPERATIONAL PERFORMANCE OF MNAIS IN ANDHRA PRADESH

For the analysis of operational performance of existing agriculture insurance scheme in Andhra Pradesh, we made attempt to registered farmers and business statistics under MNAIS from rabi 2010-11 to khariff 2013-14 for 7 seasons in two dimensions.

FARMER DIMENSION

The table- 1 shows the details of top five ranker states's registered farmers and insured area under the program of MNAI in India. In no of registered farmers under MNAI Rajasthan state stands at first position with 31.79% followed by Andhra Pradesh with 15.78%, West Bengal with 11.47%, Uttar Pradesh with 11.25%, Bihar with 11.14%. In covered insured area as usually Rajasthan and Andhra Pradesh stands for first and second positions with 32.48% and 16.47% and followed by Bihar with 11.84%, Uttar Pradesh with 10.52%, West Bengal with 3.48% respectively. In the subject of benefitted farmers in this program, surprisingly Andhra Pradesh state stands at first position with 28.765% followed by Rajasthan with 16.16%, Uttar Pradesh with 13.76%, West Bengal with 8.75%, Bihar with 5.80% respectively.

Table – 1

MNAIS – Benefited Farming Statistics from Rabi 2010-11 to Kharif 2013-14 i.e., For 7 Seasons (As On 09.07.2014) Top 5 States In India
(In '000')

Sr. No	States and UTs	No of Farmers Covered	%	Area Insured	%	No of Farmers Benefited	%
1	Rajasthan	2385.64	31.79	2568.13	32.48	168.82	16.16
2	Andhra Pradesh	1184.12	15.78	1302.75	16.47	300.37	28.76
3	West Bengal	861.39	11.47	293.51	3.71	91.45	8.75
4	Uttar Pradesh	840.84	11.20	832.41	10.52	143.81	13.76
5	Bihar	836.41	11.14	936.30	11.84	60.66	5.80
	Total	6108.4	81.40	5933.10	75.03	765.11	73.25
	All India	7503.82	100.00	7906.62	100.00	1044.40	100.00

Source: <http://www.aic india.com/AICEng/pages/default.aspx>

At over all India level, these five ranked states covered 81.40 % of registered farmers, 75.03 % of area insured and 73.25 % benefited farmers under this programme. Finally the study find that Andhra Pradesh state's farmers who are insured their irrigated area under MNAI programme, highly benefitted among the five ranked states India, (nearly 20% of registered farmers, 21% area insured and 39.26% benefitted farmers).

Table - 2

MNAIS – Benefited Farming Statistics for Kharif (As On 09.07.2014) in Andhra Pradesh
(In '000')

Kharif						
Years	No of Farmers	%	Hectors	%	No of farmer beneficiaries	%
2011	39568	3.92	53076	5.17	4640	0.92
2012	493054	48.92	493108.45	48.08	277140	54.95
2013	475324	47.16	479312.68	46.75	222578	44.13
Total	1007946	100.00	1025496.87	100.00	504358	100.00
Rabi						
2010-11	54195	31.87	65217	29.01	1594	8.18
2011- 12	58602	34.46	89904	39.99	12492	64.10
2012- 13	35364	20.79	43093.10	19.17	5403	27.72
2013-14	21910	12.88	26587.16	11.83	-	-
Total	170071	100.00	224800.27	100.00	100.00	100.00

Source: <http://www.aic india.com/AICEng/pages/default.aspx>

The above table -2 shows the year wise and season details of registered farmers, their insured area and benefited farmers (from 2011 to 2013 for Kharif season and 2010- 11 to 2014 for Rabi season) in Andhra Pradesh state. It is very clear that more number of farmers involved and benefitted under this program in 2012 for khariff season with 48.92%, 48.08% and 54.955 respectively and 2011- 12 for Rabi season with 34.46%, 39.99% and 64.10% respectively.. Finally it is find that after 2012 Kharif season and 2011-12 Rabi season, formers are not interested on crop insurance.

BUSINESS DIMENTION

In case of sum insured Andhra Pradesh state stands first position with 28.38% followed by Rajasthan with 14.87%, West Bengal 13.24%, Uttar Pradesh with 10.48% and Bihar with 10.32%. In the category of gross premium Andhra Pradesh state stands for first position with 23.16% followed by Bihar with 19.83%, West Bengal with 19.04%, Rajasthan with 13.48% and Uttar Pradesh with 4.26% but in case of premium subsidy Bihar state stands for first position with 23.30% followed by West Bengal with 21.48%, Andhra Pradesh with 20.33%,rajestan with 12.25% and Uttar Pradesh with 2.87% respectively. In case of claims again Andhra Pradesh state stands for first position with 51.91% followed by Bihar with 10.46%, Uttar Pradesh with 9.34%,west Bengal with 5.02% and Rajasthan with 3.64% respectively.

Table- 3

MNAIS - Business Statistics from Rabi 2010-11 to Kharif 2013-14 i.e., for 7 Seasons (As On 09.07.2014) in India

(Rs in crores)

S. No	States and UTs	Sum Insured	%	Gross Premium	%	Premium Subsidy	%	Claims	%
1	Andhra Pradesh	5178.00	28.38	448.45	23.16	238.02	20.33	760.88	51.91
2	Rajasthan	2712.91	14.87	260.97	13.48	143.43	12.25	53.48	3.64
3	West Bengal	2415.78	13.24	368.70	19.04	251.53	21.48	73.62	5.02
4	Uttar Pradesh	1912.18	10.48	82.52	4.26	33.69	2.87	136.95	9.34
5	Bihar	1883.60	10.32	383.98	19.83	272.81	23.30	153.33	10.46
	Total	14102.47	77.30	1544.62	79.77	939.48	80.23	1178.26	80.37
	All India	18242.71	100.00	1935.86	100.00	1170.61	100.00	1465.75	100.00

Source: <http://www.aic india.com/AICEng/pages/default.aspx>

At over all India level, these five ranked states covered the business with 77.30 % of sum insured, 79.77% of gross premium, 80.23% of premium subsidy and 80.37% of claims under this programme.

Finally it is find that Andhra Pradesh state's MNAI programme, highly benefitted in case of business also, among the five ranked states in India, (nearly with 37 % of sum insured, 29 % gross premium, 25% of premium subsidy and 63 % of claims.

Table- 4: MNAIS – Business Statistics for Kharif (As On 09.07.2014) in Andhra Pradesh (In '000')

Kharif								
Years	Sum Insured	%	Gross Premium	%	Premium Subsidy	%	Claims	%
2011	16844.34	3.90	872.07	2.12	370.84	1.67	232.27	0.31
2012	200816.23	46.36	15925.84	38.83	7847.09	35.27	42455.40	56.18
2013	215472.53	49.74	24227.38	59.05	14033.60	63.07	32877.34	43.51
TOTAL	433133.11	100.00	41025.29	100.00	22251.54	100.00	75565.02	100.00
Rabi								
2010-11	19194.69	22.38	1134.19	28.95	534.50	33.29	77.92	4.13
2011-12	34938.63	40.73	1318.20	33.65	472.39	29.42	966.67	51.30
2012-13	18276.94	21.31	827.53	21.13	336.39	20.95	381.53	20.24
2013-14	13363.16	15.58	637.42	16.27	262.33	16.34	458.66	24.33
TOTAL	85773.43	100.00	3917.36	100.00	1605.62	100.00	1884.78	100.00

Source: <http://www.aic india.com/AICEng/pages/default.aspx>

The year wise and season wise business details of registered farmers under MNAI program (from 2011 to 2013 for Kharif season and 2010- 11 to 2014 for Rabi season) in Andhra Pradesh are in above table-4. It is very clear that the business on sum insured, gross premium and premium subsidy is high in 2013 with 49.74%, 59.05% and 63.07% respectively and in case of claims, it is high in 2012 for Kharif season and for Rabi season 2011-12 is highly benefitted in sum insured, gross premium, premium subsidy and claims with 40.73%, 33.65%, 29.42 and 51.30% respectively. Finally it is find that this business activities are gradually increasing year by year in the Kharif season and in the Rabi season it is gradually decreasing after 2011-12 at Rabi season.

Table- 5: Details of Total Number House Holds

Formers who are involved in MNAIS	f	%
Involved	22	8.80
Not involved	189	75.60
Don't know about MANI	39	15.60
Total	250	100.00

Source: field survey

The above Table- 5 shows the details of total number of farm house holds from the field survey. About 250 house hold only 22 respondents involved in MNAI program with 8.8%, 189 respondents known the program but not interested to insure their crops with 75.60% , remaining 39 respondents do not know the national program with 15.60 %.

SOCIO ECONOMIC STATUS OF THE FARMERS

The Table - 6 shows the details of insured farmer households socio economic conditions. The insured farmers are over 31 years with age range of 31-40 with 86.36% of the age distribution. Thus, the involvement of youths in agricultural production in the study area is very low.

The gender distribution of the farmers is asymmetrical with male farmers been with 81.82% and females with 18.18%. This however shows that female farmers take more risks than the male farmers and hence indicates that they are more informed on how to manage their vulnerability to loss by participating in the insurance scheme.

Table- 6:Details of Socio Economic Status of House Holds Who Are Involved In MNAI Program

Variable	Category	Sample house hold(N=22)	
		f	%
Age	Less than 20	0	0.00
	21 -30	2	9.09
	31-40	19	86.36
	41-50	1	4.55
	50 and above	0	0.00
Gender	Male	18	81.82
	female	4	18.18
Education	Illiteracy	0	0.00
	Up to 5 th	1	4.55
	6 th to 10 th	19	86.35
	Intermediate	1	4.55
	Graduate	0	0.00
Marital status	Technical	1	4.55
	Married	22	100.00
	Unmarried	0	0.00
Number of children	Widow	0	0.00
	1	3	13.64
	2	17	77.27
	3	2	9.09
	4	0	0.00
	5 and above	0	0.00

Source: Field survey

Higher number of insured farmers is having above primary education with 90.90% it indicates that the level of education of the farmers may have influenced their level of awareness as to how to minimize the effects of agricultural risks or in case of its occurrence, cover the costs.

The result shows that all the farmers are married and 86% percent of the house holds having children more than 2. The need for the farmers to meet their responsibilities as married and parental by ensuring maximum output may be responsible for their engagement in full scale agricultural production which has necessitated their participation in the insurance scheme in a bid to minimize their exposure to imminent losses.

IMPACT OF MNAI PROGRAMME ON FARMER'S

The below Table – 7 shows the details of MNAI programme impact on farmer house holds

Table- 7: Impact of MNAI Program on House Holds Details

Variable	Category	Sample house hold(N=60)	
		F	%
Farming System	1.Commercial	21	95.45
	2.Peasant	1	04.55
Farming Experience	Less than 10	3	13.64
	10 – 20	17	77.27
	21 – 30	1	4.55
	31 – 40	1	4.55

	41 – 50	0	0.00
	Above 50		
Motivating factors	Accessibility to loan	20	90.91
	Aversion to Risk	2	9.09
	Insurance Marketing	0	
Farm Investment after Participation in the scheme	Increased	20	90.91
	Decreased	0	0.00
	No impact	2	9.09
Farm Output after Participation in the Scheme	Increased	19	86.36
	Decreased	0	0.00
	No impact	3	13.64

Source: Field survey

However, the result shows that 95% of the farmers are involved in commercial agriculture. Above 86.09% of the farmers having more than 10 years farming experience, it indicates that experience tells about the risks and minimize their exposure to imminent losses

Above 90% of the insured farmers participated in the insurance scheme because is it one of the requirements needed to access agricultural loans. Thus, this indicates that the objectives of the Modified Agricultural Insurance Scheme to increase access of farmers to credits is been achieved. All of the farmers confirmed that there has been increase in their investments after their participation in the scheme. However, this may not be unconnected from the fact that they all participated in the scheme in order to access agricultural loans and these loans have increase their input consumption level.

Above 86% of insured farmers confirmed that their outputs have increased since their participation in the insurance scheme. This is as a result of the increase in their scale of production and input consumption which cannot be unconnected from their access to credit which brought about increased investment in their production.

CONCLUSIONS

The operational performance of the Modern National Agriculture Insurance Scheme in Andhra Pradesh State was enunciated with the parameters viz., number of farmers covered under the scheme, area insured in hectares and number of farmers benefitted. Study found that Andhra Pradesh is leading among the states implemented this scheme in availing the benefits of new Insurance Scheme by way of constituting 15.78 per cent, 16.47 per cent and 28.76 per cent in the total farmers covered, area insured and number of farmers benefitted respectively during 2010-11 to 2013-14.

Further the performance is also studied by examining the sum assured, gross premium, premium subsidy and claim settlement as parameters. The percentage share of sum assured by Andhra Pradesh state to all India constitutes 28.38 per cent, gross premium of 23.16 per cent, claim settlement of 51.91 per cent while as the in the domain of premium subsidy Andhra Pradesh State is behind Bihar(23.30 per cent), West Bengal (21.48 per cent) with 20.33 per cent.

From the study it is also found that only 8.80 per cent of farmers in Andhra Pradesh were involved in MNAIS, while as 75.60 per cent were not involved though they were aware about the scheme and about 15 per cent to total house hold farmers are not at all aware of the scheme. Of the total number of farmers availing this scheme, majority of them were commercial farmers having 10 to 20 years of farming experience and who were accessible to loan . These farmers have expressed about the increase of form investment substantially over the years after availing this insurance scheme.

Hence it is concluded that the performance of scheme in Andhra Pradesh is quite successful when compared to the other states. The farmers felt their investment and output has increased but the percentage of farmers availing this is scheme is scanty. Hence awareness programmes and workshops are needed for the farmers to avail the benefits of this scheme to sustain growth in the much demanded agriculture activities which are the backbone of Indian Economy.

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LOCATING WOMEN'S CRIME IN INDIA'S SOCIAL STRUCTURE: A CRITICAL PERSPECTIVE

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INTRODUCTION

Alternative development is closely linked to Amartya Sen's (Inequality Re-examined; 1992) 'capabilities approach' to development. This approach rejects the discourse of rights and entitlements as well as of general measures of poverty, such as GNP per capita, and instead focuses on how people positioned in all groups in society are capable of achieving 'quality of life' in terms of 'achievement and freedom'.

Speaking about the freedom for women, the inherent paradox in women's politics of belonging is often somewhat different, and relates to the different relationships that women usually occupy in ethnic and national collectivities. On the one hand, women belong to and are identified as members of the collectivity in the same way as men are. Nevertheless, there are always rules and regulations – not to mention perceptions and attitudes – specific to women. Another paradox which concerns the relationship between belonging and security for women is the fact that often the highest danger to women's security lies where their bonds of belonging lie as well. Feminists have always been preoccupied with 'the enemy within'. They have pointed out that it is often the woman's nearest and dearest who are the most violent towards her.

One is "a growing understanding of the meaning and role of gender and gender relations in development, reflected in a widely accepted change of focus from women in development (WID I.e. resources are allocated, but considers that women should be given positions in the hierarchy of power to ensure equality) to 'gender and development' (GAD i.e. power is defined as 'power over', meaning that, women will gain power at the expense of men and the complementary notion of empowerment). This gives greater attention to the power relations between men and women in all spheres, from development projects to the workplace and home. It also recognizes that institutions themselves often inadequately represent women's interests, obstructing progress toward gender equality. Goal three of the Millenium Development Goals (MDGs) is the promotion of gender equality and the empowerment of women. The targets for the achievement of this goal are the inclusion of women and girls in education, equal access to employment and recruitment, and the representation of women within decision-making positions. On October 31, 2000, the UN Security Council held a special session on the issue of peace and security from a women's perspective. At this session, United Nations Security Council Resolution (UNSCR) 1325 was passed unanimously. This was the first UN Security Council Resolution to be passed that specifically addresses womens roles in conflicts and peace processes, as well as the impacts of war on women.

Others look at 'power to', which has empowerment as the ability to act in particular ways. What is important about this approach is that it does not produce a zero-sum game where women's advantage is men's disadvantage, but that the increased empowerment of women will improve the community as a whole. Increased ability to act, whether in matters to do with market production or house hold reproduction, will have a positive effect on all members of the group.

Feminist politics also called for a thorough transformation of the relations of gender and sexuality within the family and within society as a whole. Feminist politics has always included both the notion of 'freedom of' as well as that of 'freedom from'.

Community is treated as a sociological framework that can relate individual behaviour, underlying economic and social structural characteristics, social meanings and the various demographic and ecological dimensions of social phenomena that are relevant to the examination of crime.

The number of crimes or offences is greater in the cities than in the rural, that 'cities produce a proportionately greater number of offenders than does the rural', and 'in general the agricultural population is one of the least criminal of all occupational classes' (Sorokin; 1931).

Criminologists have focused on the so-called 'culture of violence, for example, Fischer (1980), utilizes Chicago School of criminology themes about urbanism in examining the spread or diffusion of violence from urban to rural places. Wilkinson (1982) adopted a more social disorganization-like approach to the examination of rural violence, considering the possibility that poverty combined with social and physical isolation disrupts mechanisms of social control within places with small populations. These analyses are based on situational crime prevention theory, i.e., the theory which argues for a relationship between features of the immediate physical and social environments that either facilitate or constrain crime. Few other research indicates that peer

networks aroused by rural male abusers to exchange information about ways to control their partners through physical and psychological violence (DeKeseredy and Joseph, 2006).

GENDER AS A SOCIAL STRUCTURE

Gender Role socialization; Boy must be masculine and is Active, Aggressive, Tough, Daring, Dominant. It is also found that Girls must be feminine: Soft, Emotional, Sweet, Submissive

The notion that the body is socially constructed has been the dominant perspective of modern sociology and it is closely associated with radical social movements, which typically employ constructionism as a critical tool to deny that the body is simply a natural object. For example, feminist theory has examined the social construction of the body and rejected the notion of an essential or natural body. Simone de Beauvoir, in *The Second Sex* (1972a), argued famously that women are not born but become women through social and psychological processes that construct them as essentially female. Her work inaugurated a research tradition concentrating on the social production of differences in gender and sexuality. Feminism in the 1970s was intellectually important in establishing the difference between biologically determined sex and the social construction of gender roles and sexual identities.

The crux of the problem in gender relations lies in the fact that gender roles, rights and obligations are not just different but they are highly unequal. In almost every sphere of human functioning in India, the roles defined for women are subordinated to those defined for males, the rights for women are fewer or less emancipating than those of men, and women's obligations are more limiting than those of men, resulting in gender disparity at every level, cutting across all types of class and caste powerlessness.

Thus, most of the Indian women have been suffering from the lack of self and space, disempowerment, disprivilege, disadvantage, sexist discrimination, gender inequity, invisibility, asymmetries, marginalization, devalorization and reification. Crime against them are outcome of these reflections.

Contrastingly, there is a well-known association between technology and masculinity. This perspective on man as *homo faber* remains a vivid myth representing Man as the maker and builder, whose hands are potent tools and weapons.

Sociological research on the body in popular culture has explored how women's bodies are literally constructed as consumer or sexual objects, for example through the application of medical technology (Davis 2002; Negrin 2002). Cosmetic surgery involves the actual reconstruction of the body in order to produce desirable social and aesthetic effects.

Ann Oakley (1974), argues that Sociology is sexist because it is solely concerned with the activities and interests of men. The subject-areas sociology is concerned with are artificial constructs which distort human experience. One consequence of this is that women's 'social presence' within these areas of life is high although their 'sociological visibility' is low. In other words, although women are frequently massively present within whatever is studied, we but rarely appear in the end products of this. It is to be emphasized that that much social science work quite simply ignores women's presence within vast areas of social reality. But also where women's presence isn't ignored it is viewed and presented in distorted and sexist ways.

Giddens's (1984) structuration theory to help conceptualize gender as a structure that creates stratification, with an emphasis on the recursive relationship between structure and individuals. Social structures not only act on people; people act on social structures. Indeed, social structures are created not by mysterious forces, but by human action.

Gender is deeply embedded as a basis for stratification not just in our personalities, our cultural rules, or institutions, but in all these, and in complicated ways. The gender structure differentiates opportunities and constraints based on sex category and thus has consequences on three dimensions: (1) at the individual level, for the development of gendered selves; (2) during interaction as men and women face different cultural expectations even when they fill the identical structural positions; and (3) in institutional domains where both cultural logics and explicit regulations regarding resource distribution and material goods are gender specific.

Postmodernist, Michael Foucault argues that Freud's elaboration of oedipality (Oedipus generates the desire and the desiring bodies that as law it would seem to forbid) allows for the interpenetration of 'the deployment of alliance' and the 'deployment of sexuality'. The deployment of alliance which orders sexual relations before the end of the 18th century, refers to the transmission or circulation of wealth in terms of a regulation of licit and illicit sexual partners. The deployment of sexuality shifts the regulation of sexual relations to the quality of sensation and pleasure, the control and disciplining of bodies, making the nuclear family central to the operation

of the deployment of sexuality. According to Foucault, by the 19th century, the family has become the site at which alliance and sexuality are interfaced.

Feminist Philosopher, Judith Butler is distinguished for her criticism of the social construction of gender, and her contribution to the development of 'queer theory'. Butler asks 'what are the constraints by which bodies are materialized as 'sexed', and how are we to understand the matter of sex and bodies more generally'. To her, only some bodily form and thereby excludes different bodily figures or different embodiments of thought. Only some bodies are culturally intelligible and it depends on the exclusion of other bodies, making them unthinkable, even unliveable.

Butler argues that sexed bodies and gender identities are constructed at the same time. Genders and sexualities refer to the prior cultural norm of sexual differences as social reality, personhood and self-identity. As Butler puts it, 'desire is manufactured and forbidden as a ritual symbolic gesture whereby the juridical model exercises and consolidates its own power. Butler's argument is that the law of Oedipus imposes sexual difference not only by prohibiting an incestuous heterosexual object choice – the mother for the boy and the father for the girl.

UNDERSTANDING DOMESTIC VIOLENCE

Violence has become synonymous with power and is thus legitimized. Even today, war is the preferred option to resolve conflict. Violence thus equals power - from the bar room brawl through family violence to international conflict. Violence is a tool to perpetuate dominance and "violence in the family should be understood primarily as coercive control." There is a popular perception that domestic violence may be more prevalent in certain cultures due to intrinsic "cultural" factors.

Domestic violence refers to "assaultive and coercive behaviors that adults use against their intimate partners". It affects various parties (including partners, parents, children and extended family). The key to understanding domestic violence from a gender perspective is to appreciate that the root cause of violence lies in an unequal power relationship between men and women that is compounded in male dominated societies

In many jurisdictions, and particularly in Asia, domestic violence is seen as a private matter and considerations of family, culture, or religion tend to prevail over women's interests. However, by defining family violence both as a gender issue and a human rights issue, the locus of domestic violence is shifted away from the private domain to the public, a critical step in the Asian context.

The UN Special Rapporteur on Violence against Women has defined domestic violence in gender terms as "violence perpetrated in the domestic sphere which targets women because of their role within that sphere or as violence which is intended to impact, directly and negatively, on women within the domestic sphere."

Evidence suggests that domestic violence disproportionately affects women as victims. The World Health Organization, in its first World Report on Violence and Health in 2002, revealed that between 40 percent and 70 percent of women who die due to homicide are killed by current or former partners.

PERSPECTIVE ON DOMESTIC VIOLENCE

UN literature identifies two types of theories on domestic violence, each representing the two extremes of a spectrum of theories. At one end are theories that focus on the individual, and at the other, are theories that look to social structural explanations. Third category of theories focuses on the family and is situated along the spectrum.

The individualist theory looks at personal, social, and psychological explanations for violence. Causes of violence can be internal, for example, due to personality disorders, biological predispositions to violence, personal social conditioning brought about by environmental factors such as growing up in a violent home. Alternatively, the causes can be external, due, for example, to alcohol, drugs, provocation, jealousy, or sex. It can, however, be argued that these individual factors are actually catalysts of violence and not necessarily the true causes of violence.

The family-centered theory locates the causes of violence within the family unit. It is argued that the unique nature of the family unit is intrinsically a source for violence because of its potential to generate conflict and frustration. Theorists treat "individual problem behaviours as a manifestation of a dysfunctional family unit, with each family member contributing to the problem."

The social structural theories of domestic violence shift the debate from micro-level to macro-level analyses; instead of looking at individual or family factors, the focus is on structural factors in societies and cultures.

Feminist constructions of domestic violence provide an alternative lens through which to appraise the issue. From a feminist perspective, domestic violence is not an aberration; rather, it is the norm because it is culturally and legally accepted or tolerated. Feminism also shifts the focus from women to men by explaining why the male partner's behavior traps women in violent relationships. Social psychologists have explained this phenomenon as a consequence of being exposed to a cycle of violence.

FACTORS PROMPTING DOMESTIC VIOLENCE AGAINST WOMEN

- Conditions and Resources of the Household Or Male Partner
- A Woman's Social and Economic Dependence on the Partnership
- Status Inconsistency in the Partnership
- Family Organization and the Woman's Contact with Natal Kin
- The Early-life Experiences of Partners

POSITION OF WOMEN IN INDIA

Indian women became a combination of the spiritual Maitreyi, the learned Gargi, the suffering Sita, the faithful Savitri and the heroic Lakshmibai. The prevalence of cultural practices such as Sati Pratha, child marriage, dowry, and prohibition of widow remarriages reflect the poor social status of Indian women. Several laws have been enacted to emancipate Indian women from these problematic social practices. Nevertheless, women in India continue to be in a disadvantaged position. The national infant mortality rate (IMR) is declining gradually, but the female IMR is always higher than the male IMR. Recent government figures show the IMR for males to be 57 while it is 64 for females (SRS, 2005). The sharp decline in the sex-ratio of the population between 0 and 6 years of age in the 1990s (945 in 1991 to 927 females per 1000 males in 2001) has drawn the attention of the public and policy makers. Serious concerns have been raised about the prevalence of girl foeticide in some Indian states. Other issues are:

- **Abused Child** - children are victims of substantial abuse of a physical, psychological and emotional nature
- **Inequality in the Household** - forms of discrimination in food exists, when ill, the latter are more likely to get treated, or if women do get attention, much less is spent on their ailments, bias in feeding boys milk and milk products and eggs while both boys and girls have equal access to cereal and vegetables. Taboos associated with giving girls meat, fish and eggs which are regarded as heating are fairly widespread
- **Violence in the Conjugal Home** – Hypergamy marriage, dowry, control over sexual relations in early marriage, various forms which range from inhumanly long hours of labour, often within and outside the home, food denial, neglect of ailments, verbal abuse by affines to physical violence by the husband and sometimes other family members. In this context, it is interesting to note the growing number of cases being registered under section 498A of the Indian Penal Code [IPC 1983] which indicts a husband or relative of the husband for cruelty against a wife.
- **Aging Person Within the Home** - situation of dependency on the younger generation results in neglect and in some cases, ill-treatment and different forms of violence against older people, in particular women.

The low status of women in India has been a matter of concern for many years, and the Indian government has implemented various policies and programs to improve their situations. The Indian Constitution (1950) has stressed gender equality in all spheres of life. Since 1950 (Article 45) the Government of India has taken various efforts to provide free and compulsory education for all children between the ages of 6-14 years. Even as the literacy rate in India has increased, the gender gap remains very significant, with a literacy rate of 75.8% for men in contrast to a female literacy rate of 54.2% (Government of India, 2001a).

There has been insistent and consistent pressure on the Government of India to formulate a National Policy for Women since the late '70s which went unheeded for two decades. There was a Committee to examine the status of women in India in preparation for the International Women's Conference in Mexico in 1975. The report submitted by the committee-Towards Equality-in 1974 (Government of India, 1974) highlighted for the first time the shocking state of affairs vis a vis the position of women at all levels and in all spheres in the country

Consequently various women empowerment specific policies and plans have been executed. Naturally therefore the Eighth Five- Year Plan (1992-1997) marks a definite shift from 'development' to 'empowerment' of women. Special Marriage Act, 1954; Hindu Marriage Act, 1955; Hindu Succession Act, 1956; Hindu Minority & Guardianship Act, 1956; Hindu Adoption and Maintenance Act, 1956; Immoral Traffic Prevention Act, 1956; Dowry Prohibition Act, 1961 & 1984; Maternity Benefit Act, 1961 ; Medical Termination of Pregnancy Act,

1971 ; Child Marriage Restraint (Amendment) Act, 1978; Family Court Act, 1984; Indecent Representation of Women (Prohibition) Act, 1986; Commission of Sati (Prevention) Act, 1987; The National Plan of Action for Women, 1976; National Perspective Plan for Women, 1988; Shramashakti, 1988; National Commission for Women, 1990; Support to Training and Employment Programme for Women, 1987; Rashtriya Mahila Kosh; Mahila Samridhi Yojana; Indira Awaas Yojana; Jawahar Rozgar Yojana; Stree Shakti Mission; DWCRA; TRYSEM; National Rural Health Mission; National Rural Employment Guarantee-Scheme; the 73rd and 74th Constitutional Amendment Acts of 1993 and the support services launched and effectualized by the Govt. of India bear ample testimony to desire and preparedness of the State of India to facilitate empowerment of women in India for the ultimate efflorescence of the Indian HR. With reference to the thrust laid on empowerment of women by the state of India, the concept of empowerment is anatomized with a view to facilitating a holistic study of women empowerment, per se, in India.

In 1990, the National Commission for Women was established to safeguard the rights and legal entitlements of women. One of the main objectives of India's Ninth Five Year Plan was to provide employment opportunities for women. Only one fourth of the country's women (25.6%) were involved in officially recognized economic activities. Among these working women, only 35.7% were literate. The majority of working women lived in rural areas (87.3%) and were involved in cultivation and agriculture activities (71.8%) (Government of India, 2001b). The enactment of the 73rd Amendment of the Constitution in 1993 has reserved 33% of the seats in local governments such as, Panchayats and Municipalities for women so as to encourage their participation in societal decision-making. Since 1994, the Micro Credit Scheme (MCS) has also been in operation in India.

In 1901 the sex ratio of females per 1,000 males was 972. By 1971 the sex ratio had fallen to 930. In 1981 it increased to 934 but in 1991 it was a low 929 - a steep fall of 43 females per 1,000 males from 1901 to 1991, i.e., in 1991 there were in India 31 million fewer women than men. According to official statistics 30 per cent of girls in India are married off between the ages of 15 to 19 years and 70 per cent girls are married off by the time they are 24 and 90 per cent by the time they reach the age of 29 years. At the beginning of the 20th century the average age of girls at marriage was 13 years. By 1981 this had only shown an increase to 18.3 years and in 1991 to 19.5 years. The increase in the age of marriage has been due more to marriages of girls taking place at an older age now among the middle and upper classes.

According to the police statistics in 1987, 7,317 rapes took place, in 1990 the figure increased to 9,863 of which 394 rapes were committed on minors. Here we must keep in mind the under reporting of rapes because of the stigma that gets attached to raped women. According to information from the home ministry a violent act is perpetrated in India on a woman every six minutes and a rape occurs every 47 minutes; a woman is kidnapped every 44 minutes; and a woman becomes the victim of oppression by males every 44 minutes. There are dowry-related deaths of women every day.

WOMEN EMPOWERMENT - A Tool For Eradicating Women Crime

The issues of empowerment is about social transformation; it is about radical social transformation; and it is about the people - ordinary, common people, rather than politicians, experts and other socially or culturally advantaged persons. Empowerment is both a means to an end and an end in itself.

The concept of 'empowerment of women' implies a mediating of the relationship between the two genders by power and thus has inbuilt within it latent conflict, one up-manship, hierarchisation and a constant glancing behind one's shoulder to make sure that the other sex is not trying to out-power or over-power one. This state of affairs, it is certain will definitely not lead to a cessation of sexual struggle for power and sexual politics but escalate it adding to its surreptitiousness, mistrust, a working against each other.

Widely used definition of women's empowerment is increased power achieved through activism and grassroots movements (Moser, 1993; Kabeer, 1994). Feminist experts have argued that women's groups are vital in enabling women to increase their control of resources and decision-making capacity (Sen and Grown, 1987). Naila Kabeer (2001) found that women's participation in microcredit programs in Bangladesh led to more activism in community affairs, reduction in domestic violence, and an overall sense of power (Kabeer, 2001, p. 8).

The focus on empowerment has given a new emphasis to the building of economic and social capabilities among individuals, classes and communities. As one would expect, interventions of various kinds are being considered and recommended. Capacity building through craft training, especially for women, whether for full-time or part time employment, is seen in a similar light in the idea of empowerment is ascertain theory of social change, in particular of change from a hierarchical to an egalitarian type of society [Beteille 1983],

One successful case-study of empowerment is The Self-Employed Women's Association (SEWA), formed in 1972 in Ahmedabad, which is located in the state of Gujarat in western India. EWA operates like a trade union and organizes women into cooperatives. It also provides various services such as banking, child-care, legal aid, and vocational instruction. SEWA defines self-employed women to include workers who earn a living through their own small businesses or wage labor and do not receive regular salaries like formal sector workers.

DIMENSIONS OF EMPOWERMENT

Psychological - Self-image and identity; Creating space; Acquiring knowledge

Cultural - Redefining gender rules and norms; Recreating practices

Social - Leadership in community action; Action for rights; Social inclusion; Literacy

Economic - Attaining income security; Ownership of productive assets; Entrepreneurial skills

Organizational - Collective identity; Establishing representative organization; Organizational leadership

Political - Participation in local institutions; Negotiating political power; Accessing political power

INTERNATIONALIZING WOMEN'S RIGHTS

Women's issues, as part of international discourse, received a boost during the 1970s and 1980s when the UN General Assembly promoted the International Decade for Women between 1975 and 1985. The single most important international instrument for women's rights was created in 1979 when the Women's Convention was adopted by the General Assembly. Revitalization of a global women's movement at the end of the International Decade for Women resulted in several conferences and the recognition of violence against women as a human rights issue. It began in 1991 with the inaugural campaign of "16 Days of Activism against Gender Violence," which linked violence against women with human rights. The 1993 Vienna Conference on Human Rights condemned gender based violence and instructed the UN General Assembly to adopt a draft declaration on violence against women. The General Assembly subsequently adopted a Declaration on the Elimination of Violence Against Women (Vienna Declaration), which called upon member states to commit to preventing all forms of violence against women without distinction between private and public arenas. More importantly, the Vienna Declaration gives women "access to a very powerful vocabulary - the vocabulary of rights."

CONCLUSION

There is a need for addressing the women towards democratization through following measures:

- The necessity to protect girls and women against violence, especially gender based violence;
- The need to protect women against further violence and injuries by engendering de-mining and small arms programs;
- The need to better address the specific situation of former girls and women combatants;
- The need to actively support women's inclusion and leadership in politics;
- The need to prevent the perpetuation of gender injustice;
- The prevention of women and girls's re-victimization;
- The need to address women and girls' specific needs in economic reintegration programs;
- The mainstreaming of women needs into macro and microeconomic programs.

The empowerment process is difficult to measure quantitatively. Various authors have used education, work participation, and exposure to mass media, the means or sources by which women are expected to develop decision-making authority, greater freedom of movement, autonomy, and attitudinal changes in favour of gender equality, as indicators to measure empowerment. Education is an essential foundation for all social, economic and cultural development (Sen, 1994)

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PERSPECTIVES AND PROSPECTS OF E-COMMERCE AND M-COMMERCE

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ABSTRACT

Many years ago, the mobile device was just a mode of voice communication and text messaging. But now mobile device has come far away, and undergo a journey of enormous transformation due to an increase in their processing power and computational speed. The simple voice communication device has now entered the new world of doing business, known as M-commerce. It is an innovation that is completely changing the traditional way of doing business. M-commerce's growth is on, and it will continue the same. Increasing Smartphone users have added to its growth. Mcommerce is gaining more popularity than e-commerce because of its availability.

Keywords: M-commerce, e-commerce, internet business

INTRODUCTION

E-commerce is buying and selling goods or services via internet. In e-commerce one need a computer system or laptop attached to a net connection (modem). Similarly, M-commerce is also buying and selling goods and service from internet but on mobile. In M-commerce all you need a Smartphone with internet connection.

According to Forrester research, smart phone mobile users number has increased by 8% by the end 2014 and will continue to grow by more than 21% in 2017. This figure is very optimistic and shows the favourable environment for the growth and development of m-commerce services. It is expected that this growth will continue in future also. (Singh, 2014)

Rajan Anandan, managing director, Google India is of the opinion that every month five million new internet users will be added and all these will be using mobile as main medium of accessing internet. He also believes more than 56% internet user will be mobile internet user. (Singh, 2014)

M-commerce is gaining more population than E-commerce, because it's faster accessibility. A person may not always have a computer or laptop with them, while a person will always have their mobile phone with them.

LITERATURE REVIEW

Feng et.al (2006) in their study found m-commerce as new way of doing business thus treating m-commerce as innovative business idea due to immense unique characteristics and utilities available in m-commerce. Abu Bakar and Osman (2005) in their study defined m-commerce with the help of cellular telephone and personal digital assistant (PADs). They defined that with the help of these handheld devices exchange or buying and selling of goods and services are considered under mobile commerce. The beginnings of e-commerce can be traced to the 1960s, when businesses started using Electronic Data Interchange (EDI) to share business documents with other companies. In 1979, the American National Standards Institute developed ASC X12 as a universal standard for businesses to share documents through electronic networks. After the number of individual users sharing electronic documents with each other grew in the 1980s, in the 1990s the rise of eBay and Amazon revolutionized the e-commerce industry.

According to Sachin Gupta (2014) in their article studies the growth drivers of m-commerce. They were of the opinion that changing youth perception and lifestyle, availability of economical smartphobne with enhanced capabilities and trusteeship model facilities provided by online shopping portals are the drivers of m-commerce growth in the country.

Sujata P. Deshmukh et.al (2013) in their article stated that M-commerce is the subset of e-commerce that entire ecommerce transactions which are being done with the help of a mobile computing device.

DEFINITION**E-commerce**

E-commerce is trading in products or services using computer networks such as the internet. A type of business model, or segment of a large business model, that enable a firm or individual to conduct business over an electronic network, typically the internet-commerce is the marketing, buying, and selling of merchandise or services over the internet. e-commerce is a transaction of buying or selling online. Electronic commerce draws on technologies such as mobile commerce, electronic funds transfer, supply chain management, Internet marketing, online transaction processing, electronic data interchange (EDI), inventory management systems, and automated data collection systems. Modern electronic commerce typically uses the World Wide Web for at least one part of the transaction's life cycle although it may also use other technologies such as e-mail.

M-commerce

The delivery of E-commerce capabilities directly into the customer's hand anywhere, via wireless technology. M-commerce is the use of wireless handheld device such as cellular phone and laptops to conduct commercial transaction online.

Mobile commerce, also referred as m-commerce, is the use of wireless handheld devices such as cellular phones and laptops to conduct commercial transactions online. Mobile commerce transactions continue to grow, and the term includes the purchase and sale of a wide range of products and services, such as online banking, bill payment and information delivery.

M-COMMERCE: GROWTH DRIVERS

Now in m-commerce, mobile internet services are globally available rather than availability at local level as in the initial days, leading to growth of m-commerce.

Many m-commerce apps are available for mobile users. These m-commerce applications are simple, can be customized easily and provide location based services and highly time specific facilities.

Mobile phone is basically a connecting device that every user usually accompanies it wherever he goes. This leads to opening of more opportunities for m-commerce rather than e-commerce due to portability feature. (Sandhu 2012)

Being mobile phone an intelligent device available every time with the user, at the time of travelling, shopping, office, any time sensitive simple transactions can be made very easily. For example, purchase of movie ticket, air and train ticket reservations, m-commerce is gaining more popularity rather than e-commerce. (Sandhu 2012)

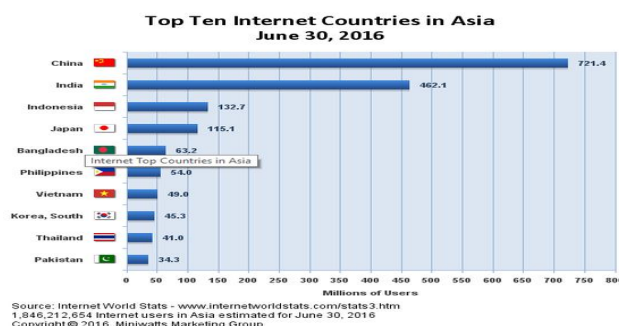
In case of emergency services like calling a cab, traveler navigation, automobile repair mechanic on road, mobile phone is boon which otherwise is not possible with a computer or laptop.

MOBILE INTERNET USER

Following figure depicts the mobile internet users number in the country is low though; share of traffic on mobile devices is more than the share of traffic on desktop, which is a favourable condition for m-commerce to boom.

Internet users often turn to their mobile devices to access the internet. Millennial internet users, for example, spent an average of 185 minutes on mobile internet services every day in 2016. Generation X internet users' average daily use of mobile internet stood at 110 minutes that year. Many companies have been profiting from the increased mobile usage by following a mobile-first strategy and optimizing their content for mobile devices. Some of the most popular mobile internet activities are using email, working, social networking, online search, online video and online shopping. Instant messaging is also popular among mobile internet users worldwide. WhatsApp is the most popular mobile messaging app in the world with one billion monthly active users. Facebook Messenger closely follows with 900 million monthly active users. Facebook was found to be the leading social network with 1.7 billion active users. Other popular social networks include Instagram, Twitter and Tumblr, as well as mobile chat apps such as WhatsApp, Facebook Messenger or WeChat.

There was an estimate of 3.5 billion internet users worldwide in 2016. This means about 45 percent of the global population accessed the internet that year. The majority of global internet users are located in East and South Asia, while China is the largest online market in the world. In 2016, China had over 721 million internet users, more than double the amount of third-ranked U.S. with nearly 290 million internet users. India ranked second in number of users; Brazil and Japan complete the top 5. English is the most common language on the internet by share of users, followed by Chinese and Spanish. South Korea has the world's fastest average internet connection speed – 27 Mbps as of 2016. The global average internet speed stood at 6.1 Mbps that year.



STRENGTH

Paavilainen (2002) discovered there are four factors as strength of m-commerce- anticipated ubiquity of devices, online access for large portion of world's population, local sensitivity of devices & authentication & authorization capabilities.

Whatever penetration of smart phone is enhancing; it will make desirable environment for growing of M-commerce. Some inimitable traits like portability, mobility, anytime, anywhere availability is coming along the big strength of m-commerce. Making alteration in youth perception will lead to boom in Internet ability what is needed for encourage for m-commerce.

WEAKNESS

although penetration of smart phone is enhanced, but absence of knowledge about m-commerce is obvious. Security & privacy issues are making barriers in fast speed of m-commerce. Another main issue is trust in non-physical actions, as making trust is hard in this type of actions. Usually in m-commerce, one part will act in English, so language is a big problem too, like India where a large population of people can't talk English. Small screen, keypad uncomfortably, limited mobile memory are other weakness in m-commerce.

OPPORTUNITIES

Fast growth in number of mobile users and accept of mobile technology are motivating m-commerce. New usages of m-commerce are more desirable which included mobile banking, mobile ticketing, mobile payments, mobile vouchers, multimedia information that all of them could be a chance in m-commerce. The big community of youth and their opinion regard m-commerce could be good singly.

THREATS

In any business, significant threads are the security and privacy risk. More threats could be wireless infrastructure security risk, mobile middleware security risk, mobile application security risk etc.

CONCLUSION

People want convenience as they have very busy schedule. In such environment M-commerce emerges out as comfortable mode. M-commerce market can bloom in world as there are many favorable drivers such as large youth population, changing youth perception, cheaper smart phones, increasing mobile internet user. Despite these there are many huddles in m-commerce pace like lack of awareness, language barrier, and graphic resolution. M-commerce in world is in nascent stage, and has a long way to travel. M-commerce comes out a alternate innovative user friendly mode of business. So it has huge scope, & a vast untapped market to capture.

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STOCK MARKET VOLATILITY AND RETURNS: A STUDY OF SIX SECTORAL INDICES OF NATIONAL STOCK EXCHANGE IN INDIA

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ABSTRACT

The study examines the volatility clustering, persistence of volatility, leverage effect and the relationship between volatility and returns for the selected NSE sectoral indices over the period from 31st March, 2005 to April 1, 2014. The GARCH-M (Generalised Auto Regressive Conditional Heteroscedasticity in Mean) model is used to examine the volatility clustering and persistence of volatility and EGARCH (Exponential GARCH) model is used to capture the asymmetric effect. The result reveals that the volatility in the selected NSE sectoral indices exhibits the characteristics like volatility clustering, asymmetry effect and persistence of volatility in their daily return. The study finds that the recent news as well as past news both has an impact on volatility of the selected NSE sectoral indices. The study also finds the existence of leverage effect indicating that the negative shocks or bad news have more impact on volatility than that of positive shocks or good news. The study further finds that there is positive relationship between volatility and returns.

Key Words: Stock market returns, Volatility, Leverage Effect, GARCH and EGARCH model.

INTRODUCTION

Industrial development is one of the most significant aspect and process of economic development of the country. Industrial development depends on capital formation. A vibrant and competitive financial market plays a vital role in mobilization of saving and investment process. Stock market is an important part of financial market. Stock market acts as an engine of industrial development. Stock exchange reflects the changing conditions of economic health of a country, as the shares prices are highly sensitive to changing economic, social and political conditions. During the periods of economic prosperity, the share prices in the stock market tend to rise. Conversely, share prices tend to fall when there is an economic stagnation and the business activities slow down as a result of depressions. The intensity of trading at stock exchanges and the corresponding rise or fall in the share prices of securities reflects the investors' assessment of the economic and business conditions in a country, and acts as the barometer which indicates the general conditions of the atmosphere of business. As a result of stock market transactions, funds flow from the less profitable to more profitable enterprises and they avail of the greater potential for growth. Financial resources of the economy are thus better allocated. Stock prices are highly volatile; it is changed in every moment in the stock market due to change in market demand and supply for the share of the companies. If more people want to buy a particular share then price moves up. Conversely, if more people want to sell their shares, then price would start to fall. Volatility in the stock market price is an integral part of stock market with the alternating bull and bear phases. In the bullish market, the share prices rise high and in the bearish market share prices fall down and these ups and downs determine the return and volatility of the stock market.

The study of financial assets volatility is important to academics, policy makers, and financial market participants for several reasons.

- First, prediction of financial market volatility is important to economic agents because it represents a measure of risk exposure in their investments.
- Second, a volatile stock market is a serious concern for policy makers because instability of the stock market creates uncertainty and thus adversely affects growth prospects. Recent evidence shows that when markets are perceived as highly volatile, it "may act as a potential barrier to investing".
- Third, the stock market volatility causes reduction in consumer spending Garner (1990). Garner found that the stock market crash in 1987 brought about a reduction in the consumer spending in the U.S.
- Fourth, pricing of derivative securities and pricing of call option is a function of volatility.
- Finally, stock return forecasting is in a sense volatility forecasting, and this has created new job opportunities for the professionals those who are experts in volatility forecasting. Thus it can be seen that the study of stock market volatility is very important and can be helpful for the formulation of economic policies and framing rules and regulations related to stock market volatility.

REVIEW OF LITERATURE

There are many literatures on stock market volatility and return. Some literatures are reviewed as follows:

Gahan et al. (2012) examine the volatility pattern of BSE Sensex and NSE Nifty during the pre and post derivative period. They estimate volatility by recognizing the stylist features of volatility like persistence, asymmetry etc. for both pre and post derivative period. They use daily closing index levels of BSE Sensex and NSE Nifty over a period of 1992-2012 and 1995-2012 respectively. They find that volatility is lower in the post derivative period as compared to the pre derivative period. They also find that recent news has more impact on volatility in the post derivative period in comparison to the pre derivative period. They further find that introduction of derivatives has increased the asymmetric effect on volatility.

Tripathy et al. (2009) investigate the relationship between leverage effect and daily stock returns, volume and volatility in the BSE Sensex index in India during the period January 2005 to June 2009. They find that there exist substantial ARCH effects in the residuals and the volatility shocks are quite persistent in the market. They also find that both the recent news and the old news have an impact on the volatility of the stock. They find the evidence of leverage and asymmetric effect on stock market. They find that bad news generate more impact on change in trading volumes and volatility of the market. They also observed that asymmetric GARCH models provide a better fit than the symmetric GARCH model suggesting that systematic variations in trading volume are assumed to be caused only by the arrival of new information.

Sarkar and Banerjee (2006) measure the volatility in the daily return at five-minute intervals of the Indian National Stock Exchange from June 1, 2000 through January 30, 2004. They find that the Indian stock market experiences volatility clustering and hence GARCH model predict the market volatility better than simple volatility models like historical average, moving average etc. They also observe that the asymmetric GARCH models provide better fit than the symmetric GARCH model, confirming the presence of leverage effect. Finally, the study reveals that the change in volume of trade in the market directly affects the volatility of asset returns. Further, the presence of FII in the Indian stock market does not appear to increase the overall market volatility.

Balaban and Bayar (2005) examine relationship between stock market returns and their forecast volatility derived from the daily observations of stock market indices of 14 countries covering the period December 1987 to December 1997 are used. Both weekly and monthly returns and their volatility are investigated. Expected volatility is derived from the ARCH (p), GARCH (1, 1), GJR-GARCH (1, 1) and EGARCH (1, 1) forecast models. Expected volatility is found to have a significant negative or positive effect on country returns in a few cases. Unexpected volatility has a negative effect on weekly stock returns in six to seven countries and on monthly returns in nine to eleven countries depending on the volatility-forecasting model.

Samanta (2003) examines the roles of stock market on excess return and volatility in predicting future output growth of Indian economy for the period April 1993 to December 2002. He finds that past values pointing to the presence of significant volatility-feedback effects in the stock market. The volatility is also quite strongly related to excess return in recent years. However, roles of stock market return and volatility in predicting future output growth are not clear. Thus, there is a need to undertake further in-depth research for understanding the relationship between stock market return / volatility and future output growth in the context of Indian economy.

Song et al. (1998) examine the relationship between returns and volatility of the Shanghai and Shenzhen Stock Exchanges in China over a period from May 1992 to February 1996. They use GARCH models to analyses the relationship between returns and volatility. They find that there is a positive relationship between returns and volatility. Volatility transmission between the two markets (the volatility spill-over effect) is also found to exist. The results of one month ahead ex ante forecasts show that the conditional variances of the returns of the two stock markets exhibit a similar pattern.

French et al (1987) examine the relationship between stock returns and stock market volatility. They use daily values of the Standard and Poor's (S&P) composite portfolio for the period from January 1928 through December 1984. They use auto regressive integrated moving average (ARIMA), auto regressive conditional heteroscedasticity (ARCH) and generalized auto regressive conditional heteroscedasticity (GARCH) model. They find that the expected market risk premium is positively related to the predictable volatility of stock returns. They also find that unexpected stock market returns are negatively related to the unexpected change in the volatility of stock returns.

OBJECTIVES

The study is based on the following objectives.

- To examine whether there is volatility clustering in the sectoral indices of National Stock Exchange in India.
- To examine whether the volatility of the sectoral indices of National Stock Exchange in India.
- To examine whether the asymmetric effect or leverage effect exist in sectoral indices of National Stock Exchange in India.
- To examine the relationship between returns and volatility of sectoral indices of National Stock Exchange in India.

HYPOTHESES OF THE STUDY

On the basis of above mentioned objectives the following hypotheses can be framed in the following:

- There is no volatility clustering in the sectoral indices of National Stock Exchange in India.
- The volatility in the sectoral indices of National Stock Exchange in India is not persistent.
- There is no change in volatility whether the shock is either positive or negative.
- There is positive association between stock market volatility and Returns.

DATA SOURCE AND METHODOLOGY**Data and Data Sources**

The present study is based on secondary data. The present study is a sectoral and firm level study. In this present study NSE listed sectoral indices are considered. There are eleven sectoral indices in National Stock Exchange in India viz; CNX AUTO, CNX BANK, CNX ENERGY, CNX FINANCE, CNX FMCG, CNX IT, CNX MEDIA, CNX PHARMA, CNX PSU BANKS, CNX REALTY, CNX METAL. From these 11 sectoral indices, six sectoral indices are selected. For selection of the sectors a composite index has been constructed by considering three crucial variables percentage of traded value, percentage of market representation and percentage of sectoral representation with assigning equal weights. Finally, a ranking has been done on the basis of composite value of the sectoral indices. Based on percentage of traded value 60 per cent of the total sectoral indices are selected. The selected sectors are banking sector, IT sector, financial sector, automobile sector, FMCG sector and energy sector which are in top six ranks as per the composite index value. The sectoral rankings based on composite index value are mentioned in Table 1.1A (in Appendix). The period of the study is from 31st March, 2005 to April 1, 2014. These sectoral indices data are collected from the NSE website www.nseindia.com

Methodology of Data Analysis

The stock return is calculated using the following formula

$$r_t = \ln \left(\frac{c_t}{c_{t-1}} \right)$$

$$r_t = [\ln(c_t) - \ln(c_{t-1})] \dots\dots\dots (1)$$

Where; r_t = stock market return, c_t = closing price at time period t, c_{t-1} = closing price at time period t-1., \ln = natural logarithm

The data is first tested for normality by using JB (Jarque-Bera) test and to test unit root, Augmented Dickey Fuller and Phillips Perron tests are used.

To examine the nature of volatility and the relationship between returns and volatility GARCH-M (Generalized Auto Regressive Conditional Heteroscedasticity in Mean) model is used. Engle (1982) introduced the ARCH model in his study "Autoregressive Conditional Heteroscedasticity with estimates of the Variance of United Kingdom Inflation" as the first formal model, which seemed to capture the phenomena of changing variance in time series data. Bollerslev (1986) extends Engle's (1982) ARCH process by allowing the conditional variance to follow an ARMA process. This model is known as a generalized ARCH model, or GARCH model. Engle, Lilien and Robins (1987) extend the basic ARCH framework to allow the mean of a sequence to depend on its own conditional variance. This class of model, called the ARCH in mean (ARCH –M) model, is particularly suited to the study of asset markets. The basic insight is that risk-averse agents will require compensation for holding a risky asset. The GARCH –M model form as follows:

$$r_t = \omega + \theta h_t + \sum_{i=1}^p \phi_i r_{t-i} + \varepsilon_t + \sum_{i=1}^q \delta_i \varepsilon_{t-i} \quad \dots \dots (2)$$

Where r_t is the daily returns on equity and r_{t-i} represents lag returns and h_t represents conditional variance which are considered as regressors and ε_t represent random shocks.

The conditional variance equation is formed as:

$$\begin{aligned} \varepsilon_t &= v_t \sqrt{h_t} & v_t &\sim iid(0, 1) \\ h_t &= \alpha_0 + \sum_{i=1}^p \alpha_i \varepsilon_{t-i}^2 + \sum_{j=1}^q \beta_j h_{t-j} & \text{GARCH (p,q)} & \dots (3) \end{aligned}$$

Where, $\alpha_0 > 0$, $\alpha_i \geq 0$, $\beta_j \geq 0$ and $\alpha_i + \beta_j < 1$.

A significant ARCH coefficient (α_1) indicates that there is significant impact of previous period shocks on current period volatility. The ARCH coefficient (α_i) is also treated as recent “news” component which explains that recent news has a significant impact on price changes which implies the impact of yesterday’s news on today’s volatility.

The GARCH coefficient (β_i) measures the impact of last period variance on current period volatility. A significant GARCH coefficient (β_i) indicates the presence of volatility clustering. A positive β_i indicates that positive stock price changes are associated with further positive changes and vice versa. A relatively higher values of β_1 implies a larger memory for shocks. The GARCH coefficient (β_1) also treated as old “news” component, which implies that the news, which is old by more than one day, plays a significant role in volatility. The sum of the ARCH and GARCH coefficients i.e. ($\alpha_i + \beta_i$) indicates the extent to which a volatility shock is persistent over time. A persistent volatility shock raises the asset price volatility. A positive θ indicates that the return is positively related to volatility process. In other words, higher value of θ represents greater the impact of conditional variance on returns.

To examine the leverage effect EGARCH (Exponential Generalized Auto Regressive Conditional Heteroscedasticity) model can be used. Though ARCH and GARCH models respond to good and bad news or positive and negative shocks and quite useful in forecasting and measuring volatility but these models are unable to capture the “leverage effect” or asymmetric information. The rational and underlying logic of asymmetric or “leverage effect is that the distribution of stock return is highly asymmetric. An interesting future of asset prices is that “bad news” (negative shocks) seems to have a more pronounced effect on volatility than that of “good news” (positive shocks) of the same magnitude, that is, bad news is followed by larger increase in price volatility than good news of the same magnitude. It is known that the magnitude of the response of asset prices to shocks depends on whether the shock is negative or positive. To demonstrate this point Engle and Ng (1990) mapped the relationship between the conditional variance of asset returns to exogenous shocks, which resulted in what they termed a news impact curve. Nelson (1991) proposed an exponential GARCH model or EGARCH model that is the earliest extension of the GARCH model that incorporates asymmetric effects in returns from speculative prices based on a logarithmic expression of the conditional variability of variable under analysis. The conditional variance equation in the EGARCH (1, 1) model is

$$\ln(h_t) = \alpha_0 + \alpha_1 \frac{|\varepsilon_{t-1}|}{\sqrt{h_{t-1}}} + \lambda_1 \left(\frac{\varepsilon_{t-1}}{\sqrt{h_{t-1}}} \right) + \beta_1 \ln(h_{t-1}) \quad \dots \dots (4)$$

Where, h_t is an asymmetric function of past ε_t and α_0 , α_1 , λ_1 and β_1 re constant parameters.

Note that the left hand side is the log of the conditional variance. This implies that the leverage effect is exponential, rather than quadratic and that forecasts of the conditional variance are guaranteed to be nonnegative. In this model specification, β_1 is the GARCH term that measures the impact of last period’s forecast variance. A positive β_1 indicates volatility clustering implying that positive stock price changes are associated with further positive changes and vice versa. If $\frac{\varepsilon_{t-1}}{\sqrt{h_{t-1}}}$ is positive the effect of the shock on the log of the conditional variance is $(\alpha_1 + \lambda_1)$. If $\frac{\varepsilon_{t-1}}{\sqrt{h_{t-1}}}$ is negative, the effect of the shock on the log of conditional

variance is $(-\alpha_1 + \lambda_1)$. λ_1 measures the leverage or asymmetric effect. λ_1 is expected to be negative implying that bad news has a bigger impact on volatility than that of good news of the same magnitude.

RESULT AND DISCUSSION

This analysis is started with descriptive statistics of daily returns of selected sectoral indices, which are reported in Table 1.

Table 1: Descriptive Statistics of Return Series for Sectoral Indices

Sector	Mean	Std. Dev.	Max.	Min.	Skew.	Kurtosis	J.B.-Statistic	P- Value
Automobile sector	0.00074	0.015	0.140	-0.10	-0.13	8.54	2875	0.00
Banking sector	0.00055	0.003	0.023	-0.01	0.29	7.00	1197	0.00
Energy sector	0.00038	0.017	0.15	-0.15	-0.25	11.47	6721	0.00
Financial sector	0.00063	0.021	0.178	-0.12	0.08	8.00	2411	0.00
FMCG sector	0.00083	0.014	0.08	-0.09	-0.24	6.33	1057	0.00
IT sector	0.00052	0.018	0.12	-0.12	-0.13	7.43	1836	0.00

Source: computed based on secondary time series data collected from www.nseindia.com, 2014

From Table 1, it is observed that the daily mean return of FMCG sector is relatively higher than that of other sectors followed by Automobile sector and financial sector respectively. The daily mean return of FMCG sector is 0.00083 (0.083%). The lowest mean return is shown in energy sector 0.00038 (0.038%). Among the selected sectors the return is fluctuated between 0.17 to -0.15. The highest standard deviation or volatility is shown in financial sector (0.021) where as the lowest is shown in banking sector (0.003). From this, it can be said that higher return is associated with relatively lower risk. A positively skewed return series indicates that it has higher possibility to generate positive returns while negatively skewed implies higher probability to generate negative returns. Except banking and financial sectors all other sectors have negative skewness. The kurtosis of all the sectors are greater than three (leptokurtic) i.e; the frequency distribution assigns a higher probability of very high positive and negative returns. It is also observed that the JB Statistic for all the sectors are highly significant even at less than one percent level of significance, which indicates that the return series are not normally distributed implying the presence of heteroscedasticity. Hence, the GARCH model is justifiable.

Table 2: Unit Root Test

Sectoral Indices	ADF- Statistic	P Value	PP Statistic	P Value
Automobile Sector	-33.17	0.00	-38.93	0.00
Banking Sector	-41.43	0.00	-41.23	0.00
Energy Sector	-44.89	0.00	-44.82	0.00
Financial Sector	-41.60	0.00	-41.39	0.00
FMCG Sector	-46.24	0.00	-46.23	0.00
IT Sector	-35.24	0.00	-46.234	0.00

Source: Estimated based on secondary time series data collected from www.nseindia.com, 2014.

For the time series analysis, the first important task is to check whether the data series of the concerned variables are stationary or not. To check whether the data series are stationary the study here employs the unit root test. For the test of unit root, the present study applies the Augmented Dickey Fuller Test and Phillips Perron Test. From Table 2, it is observed that the Augmented Dickey-Fuller test statistic and Phillips-Perron test statistic for all the return series of banking sector is greater than their critical values even at less than one percent level of significance. Both ADF and PP test statistic confirms that there is no unit root. Therefore, the null hypothesis that the return series has unit root is rejected for all the return series and thus data for all return series are found to be stationary.

Table 3: ARCH-LM Test

Sectoral Indices	F- Statistic	P Value	LM Statistics	P Value
Automobile Sector	52.53	0.00	51.37	0.00
Banking Sector	33.42	0.00	126.39	0.00
Energy Sector	93.91	0.00	90.21	0.00
Financial Sector	46.11	0.00	45.22	0.00
FMCG Sector	388.34	0.00	331.17	0.00
IT Sector	137.72	0.00	129.84	0.00

Source: Estimated based on secondary time series data collected from www.nseindia.com, 2014.

To check ARCH effect the study here employs the ARCH LM test of Engle (1982). The ARCH LM test regress the squared residual of the mean model (ε_t^2) on lagged squared residual (ε_{t-1}^2) and a constant. The ARCH LM test provides two statistics, that is, F-statistic value and Observed R square value. From Table 3, it is observed that the F-statistic and the observed R square value is greater than their critical values for all the return series of Banking sector except HDFC bank, as indicating by their corresponding P-value which is less than one percent level. Therefore, the null hypothesis that is no ARCH effect is rejected for all the return series except HDFC bank indicating that there is ARCH effect for all the return series of banking sector except HDFC bank. Thus, it is confirmed that the study can apply ARCH or GARCH model.

RESULT OF GARCH-M MODEL

The most popular member of the ARCH class of model, i.e. GARCH-M (p,q) model is used to model volatility of sectoral indices. The Maximum Likelihood Estimation technique is used for the estimation of GARCH-M model. When using this technique the model selection is based on AIC and SIC. The model with lower value of AIC and SIC fits the data best.

From Table 4, it is observed that for all the return series the ARCH coefficient is statistically significant at less than one percent level of significance which indicates that previous period shocks influence the current period volatility. It is further observed that the GARCH coefficient β_1 is statistically significant for all the return series indicating that h_{t-1} has influenced the current period volatility (h_t). A relatively large value of GARCH coefficient indicates that shocks to conditional variance take a long time to die out. However, low value of ARCH coefficient suggests that market surprises induce relatively small revision in future volatility. A large sum of these coefficients implies that a large positive and negative return will lead future forecasts of the variance to be high for a particular period. So investor can take advantage for the same and by analyzing recent and historical news can forecast the future market movement and can take their investment strategies accordingly.

Table 4: Result of GARCH-M Model of Sectoral Indices

Coefficients of Mean Equation							Coefficients of Variance Equation				Diagnostic Test		
Return Series	θ	ω	ϕ_1	ϕ_2	δ_1	δ_2	α_0	α_1	β_1	$\alpha_1 + \beta_1$	Log like	F-statistic	AIC
Automobile sector	9.55 (0.54)	0.0007* (0.00)	0.66* (0.00)	-0.31* (0.00)	-0.50* (0.00)		0.00000* (0.00)	0.08* (0.00)	0.90* (0.00)	0.98	10822	29* (0.00)	-9.66
Banking sector	0.55 (0.73)	0.0008 (0.14)	-0.71* (0.00)	0.10* (0.00)	0.85* (0.00)		0.00000* (0.00)	0.07* (0.00)	0.92* (0.00)	0.99	5779	5.01* (0.00)	-5.15
Energy Sector	0.15** (0.03)	-0.0012 (0.15)					0.00000* (0.00)	0.10* (0.00)	0.89* (0.00)	0.99	6357	21* (0.00)	-6
Financial Sector	0.00 (0.77)	0.0026 (0.61)	0.13* (0.00)				0.00000* (0.00)	0.08* (0.00)	0.91* (0.00)	0.99	5904	6* (0.00)	-5
FMCG Sector	0.09 (0.24)	0.0001 (0.90)	-1.59* (0.00)	-0.98* (0.00)	1.60* (0.00)	0.99* (0.00)	0.00001* (0.00)	0.14* (0.00)	0.82* (0.00)	0.96	6674	10* (0.00)	-6
IT Sector	0.009* (0.00)	-1.0425 (0.51)	0.48*** (0.07)	-0.07* (0.00)	-0.45*** (0.09)		0.00002* (0.00)	0.16* (0.00)	0.79* (0.00)	0.95	6137	2* (0.00)	-5

Source: Estimated based on secondary time series data collected from www.nseindia.com, 2014.

Note: * denotes the level of significance at one or less than one per cent level of significant, ** denotes at five or less than five per cent and *** denotes the ten percent. Value in Parenthesis represents Probability value.

From the above table, it is also observed that in case of ARCH effect the most sensitive sector is IT sector (0.16) followed by FMCG (0.14) and Energy sector (0.10). This means that the impact of recent information on volatility is higher in IT sector in comparison with other selected sectors. However, the GARCH effect is higher in banking sector (0.92) followed by Financial (0.91) and Automobile sector (0.90). This indicates that the impact of old information on volatility is relatively higher in banking sector than that of other selected sectors. As far the stationarity of the variance process is concerend, it is observed that the summation of α_i and β_i for all sectors are less than one and hence the stationary condition is satisfied for all the sectors of. However, the sum is rather close to one, which indicates a long persistence of shock on volatility.

In the GARCH-M model in the mean equation the most important variable is h_t i.e. conditional variance. Here the coefficient of h_t i.e. θ is the risk parameter. A significant positive θ indicates that there is positive relationship between predicted return and volatility. If volatility increases then expected return will also increases and vice versa. From Table 4, it is observed that the coefficient θ is positive for all the sectors but it is

statistically significant for Energy and IT sector. From this, it can be said that when volatility rises expected return is also rises for Energy and IT sectors.

Apart from this AIC and SIC is used in the study indicating lower for the regression which is quite reasonable and fit for our models. A high value of F-statistic states that the statistical models that are used are fit and appropriate

Table 5: ARCH LM Test after Estimation

ARCH LM TEST After Estimation					Standardized Residuals		Squared Standardized Residuals	
Sectoral Indices	F-Statistics	P-Value	LM statistic	P-Value	Q-Statistic (36)	P-Value	Q-Statistic (36)	P-Value
Automobile Sector	0.47	0.49	0.47	0.49	39.96	0.16	14.95	1
Banking Sector	0.02	0.88	0.02	0.88	24.30	0.86	40.63	0.17
Energy Sector	0.04	0.83	0.04	0.83	56.72	0.02	26.59	0.87
Financial Sector	0.00	0.96	0.00	0.96	27.88	0.80	33.48	0.54
FMCG Sector	0.69	0.41	0.69	0.41	37.00	0.25	27.38	0.62
IT Sector	0.19	0.66	0.19	0.66	28.34	0.70	10.24	1.00

Source: Estimated based on secondary time series data collected from www.nseindia.com, 2014.

To check whether the estimated models capture the ARCH effect or there remains further ARCH effect, the study here employs the ARCH-LM test. To check the adequacy of the mean models the Ljung-Box Q-statistics of standardized residual is used and that of square standardized residual is used to check for the adequacy of variance models.

From Table 5, it is observed that the Ljung Box Q-statistic of standardized residuals is insignificant for all the Sectoral indices indicating that the estimated mean models of each sector fits the data well. However, the Ljung-Box Q statistic of square standardized residual is highly insignificant for all sectoral indices indicating that the estimated variance models fits the data very well. That is the GARCH-M models are suitable for the sectoral indices.

To check whether the estimated models capture the ARCH effect or there remains further ARCH effect, the study here employs the ARCH-LM test. From Table 5, it is also observed that the ARCH- LM test statistic i.e. F-statistic and $T \cdot R^2$ value for all the selected sectors is less than their critical values imply that the null hypothesis of no ARCH effect is accepted. This implies that there is no further ARCH effect. That means the estimated models are appropriate.

RESULT OF EGARCH MODEL

Though ARCH and GARCH models are responds to good and bad news and quite useful in forecasting and modeling volatility but these models have not capture leverage effect and information asymmetry. The rational and underlying logic of asymmetric or leverage effect is that the distribution of stock returns is highly asymmetric. Bad news (negative shocks) is followed by larger increase in price volatility than that of good news (positive shocks). Because when stock prices falls the value of the associated company's equity declines. As a result the debt equity ratio of the company rises, thereby signaling that the company has become riskier. Increased risk is considered an indicator of higher volatility (Black 1976). So it is important to use EGARCH model to test asymmetric shocks to volatility.

Table 6 presents the result of EGARCH model of sectoral indices. The EGARCH model takes the leverage effect into account. From Table 6, it is observed that the asymmetric term (λ_i) is negative and statistically significant for all the sectors viz; automobile, banking, energy, financial, FMCG and IT sectors. This indicates that the volatility is high when there is bad news or negative shocks in the market than that of good news or positive shocks for all the sectoral indices. The asymmetric effect or leverage effect of automobile, financial, FMCG and IT sectors is same (-0.07). However, the lowest asymmetric effect is shown in the energy sector. In the variance equation, the ARCH and GARCH coefficients are statistically significant for all the sectoral indices

Table 6: Result of EGARCH Model of Sectoral Indices

Return Series	α_0	α_1	λ_1	β_1	Log like.	F-statistic	AIC	SIC	Obs.R ²
Automobile sector	-0.361* (0.00)	0.16* (0.01)	-0.07* (0.00)	0.97* (0.00)	6406	5* (0.00)	-9	-9	0.16 (0.68)
Banking sector	-0.212* (0.00)	0.14* (0.00)	-0.06* (0.00)	0.99* (0.00)	5796	6* (0.00)	-5	-5	0.46 (0.50)
Energy Sector	-0.34* (0.00)	0.20* (0.00)	-0.05* (0.00)	0.98* (0.00)	6361	21* (0.00)	-6	-6	0.02 (0.89)
Financial Sector	-0.247* (0.00)	0.15* (0.00)	-0.07* (0.00)	0.98* (0.00)	5915	6* (0.00)	-5	-5	0.06 (0.81)
FMCG Sector	-0.68* (0.00)	0.26* (0.00)	-0.07* (0.00)	0.95* (0.00)	6675	20* (0.00)	-6	-6	2.03 (0.15)
IT Sector	-0.54* (0.00)	0.23* (0.00)	-0.07* (0.00)	0.95* (0.00)	6145	10* (0.00)	-5	-5	0.36 (0.55)

Source: Estimated based on secondary time series data collected from www.nseindia.com, 2014.

Note: * denotes the level of significance at one or less than one per cent level of significant, ** denotes at five or less than five per cent and *** denotes the ten percent.

To check whether the estimated models capture the ARCH effect or there remains further ARCH effect, the study here employs the ARCH-LM test. From table 4.2.3, it is observed that the ARCH- LM test statistic i.e. F-statistic and T*R2 value for all the sectors is less than their critical values imply that the null hypothesis of no ARCH effect is accepted. This implies that there is no further ARCH effect. That means the selected models are appropriate.

CONCLUSION

From the above analysis it can be concluded that the volatility in all the sectoral indices exhibits the characteristics like volatility clustering, asymmetry effect and persistence of volatility in their daily returns. Thus the null hypothesis that no volatility clustering and non-persistence volatility is rejected. The study also observed that the asymmetric term (λ_1) is negative and statistically significant for all the sectors viz; automobile, banking, energy, financial, FMCG and IT sectors. This indicates that the volatility is high when there is bad news or negative shocks in the market than that of good news or positive shocks for all the sectoral indices. That means the null hypotheses that there is no change in volatility whether the shock is either positive or negative is rejected. The asymmetric effect or leverage effect of automobile, financial, FMCG and IT sectors is same (-0.07). However, the lowest asymmetric effect is shown in the energy sector. This implies that the investors who invest in these firms should take care of negative shocks. The relationship between returns and volatility is statistically significant for Energy and IT sector. This implies that for Energy and IT Sector return increases with the increase in volatility. Thus it can be said that the null hypothesis that there is positive association between volatility and returns is accepted for Energy and IT sector.

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SUSTAINABLE ECO-FRIENDLY PRACTICES IN WESTIN SOHNA RESORT AND SPA

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ABSTRACT

This study helps to comprehend, the relation between job satisfaction and employee productivity. The key objective of this exploration is to determine the existing eco-friendly practices in The Westin Sohna Resort and Spa, to evaluate the adherence of the eco-friendly practices; it is delineated from facts and surveys that sustainability and use of eco friendly products has vast impact on the environment. The data is collected from Westin Sohna resort and spa in Gurugram with the help of 5 point Likert scale and different research techniques like mean and standard deviation are being used. The result suggests in order to be successfully embedded into a hotel's operations, environmental sustainability needs to be wholly endorsed by hotel management and cascaded appropriately throughout the business.

Keywords: Sustainability; Eco friendly; Westin; Resort and spa.

INTRODUCTION

After galloping industrialisation and civilisation, human race has realised that his practise are damaging the planet earth in an irreversible manner (Mensah, 2007). The tourism and hospitality industry is known for extensive use of water and energy, and for generating a lot of waste. If not managed they have a negative impact on the environment. Tourism is one of the leading sectors of the global economy but the tourism industry's growth through the years has created an increasing amount of stress on the environment. This saw the surfacing of the green tourism concept and it being introduced in urban hotel facilities and lodges.

Sustainability and environmental concerns have become the gravest issues facing many industries as well as the hotel industry. While it was considered that the hospitality industry does not cause much environmental stress, study has now shown that this industry is just as bad as the manufacturing industry. The hospitality industry is a continuous business that operates on daily basis hence consumes considerable amounts of water and also energy. Also, stated by Foster (2000), the hotel industry is one of the major parts in tourism development, so it consumes considerable amount of resources and energy.

DEFINITIONS

SUSTAINABILITY

Sustainability means meeting the needs of the present generations without compromising the aptitude of the future generations stated by N. Moris 2004. Another definition says that it is a dynamic process which enables all people to realize their potential and to improve their quality of life which simultaneously protect the Earth's life support systems quoted by P. Ricord 2009.

Economic sustainability means doing business in a sustainable way so that the businesses and activities will stay viable for a long term. Sustainable business activities for instance aim to contribute the economic well-being of the local communities. (UNEP & UNWTO 2005, Bien 2006,).

Social sustainability emphasizes respect for human rights, equality and focuses on poverty alleviation (UNEP & UNWTO 2005,). Local communities and different cultures should be respected, revitalized and strengthened, not exploited or damaged (Bien 2006,).Activities done based on these three main aspects are also called the Triple Bottom Line. Triple Bottom Line involves operating a business, an organization or a government in a way that does not destroy the natural, cultural, economic or any resources on which it depends. A business that follows these principles can operate in a profitable way and at the same time bring benefits for the local communities and natural areas. (Bien 2006,p.4). However, sustainable tourism development is an on-going process and not a target that can be reached (UNEP & UNWTO 2005, p. 12).

Environmental sustainability is the management and conservation of resources with efforts to minimize pollution and conserve natural heritage. Essential is to minimize any damage to the environment and its versatility by environmental conservation. (Hemmi 2005;UNEP& UNWTO 2005, p. 9). This requires that each country and business puts effort on stopping the decrease in natural resources and in return attempts to increase the amount of renewable natural resources (Hemmi 2005, p. 77).

SUSTAINABLE HOTELS

According to Mahonen (2010), an environmentally conscious hotel operates all sections of its business responsibly, is committed to continuous improvement of its environmental work and to decreasing negative environmental impacts. Moreover, a sustainable hotel is seen as a hotel that acknowledges the most significant

environmental aspects of its operations, controls and measures them and actively attempts to reduce their causes (Jantunen 2010). To be properly 'green', a company needs to incorporate sustainable thinking in its decision-making at all levels throughout the organisation (International Tourism Partnership, p. 2).

ECO HOTELS AND LODGES

Eco hotels (also named as green hotels) are an example of sustainable hotels. They are environmentally friendly lodging properties that follow the principles of sustainability and institute ecologically sound practices into their operations in order to help to protect the Earth. They aim to be more environmentally friendly through different methods of minimizing the negative impacts on the environment. These methods include for instance efficient use of water, energy and materials, recycling and reduction of solid waste. At the same time as operating in an environmentally friendly way, green hotels aim to provide quality services. (Alexander 2002; Green Hotel Association 2008, according to Han, Hsu & Sheu 2010, p. 325). The aim of these hotels can also be a certain kind of self-sufficiency with regards to resources, for instance with the use of energy and water (Jantunen2010).

According to Mehta et al. (according to Wood 2002, p. 28), an Eco lodge is a tourism accommodation facility that meets certain criteria. It is said that it contributes to the conservation of the surrounding natural and cultural environment. While constructing the establishment, an Eco lodge minimizes its impacts on the environment and is designed and built in a way that it fits into the specific physical and cultural contexts by its form, colour and landscaping, without forgetting the local architecture.

WHY THE HOTEL INDUSTRY?

In requisites of addressing environmental concerns, the hotel industry is a giant player in the creation of unsympathetic environmental impacts. The EPA states that the hospitality industry is the nation's fifth-largest contributor to CO₂ emissions. From the first stages of construction, and throughout daily operations, hotels are significantly affecting climate change and the industry continues to fuel the growth of landfills. In the average hotel room, one kilogram of waste per guest per night is produced. Aside from physical waste, hotels also generate extensive energy and water use.

OBJECTIVES

1. To determine the existing eco-friendly practices in The Westin Sohna Resort and Spa.
2. To evaluate the adherence of the eco-friendly practices by The Westin Sohna Resort and Spa.
3. To suggest and recommend the strategies to the Westin Sohna Resort and Spa in order to enhance the environment and sustainability.

SCOPE

1. To identify how well was the Westin Sohna resort and spa doing in terms of sustainability.
2. The study is helpful in identifying the environmental impacts of the Westin Sohna resort and spa?
3. This study helps to improve the environmental sustainability in the hotel and to decrease their impact on the environment?

LITERATURE REVIEW

GREEN PRACTICES

The term "green" is used to signify "environmentally friendly" (Shrum, 2005). Gupta and Sharma (2002) define green practices as environmentally friendly management principles in which executive levels convert natural resources into better outputs or products. In the hotel industry, practices associated with green concerns are diverse; they may encompass a variety of activities from pollution prevention to stakeholders' awareness campaigns regarding these activities. However, for the purpose of the study this research views green practices as activities of a hotel to implement environmentally friendly practices towards the goal of environmental sustainability.

The term "green facility or hotel" can be used interchangeably or synonymously with "an environment friendly hotel," "an eco-friendly hotel," or "a sustainable hotel." During the last few decades it has become a common phenomenon to focus on the environmental impact of the hotel industry with each hotel striving to achieve environmental sensitivity even though there is no universally agreed upon definition of a green hotel (Harris & Crane, 2002). Academics, governmental agencies and non-profit environmental organizations have introduced their own definitions of a green facility. Some scholars defined green hotel as an environmentally sensitive hotel that operates its business in a manner that minimizes degradation of the environment (Iwanowski, 2003). The specific areas of focus are energy efficiency, recycling, water conservation, and clean air practices (Bohdanowicz, 2005).

TECHNIQUES UTILIZED IN THE INDUSTRY TO MINIMIZE ENVIRONMENTAL IMPACTS**Energy Conservation**

A number of hotels have been able to limit their energy use by replacing inefficient systems. Installing more efficient light bulbs is a common tactic because they are a low-cost solution and are easy to install. Philadelphia's Sheraton Rittenhouse Square replaced incandescent light fixtures with compact fluorescents, which saved the hotel 78% in energy costs, with a payback period of just two years.¹² In addition, insulation can have extremely beneficial results conserving heat in the winter and keeping buildings cool in the summer. Reflective window films can be used similarly to deflect heat in the summer months. Both of these strategies result in decreased use of heating and cooling systems that can use require a particularly high amount of energy. Reducing water temperature by five to ten degrees in guest rooms and in hotel pools significantly reduces energy costs without hampering the guest experience. In Aventura, Florida, the Turnberry Isle Resort and Club installed energy efficient equipment and is now reaping the benefits. The resort saves about \$65,000 annually and received \$20,000 in utility company rebates. Similar stories are widespread in the industry. When the Park Sheraton Hotel and Towers in Madras, India replaced in room refrigerators with newer more energy efficient models and upgraded its air conditioning plant they saw savings of \$152,000 in only a few years.¹³ Developing new green buildings are often easier than retrofitting existing buildings. A number of built hotels struggle to gain recognition from certification agencies because the initiatives these agencies require are difficult to implement in existing buildings further, energy conservation strategies are easier to facilitate in existing properties than the implementation of alternative energy capturing devices. In hotels designed to be sustainable, solar panels are more likely to be present. Nevertheless, they are not extremely popular primarily due to the fact that hotels will not see immediate benefits in the implementation of such technologies. Rather, the pay-offs of solar panels for examples are more long-term in comparison to the immediate effects of low-cost technology such as LED lights. Nevertheless, solar technology, similar to other emerging technologies, is likely to drop in price and increase in efficiency quite rapidly. As this occurs, solar panels in hotels will most likely be more prevalent, since the payback period will be much shorter. On the other hand, hundreds of utility companies in every region of the United States offer customers the option to receive electricity from renewable sources.¹⁴ Hotels can purchase utilities from companies that offer wind or hydro energy as an alternative way to run operations. Unfortunately, these methods for using alternative energy are less prevalent in the market and unlikely to be seen in the industry. In spite of this, one hotel chain in the United States, Societal, has agreed to use wind power as its energy source in all U.S. hotel operations. Switching to wind power has significant environmental benefits, it's estimated that using wind power will offset "two million pounds of carbon dioxide a year".

Conserving Water

Another way the hotel industry is beginning to identify environmental change is through actions geared at conserving and reusing water. Towel re-use programs are the most prominent example of hotel efforts to minimize water consumption. In my survey I noticed cards in the room that allowed one to opt out of daily towel and/or linen changing during his or her last hotel stay. The majority of hotel chains in the United States that embraced the towel and linen reuse programs noted not only lower costs because of less water use, but also lower costs due to less time devoted to washing these items by employees. While this is one of the most basic approaches to conserving water in the industry, its popularity represents the possibility for a wide-range of conservation techniques to become main stream. The amount of water used in the landscaping of hotel grounds is another concern. The amount of water used in these operations is considerable, and can often be minimized through the use of grey water capturing devices and irrigation systems. Recycled water can be used in a variety of hotel operations, and the use of grey water in landscaping is relatively easy to facilitate. Some hotels also choose to plant native species on property grounds. Drought tolerant plants can flourish in areas with little rainfall. These methods prove to be highly effective strategies for minimizing water use in hotel landscaping. The mass use of towels and linens implies a large amount of water used for washing these items. Recycled water can be filtered and used in laundry operations as well. In India, The Park Sheraton Hotel & Towers started recycling wastewater and "saves 95 litres/day and \$35,000 annually".¹⁶ Combined, large watering systems and commercial washers consume an extremely large amount of water. Thus, these operations contribute heavily to the carbon footprint of a hotel. Small changes in this area can lead to large environmental benefits. One of the most common methods for reducing water use in hotels is installing low-flow appliances. A survey of hotels with more than 75 rooms conducted in Seattle Washington, found, "Ninety per cent of the hotels had installed faucet aerators or restrictors and low-flow showerheads."¹⁷ This tactic is becoming customary in the hotel industry especially since many chains have embraced this strategy. Installing water efficient fixtures can lower hotels' water bills by 25-30%.¹⁸ The Marriott has taken a variety of steps to become more environmentally friendly in the past few years. Among these, the installation of low-flow showers

and sinks has been particularly economical for the chain. At the Marriott Marquis in New York, 1,800 toilets were replaced with low consumption models and it now, “saves 20 million gallons of water and \$70,000 in sewage and water costs each year”.¹⁹ Conserving water is a common method utilized in the industry to lower operational costs and minimize the negative effects on the environment. At this point, most hotels have not considered the idea of collecting rainwater for use in facilities. However, water cisterns could be an effective way to capture water that could then be used in other hotel operations. In areas with high rainfall, cisterns would be most effective. In spite of this, water-cisterns also function in warmer regions with less annual precipitation.

Minimizing Waste

Physical waste is plentiful in an industry based on excessiveness. However, operations do not have to rely on purchasing new goods and discarding those items that show any sign of use in order to meet guests' expectations. During traditional hotel construction, many developers source wood from unsustainable sources. First, trying to use salvaged wood found on-site, and also through a careful sourcing selection process, developers can mitigate these practices. A number of hotel shave decided to use Forest Stewardship Council grade lumber when constructing sustainable hotels. Daily operations can be slightly altered in order to minimize solid waste created onsite. Limiting this type of waste will also be economically appealing to companies who pay for waste disposal services. Refillable amenity dispensers should be used in place of disposable versions. Recycling programs should be implemented both in front and back house operations. Packaging is also a significant contributor to solid waste. Using re-useable products rather than disposable versions, requiring vendors to limit packaging and purchasing in bulk can all help reduce hotel waste. Food waste created in hotel dining operations can similarly be reused instead of ending up in landfills. In California, 112,000 tons of food waste comes from the hotel and lodging industry each year. This food waste can be composted and/or donated to charities. Establishing a compost system on site can have multiple benefits. Composting repurposes food waste generated on site and creates fertile soil for landscaping purposes.

Clean Air

The topic of air pollution is most often discussed in the hotel industry in relation to refrigeration systems and air conditioning units. Emissions such as carbon monoxide and hydrocarbons affect the health of humans, plants, and animals alike. Poor-quality indoor air and contaminated outdoor air (Kuo, Chiang, & Chiang, 2008) are both linked to tourists' health and level of hotel stay comfort. The quality of air inside buildings results from a combination of external atmospheric pollutants and internal activities (Pichon, 1996). Thus the reduction of air pollution in hotels can begin with controlling air quality. Pichon (1996) provides the definition of indoor air quality as “the quality of indoor air in terms of the proportions of normal air gases and the concentration of pollutions” Using environmentally friendly refrigerators and air conditioners and covering outdoor areas with plants are suggested means for improving air quality while protecting the environment (Hueng, Fei & Hu, 2006).

Another issue related to air pollution in a hotel is smoking. Hotel smoking bans (smoke-free policies) have received attention in many studies (Field, 1999; Scollo, Lal, Hyland & Glantz, 2003). According to Scollo et al. (2003), there are no negative economic impacts associated with smoke-free policies. The study further suggested that creating a smoke-free policy can protect workers and patrons from carcinogens. The study by Field (1999) stated that “the availability of non-smoking room is important to over 80 per cent of non-smoking respondents, whereas only 54 per cent of smokers considered the availability of smoking rooms to be more than a minor factor in their choice of hotels.” Such evidence of an increase in consumers' requests for non-smoking rooms shows that non-smoking policy is important in the hotel industry. Kuo et al. (2008) state that guests want to stay in comfortable environments, whether they are for business meetings, leisure, sleeping or dining and that employee need to have good air quality in order to work efficiently and be productive.

BENEFITS OF THE IMPLEMENTATION OF SUSTAINABLE BUSINESS PRACTICES

The moral obligation or pure desire to contribute to society might be the reason for adopting sustainable business practices for some businesses (Tzschentke et al., 2004); but for many the business case for sustainability and the benefits related to sustainable business practices tie the commercial interest of business to the goals of society (Miller and Twining-Ward, 2005).

Cost reduction

The most cited benefit of sustainable business practices is the reduction of costs (Landrum and Edwards, 2009; Bohdanowicz et al., 2004; Hobson and Essex, 2001; Hitchcock and Willard, 2009; Swarbrooke, 1999). Tzschentke et al. (2004) declare it as the prime motive behind introducing environmental initiatives. In particular the rising costs for water, energy and waste disposal led many businesses to look for alternatives. Operational measures are for example recycling systems, using recycled materials, installing water-saving

devices, using low energy light bulbs, energy-conservation measures such as insulation or solar-powered water heating systems. These initiatives focus exclusively on the environmental dimension of sustainable business practices (Swarbrooke, 1999). There is a lack of literature and research about cost saving possibilities related to the socio-cultural and economic dimension of sustainability.

Public relations

Sustainable business practices can also bring benefits to a company in terms of positive public relations and improved hotel image with shareholders and local community. These benefits can differentiate the business from its competitors and can be the source of competitive advantages and new market opportunities (Hitchcock and Willard, 2009; Landrum and Edwards, 2009; Swarbrooke, 1999). Kirk's (1998) findings revealed that public relation benefits had the most positive attitude ratings, followed by 'Improved relation with the local community' and 'Marketing'. The analysis shows interesting associations with the hotel characteristics. Large hotels, hotels with a classification between 3 and 5 stars and chain hotels were more likely to see positive public relation benefits (Kirk, 1998) than small, 2 star classified and independent hotels.

Employee satisfaction

Through sustainable human resource management employees are more likely to feel adequately rewarded, valued, and proud of their work and have a more positive self-image (Swarbrooke, 1999; Baum, 2006). Service quality but also health and productivity are likely to improve through more sustainable developments and business practices (Swarbrooke, 1999; Butler, 2008). The move towards sustainability requires a positive change in corporate culture. In this context, culture can be described as the hidden driving force of people's behaviour both inside and outside organisations. Cultural beliefs, thinking and behaviour need to be consistent with the concept and values of sustainable business practices to make efforts successful (Doppelt, 2003; Schein, 2009). Sustainable human resource management and a sustainable corporate culture can help the company to attract and retain the best employees which at present is a serious problem in the tourism and hospitality industry (Hitchcock and Willard, 2009; Swarbrooke, 1999).

Consumer demand

Consumer demand is the most controversial benefit of sustainable business practices. Environmental and social concerns increasingly influence customer behaviour but so far it is debatable if this 'green' consumerism has reached the tourism industry (Dodds and Joppe, 2005; Hjalager, 2000; Miller and Twining-Ward, 2005). Once more the difficulties in defining sustainable tourism and sustainable business practices force consumers to base their choice on individual judgement and limited knowledge. Sustainable tourism products are often not readily available and clearly specified. Consequently greater information and disclosure about the impacts of the products is necessary (Hjalager, 2000; Miller and Twining-Ward, 2005). Many researchers argue that the increased awareness for general societal issues will ultimately lead to a rise in demand for sustainable travel and tourism products (Dodds and Joppe, 2005; Bohdanowicz and Martinac, 2003; Sloan et al., 2009). However, although people might be aware of the negative impacts of tourism they are not willing to pay more for environmentally friendly products (Watkins, 1994; Dodds and Joppe, 2003). Business owners are unconvinced that consumers will be attracted by a business's environmental performance and more research is required to determine the actual consumer demand for sustainable business practices in the accommodation industry (Dewhurst and Thomas, 2003; Sloan et al., 2009).

RESEARCH METHODOLOGY

Research Design

A descriptive research design with survey method is applied in the study. The researcher has used both the primary and the secondary data for the purpose of this study. Secondary data were collected from available books, publications, research studies, articles and websites.

Research technique

Self administered questionnaire was designed to collect primary data. **The Westin resort and spa** was selected to collect primary data. After collecting all the necessary data, it has been analyzed and tabulated descriptively. This tabulated information has been used to measure the perceived satisfaction and dissatisfaction level of the employees. To measure the satisfaction level a 5 point scale has been used which is denoted by 1=SD, 2=D, 3=N, 4=A, and 5=SA.

The mean (also known as average) is obtained by dividing the sum of the observed values by the number of observations, n . Although data points fall above, below, or on the mean, it can be considered a good estimate for predicting subsequent data points.

$$\bar{X} = \frac{\sum_{i=1}^n X_i}{n}$$

Mean

The standard deviation gives an idea of how close the entire set of data is to the average value. Data sets with a small standard deviation have tightly grouped, precise data. Data sets with large standard deviations have data spread out over a wide range of values. The formula for standard deviation is

$$\sigma = \sqrt{\frac{1}{n-1} \sum_{i=1}^n (X_i - \bar{X})^2}$$

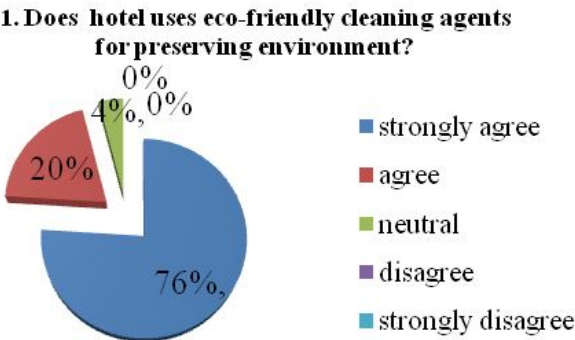
SAMPLING

The data regarding the present study was collected from the target population of 75 through self-administered questionnaire by referring the previous reports and literature. Data was collected by questionnaire listing the 18 variables from 57 male and 18 female employees who were working in the selected property.

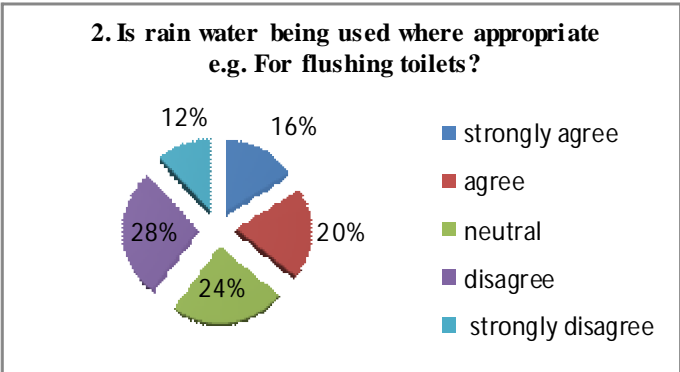
DATA INTERPRETATION

S.No	Variables	Mean	Standard Deviation
1	Does a hotel use eco-friendly cleaning agents for preserving environment?	4.72*	0.54
2	Do you believe that eco-friendly chemicals require less time and energy in their application?	4.28	0.73
3	Does the hotel inform its staff with regard to environmental policy and the role of staff in the implementation of policy?	4.48	0.71
4	Does the hotel have an energy efficient heating system?	4.24	0.77
5	Does the hotel regularly collect data on energy consumption and take action to reduce it?	4.52	0.82
6	Is the total water consumption being registered on monthly basis?	4.32	0.9
7	Is rain water being used where appropriate e.g. For flushing toilets?	3*	1.29
8	Are there signs in washrooms and restrooms to inform guests that sheets and towels will only be changed upon request?	3.96	1.27
9	Is waste being segregated into categories outlined by local and national authorities?	4.4	0.70
10	Does the hotel use paper towels and toilet paper that is made of non-chlorine bleached paper or paper with an Eco label? Does the hotel buy eco-friendly paper?	4.28	1.02
11	Does the hotel in general prefer recyclable products in recyclable packaging?	4.48	0.77
12	Does the hotel avoid fossil fuel as much as possible?	4	1.15
13	Does the hotel involve public in its effort to operate in the green way?	4.4	1.0
14	Do hotel use eco fibre cotton for hotel linen?	3*	1.0
15	Does hotel have implemented water saving strategies?	4.44	0.71
16	Do hotel participate in a programme that allows guests to choose not to have their towels and sheets washed daily?	4.68*	0.62
17	Does hotel have efficient waste disposal plant?	4.12	1.12
18	Is hotel a member of Green Hotels Associations?	3*	1.32

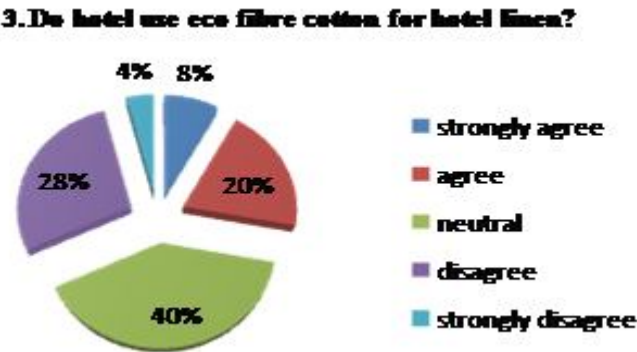
Table 1: To evaluate the adherence of eco-friendly practices by the hotel



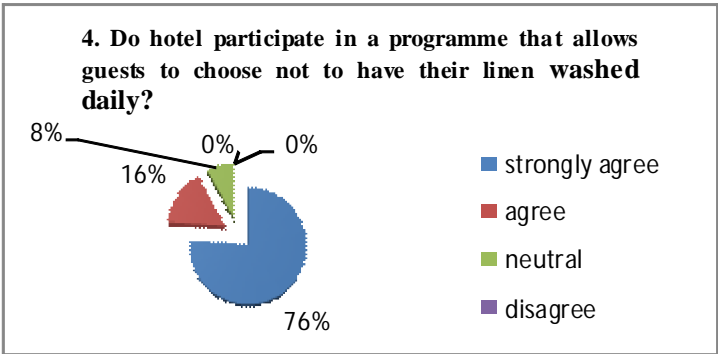
➤ When asked about if eco-friendly cleaning agents are used by the hotel 76% employees agreed however 4% of employees where of no opinion. Therefore it was found that hotel uses eco-friendly cleaning agents in order to preserve environment.



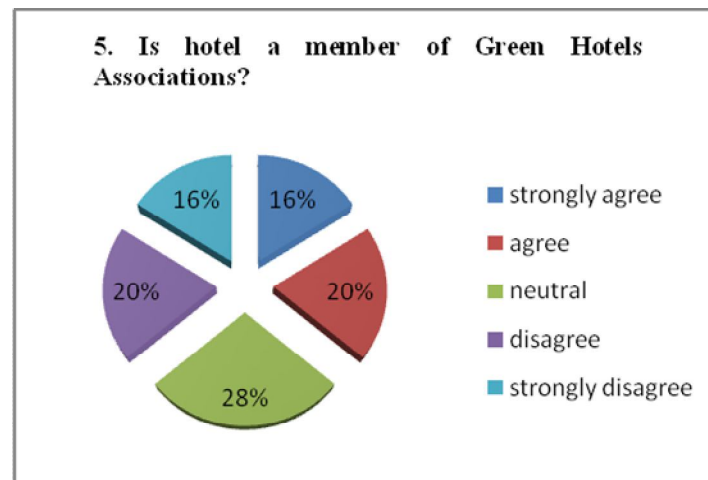
➤ 20% employees agreed that rain water is used by the hotel where ever required while 28% where of the opinion that hotel is not using rain water for flushing toilets however 24% of employees neither agreed nor disagreed about the usage of rain water.



➤ About use of eco fibre cotton for hotel linen 20% of employees agreed however 40% neither agreed nor disagreed about its use while 28% disagreed about usage of eco fibre cotton for hotel linen.



- When asked if hotel participate in a programme that allows guests to choose not to have their linen washed daily 76% agreed that hotel uses the programme in which guests are asked to place the card on the bed if they want to change the linen and if not then keep the card at its own place. However, 8% had no opinion on the matter.



- 20% of employees agreed that hotel is a member of green hotels associations however 28% employees do not possess any information about the membership while 16% strongly disagreed about the membership of the hotel.

RESULTS AND DISCUSSIONS

The hotels employees were contacted regarding the green initiatives or eco-friendly practices adopted by The Westin Sohna Resort and Spa and it was found that the following are the sustainable eco-friendly practices implemented by the hotels

Sewage Treatment Plant

- The Westin Sohna Resort and Spa, Gurugram, recycle their wastewater. With the latest technology, wastewater is treated and then reused in areas like air conditioning & gardening. They have a water sewage plant with the capacity of 400 Kiloliter per day.
- Saving of Fresh water for Irrigation system: 30 Kiloliters/day i.e. 10950 Kiloliters/year.
- Saving of Fresh water for W/C flushing: 15-18 Kiloliters/day i.e. 5475 -6570 Kiloliters/year.
- Saving of Fresh water for Cooling towers: 40-50 Kiloliters/day i.e. 14600 – 18250 Kiloliters/year.
- Savings Approx.: Rs. 12400 / month = Rs. 148800.00 / year.

VFD installation for HVAC system

- TWS has installed VFDs for their Secondary Circuit of A/C Chilled water system for three different zones: Guest floors, Offices & Banquets.
- Saving of electricity: 420 KWh /day i.e. 153300 KWh/day.
- Saving Approx.: Rs.1073100/-
- Waste Wet Garbage Management: Wet waste was generated treated & recycled as organic manure. Kitchen waste oil is also sent to further recycling.

Steam Boiler

- Steam boilers have been converted from HSD to Piped Natural gas to reduce carbon mono oxide emission, to reduce wear & tear of equipment and to save on fuel.
- Saving compare to HSD: Rs. 11500/day = Rs. 345000/month = Rs.4140000/year.

Solar Panels

TWS engineering use Solar Panels to preheat Soft water for make up for Guest Floor Hot water use with the help of Solar panels by using PHE. Saving Approx. Rs.183960/-.

Green Cuisine

In the kitchens and dining outlets of The Westin Sohna Resort and Spa, Gurugram, environmental awareness is high and the specialists have developed successful techniques of harmonizing luxury cuisine with recipes for green cuisine and developed the Green Theme Breaks.

Mix Bar

One of the most distinctive feature of The Mix – Lounge and Bar is that all the syrups used in any of the mock tails and cocktails are freshly produced and do not contain any preservative.

CONCLUSION

The study was conducted to evaluate the adherence of the eco-friendly practices by the hotel as Environmental sustainability practices are a growing area of concern for the hotel industry. They have been widely accepted in the hotel industry and are becoming a critical strategy for many hotels. Use of eco-friendly cleaning agents, use of rain water, use of eco fibre cotton, and last but not the least participation of a hotel in a programme which allows guest not to wash their linen daily are few green practices that were taken under research and the respondents agreed that the practices like use of eco-friendly cleaning agents and participation of hotel in a programme of linen wash are indeed important to the hotel as it helps in preserving environment and reducing the level of water consumption. However 24 & 40 percent of respondents believe that use of rain water and use of eco fibre cotton are not important for environmental sustainability therefore hotel does not adhere to these practices.

SUMMARY, RECOMMENDATIONS AND LIMITATION**SUMMARY**

The aim of this study was to assess the existing eco-friendly practices in The Westin Sohna Resort and Spa, to evaluate the adherence of the eco-friendly practices by the hotel and to suggest and recommend the strategies to the hotel in order to enhance the environment and sustainability. It was found that the hotel has its sewage treatment plant where they recycle their waste water. It has also VFD installation for HVAC system and has a Steam Boiler which has been converted into Piped Natural gas to reduce carbon monoxide emission. About the adherence of eco-friendly practices by the hotel questionnaire was distributed among employees and result shows that hotel is using eco-friendly cleaning agents that helps in preserving environment and is also participating in a programme which allows its guests not to wash their linen daily thus helps in conservation of water. However, it was found that hotel does not make use of rain water which could have further help it in preserving or conserving the use of fresh water. Thus, it is recommended to the hotel to make use of rain water which could not only be used for toilet flushes but also for irrigation purpose thus preventing wastage of fresh water.

RECOMMENDATIONS

To be successfully embedded into a hotel's operations, environmental sustainability needs to be wholly endorsed by hotel management and cascaded appropriately throughout the business. The following initiatives should be implemented by hotel management:

- Ensure an Environmental Policy is followed by the hotel.
- Demonstrate a Sustainability Improvement Programme
- Employ a Hotel Sustainability Representative
- Communicate with Guests on Sustainability Issues.
- Minimise use of Paper for Guest communication.
- Train and Communicate Staff on Sustainability Issues.
- Sustainable Office Organization
- Sustainable products must be Purchased and Procured.

LIMITATIONS

1. The main obstacle while preparing this report was time as the tenure of the internship programme was limited it was not possible to highlight everything deeply.
2. Work pressure in the office was another limitation restricting this report from being more detailed or analytical.
3. The chance of biased response can't be eliminated though all necessary steps were taken to avoid the same.

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ACCESS TO REPRODUCTIVE HEALTH SERVICES UNDER NRHM FRAMEWORK: AN ASSESSMENT IN NALBARI DISTRICT OF ASSAM

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ABSTRACT

The condition of women's health is one of the indicators to measure the overall development of a nation which comprises Reproductive and Maternal Health. Reproductive health implies that people are able to have a responsible, satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so. It emphasises on access to appropriate health care services that will enable women to go safely through pregnancy and childbirth and provide couples with the best chance of having a healthy infant. Thus, reproductive and maternal health is interconnected. With the implementation of National Rural Health Mission (NRHM), and announcement of Reproductive, Maternal, Neonatal, Child and Adolescent Health (RMNCH+A) programme within the framework of NRHM, Govt. of India has also given special recognition and care for women for upgrading the condition of reproductive health. Here, in this study, an attempt was made to assess the reproductive health services under NRHM with the implementation of the provisions of RMNCH+A in Nalbari district of Assam, the highest ranking district in the state, providing health services.

For the study, field survey has been conducted taking women as the respondents from 7 development blocks of Nalbari district. It was observed that despite the mentioned position of the district, reproductive health services are not accessible to women as provided under the provisions. Most of the women have to bear the cost of their own even though there is a provision of free reproductive health services under the scheme of RMNCH+A. It becomes problematic for women from lower socio-economic background. Again, lack of information regarding the services and certain religious and cultural barriers become hindrances in availing the facilities.

Key Words: NRHM, Reproductive Health, RMNCH+A, Women Health.

INTRODUCTION

“Health is a state of complete physical, mental and social well-being and not merely the absence of disease and infirmity.”

Men and Women are two indispensable halves of humanity. Woman's development forms the grassroots of social development. But it seems that health is one of the neglected fields in our social life, where the women section of the society becomes more vulnerable having an additional responsibility of reproduction and motherhood. This negligence towards health directly has an impact on the development of women, development of society, and at the same time, it lessens the position of women also. Therefore, it becomes the utmost responsibility of the state and other organizations to take special care of women. In the Alma-Ata Conference, 1978, organized under the auspices of WHO, almost 166 countries have pledged for “Health for All” by 2000 A.D. aiming at proper distribution of the resources for health and access of essential health care to all. The International Conference on Population and Development (ICPD) held in Cairo in 1994 has given emphasis on women's reproductive health and it has influenced many countries of the world to formulate policies on this part. Again, the Beijing World Conference on Women, 1995, also highlighted the need to ensure universal access to appropriate, affordable and quality health care to women.

Women health is now a growing concern which basically relates to Reproductive and Maternal Health. Reproductive health implies that people are able to have a responsible, satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so. Implicit in this last condition are the right of men and women to be informed of and to have access to safe, effective, affordable and acceptable methods of family planning of their choice, as well as other methods of their choice for regulation of fertility, which are not against the law, and the right of access to appropriate health care services that will enable women to go safely through pregnancy and childbirth and provide couples with the best chance of having a healthy infant.

United Nations, in its Human Development Report (UNDP), has emphasised on improving women's health through the inclusion of Millennium Development Goals (MDGs). MDG-5 focuses significantly on reducing Maternal Mortality Ratio (MMR) especially in some regions where are vulnerable in giving birth due to their delivery without skilled care. This goal was included to achieve universal access to health care in general, including ensuring that more women access antenatal care, reducing inequalities in pregnancy care, and

expanding access to and use of different contraceptives for women. It was acknowledged that inadequate funding for family planning is a major factor behind the failure of some countries to fulfil their commitments to improve women's reproductive health.

It can be observed that maternal health and reproductive health of women are interrelated and overlapping to each other. Whether MMR is a concern of maternal health, Total Fertility Rate (TFR) is another concern of reproductive health. Both these two are unified and difficult to analyse within separate discourses. With the growing international concern on women health and being a member state of UN, India has also adopted the Millennium Development Goals (MDGs) as explained by UN that was to be fulfilled by 2015. But, due to the vulnerability and poor health condition of women, India was unable to reach its goal within the time period. Reproductive health service is one of the major determinants of women health. With the implementation of National Rural Health Mission (NRHM) in 2005, and announcement of RMNCH+A in 2013 as the schemes within the framework of NRHM, Govt. of India has also given special recognition and care for upgrading the condition of women's health.

NRHM: A HEALTH PROGRAMME IN INDIA

NRHM 2005-2012 was launched to provide equitable, affordable, accountable and effective primary healthcare for rural people and to make it accessible especially for poor women and children to reduce Infant Mortality Rate (IMR), Maternal Mortality Ratio (MMR), Total Fertility Rate (TFR) which are certain key indicators of women's Reproductive and Child Health (RCH) by promoting newborn care, immunization, antenatal care, institutional delivery and post-natal care along with popularising the quality methods of Family Planning. The Mission seeks to raise public expenditure on health from 0.9% of GDP to 2-3% of GDP; strengthen public health management; universal access to public healthcare services with emphasis on services addressing women's and children's health and universal immunization; delivery of comprehensive primary healthcare; revitalize local health traditions and mainstream AYUSH; prevention and control of communicable and non-communicable diseases; decentralize the programmes; reduce inter-state and inter-district disparities etc. To fulfil these visions, it has adopted different core and supplementary strategies, like- train and enhance capacity of Panchayati Raj Institutions (PRIs), introduction of Village Health and Sanitation Committee (VHSC), engagement of female health activist as Accredited Social Health Activist (ASHA) and Multi Purpose Workers (MPWs), strengthening existing Sub Centres (SC), Primary Health Centres (PHCs) and Community Health Centres (CHCs), promotion of Public Private Partnerships, providing medical education, inclusion of NGOs in the health sector and so on.

Within the framework of NRHM, Assam, one of the 18 Low Performing States, has initiated several schemes for the improvement of the health condition of Assam. Reproductive stage is one of the most important stages in the life of a woman which determines the overall health condition including her maternity. Understanding the importance and far reaching impact of reproductive health, NRHM has started special care services for women during their reproductive age with a view to provide them quality care. RMNCH+A is one of the major initiatives implemented in 2013 as an all inclusive programme covering Reproductive Health, Maternal Health, Neonatal Health, Child Health and Adolescent Health. Under reproductive health, this scheme emphasises on:

- Information and counselling for awareness on family planning methods
- Spacing between two children
- Distribution of contraceptive pills to the eligible couples to ensure spacing relating to conceive
- Distribution and use of PPIUCD method in public health facilities specially in those health centres where the number of delivery is more
- Distribution and use of IUCD in the health centres and organising health camp on specific date/day for insertion of IUCD
- Popularise the method of sterilization for both male and female and to motivate them providing incentives
- Popularise the method of safe abortion using medically approved procedure to maintain its quality
- Ensure availability of Pregnancy Testing Kit among the expecting mothers to be provided by ASHA or ANM in sub-centres

With a view to bring down the birth rate RMNCH+A was introduced including the above provisions. ASHAs will motivate the sexually active and fertile couple, i.e. 'eligible couples' (The term 'eligible couple' is applied to couples with wives in the reproductive age group of 15-49 years and who require the use of some sort of family planning method) to use the method of spacing and will distribute the facilities free of cost. The Govt.

will provide incentives for those who will undergo the process of sterilization to make family planning popular and successful. The incentives are- for male sterilization Rs. 1100/- to be the beneficiary and Rs. 200/- to the motivator (increased to Rs. 2000/- and Rs. 300/- respectively) and for female sterilization Rs. 600/- to the beneficiary and Rs. 150/- to the motivator (increased to Rs. 1400/- and Rs. 200/- respectively). Again, if the women will undergo this operation just after their delivery, there is a provision of Rs. 2200/- as incentives and Rs. 300/- to the motivator from the side of the Govt.

The 'Sanjeevani' MMU is introduced as an initiative under the National Rural Health Mission, Assam to bring health care to the doorstep of rural people with basic diagnostics facilities and specialists. The MMU will carry out the services like Curative Care, Reproductive and Child Health Services, Family Planning Services related to reproductive health.

OBJECTIVES

1. Understand the functioning of Reproductive Health Services under NRHM.
2. Examine women's access to Reproductive Health Services with special reference to the use of different methods of spacing.
3. Find out the problems in realizing the provisions under NRHM in relation to Reproductive Health Services.

METHODOLOGY

The study was carried out in Nalbari District of Assam which is basically a rural district only with 2.39% urban population according to the Census Report, 2001, GOI. It is the lowest among all the districts of Assam in terms of urban population and highest in terms of rural population comprising 97.61%. According to Assam Human Development Report, 2003, in 2001, Nalbari district occupied 16th and 17th position in Human Development Index (HDI) and Gender Development Index (GDI) respectively. The district has achieved a milestone in the state for securing 1st Rank for two consecutive years in 2014-15 and 2015-16 for best performance in 16 Dashboard Monitoring Indicators (as per GOI norms) and keeping its constituency till the current year 2016-17 up to January'17. NRHM, being a rural based health mission, covers the rural health sector under its dimensions. That is the reason for selecting this particular district as the study area to make comprehensive study as a whole.

Considering the nature of the topic, the research is a descriptive and analytical both. The present study is based on both primary and secondary data. For primary data collection, field survey has been conducted. For survey, 158 women were randomly selected within the age group of 15-49 years of age from 7 CD Blocks constituting maximum of 30 women from Barkhetri Block as it is the largest and most populous block among all. Interview was conducted through previously structured questionnaire. Further, discussion was made with health provider, i.e. Doctor, ANM, ASHA, Employees under NRHM, AWW and PRI members working with the Mission. Again, Govt. Reports, NRHM Reports, Statistical Handbooks, DLHS-3, NFHS-4, DCHB 2011 etc. were also used. Secondary data were collected from a survey of literature from books, journals, articles, newspapers, internet sources etc. For data analysis, both qualitative and quantitative methods have been used.

DATA ANALYSIS

Collection of data and its analysis is a popular method in social science research. During this study data was collected from different areas or villages of Nalbari district on the basis of survey conducted during 2015 to 2017 (March). Applying both the methods of qualitative and quantitative and using of tables and figures, analysis and interpretation of data has been done to find out the result of this study.

ACCESS TO REPRODUCTIVE HEALTH

NRHM has started an integrated approach launching RMNCHP+ A in 2013 to provide an understanding of 'continuous of care' to ensure equal focus on various stages of life. Reproductive stage and to ensure reproductive health is very essential which is directly related to the maternal health of women. Under this programme NRHM has given emphasis on reproductive care for women providing some facilities from the side of the government which are related to the family planning programme (FPPs). This study has made to assess the access of the provisions under NRHM on reproductive health in theory and its application.

Family planning is a popular term related to reproductive health limiting the number of children within a family. While the respondents were asked whether they feel the necessity of family planning or not, 141 respondents constituting 89.2% favoured family planning and respondents constituting 3.2 reported that they do not feel it as necessary, other 12 respondents from Tihu, Barkhetri & Pachim Nalbari Block constituting 7.6% did not want to respond. Further, 148 respondents constituting 93.7% have heard about spacing between two children and 10 respondents constituting 6.3% did not know about spacing between two children. It was found

that out of total respondents, 140 respondents constituting 88.6% are in favour of spacing, 8 respondents constituting 5.1% are against spacing between two children and 6.3% of respondents constituting 10 women were quite regarding this issue. While the researcher tried to talk to them regarding spacing, 7 respondents reported that adopting the method of spacing is anti-religious who belong to the Muslim religious group. Another 11 respondents feel it risky for future and harmful for their health.

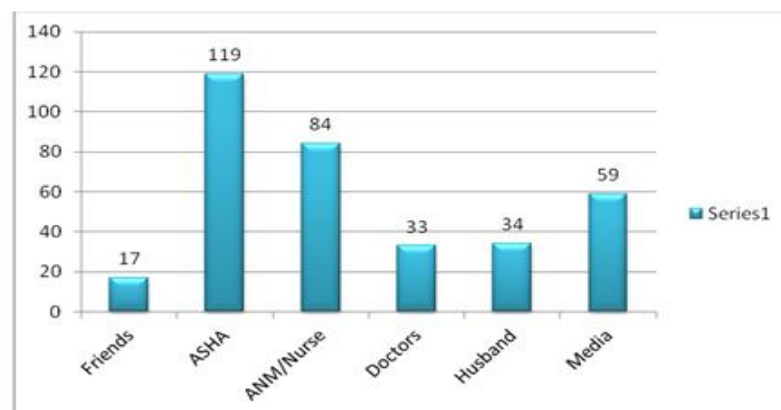
Table 1: Knowledge on Method of Spacing

Knowledge on Spacing	No. of Respondents	%
Yes	151	95.6
No	7	4.4
Total	158	100

Source: Primary Data

As regards to the knowledge of spacing methods among respondents, 151 respondents constituting 95.6% are aware of the methods of spacing while only 7 respondents constituting 4.4% are unaware of it. ASHA has been playing a vital role in making women aware about the FPP. Those who are aware, their source of awareness can be figured as follows:

Figure 1: Source of Knowledge about Spacing



Source: Primary Data

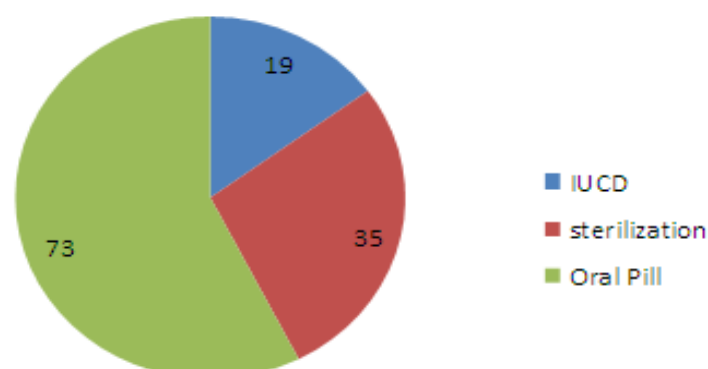
Table 2: Use of Family Planning Method

Use of spacing Method	No. Respondents	%
Yes	127	80.4
No	31	19.6
Total	158	100

Source: Primary Data

Out of 158 total respondents, 127 respondents constituting 80.4% reported using of family planning methods, while 31 respondents constituting 19.6% do not use any method for spacing. Among the users of family planning methods, maximum respondents were found to be using contraceptives pills followed by sterilization and IUCD/PPIUCD.

Figure 2: Methods used for Family Planning in Detail



Source: Primary Data

Under NRHM, responsibility has given to the ANM in the sub-Centres to find out the 'eligible couples' who are within their reproductive age group. Further, ASHA have to distribute contraceptive tablets every household free of cost and to motivate the couples towards the use of different methods of family planning including use of IUCD and sterilization. It was found that only 30 respondents constituting 19% are aware of distribution of IUCD in their nearby hospitals. It was reported that though distribution and insertion of IUCD should be free in govt. hospitals, sometimes nurses demanded money for insertion and removal of IUCD, 48 respondents reported that IUCD is not available in nearby health institution and 80 respondents are unaware of this facility.

Only 8 respondents constituting 5% reported that ASHA distributes contraceptive pills every household. Among these 8 respondents, 5 are from Pub-Nalbari and 3 are from Barkhetri Block. 146 respondents constituting 94.4% reported that ASHA never distributed oral pill and 4 respondents constituting 2.5% were not aware of it.

Regarding free pregnancy kit for expecting mothers, 6 respondents only have taken it from ASHA free of cost. On the other hand, 149 respondents constituting 94.3% have not availed it from ASHA. Respondents from every block within the district, it was reported that for pregnancy kit, ASHA took Rs. 20/- to Rs. 60/- if they collect it from ASHA, 3 respondents were not aware that kit can be availed from ASHA. They are unaware about such pregnancy kit too.

Abortion is another important aspect related to reproductive health rights. Like safe delivery, safe abortion is also equally important which can have an impact on maternal health of women. Unsafe abortion may leads to several other kinds of communicable or non-communicable diseases. NRHM, under the scheme of RMNCHP+A, has emphasized on safe abortion attended by health personnel within health facilities. It was reported that 25 respondents consisting 15.8% of total respondents have to abort while 19 respondents did not answer. Among those respondents who have aborted, 13 respondents aborted on Doctor's advice and 12 on their own decision, 20 respondents have aborted due to unwanted pregnancy and 5 of them were because of medical complications.

Table 3: Place and Method of Abortion

Method/Place	Method/Place in Details	No. of Respondents
Method	Using Tablets	4
	Surgical Process	19
	Traditional Method	2
Place	Home	2
	Pvt. Clinic	11
	Govt. Hospital	12

Source: Primary Data

Regarding the method of abortion, 4 respondents aborted on their own decision due to unwanted pregnancy by using tablets after consulting with the doctors in govt. hospitals, 19 of them had done by surgical procedure among who 11 went to private clinic for abortion and other 8 respondents in govt. hospitals. 2 respondents aborted at home by using traditional herbs. These two respondents were from Borigog-Banbhag Block and Barkhetri Block (Char area), 7 respondents reported that they felt complications like pain, excessive bleeding and menstrual problem after abortion. Fatigue is another problem that the respondents felt, 18 respondents reported no complications after abortion.

Sterilization is another method which gives permanent solution to the method of spacing. To motivate the couples towards sterilization, NRHM has the provision of giving incentives to the person who will go through the process of surgical operation for sterilization.

Table 4: Beneficiaries for Sterilization

Incentives for Sterilization	No. of Respondents	%
Incentive Received	13	37.1
No Incentive	22	62.9
Total	35	100

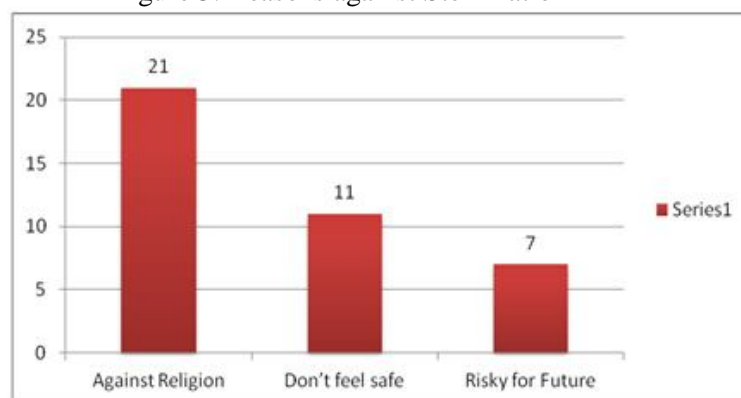
Source: Primary Data

Regarding the place of sterilization, 33 respondents have done at govt. hospitals; one in private facility and one respondent have done at health camp organized for sterilization. It was reported that 147 respondents including 93.1% have heard about the method of sterilization. 113 respondents constituting 71.5% feel necessary, 39

respondents constituting 24.7% do not feel the necessity of sterilization and 6 respondents did not replied regarding this.

Those respondents who are against sterilization mentioned the reasons as showed in the following figure:

Figure 3: Reasons against Sterilization



Source: Primary Data

53.8% among the 39 respondents, who were against it reported sterilization as anti-religious. Though they were from different Blocks, one commonality was there that they belong to the Muslim religious group. They mentioned that according to their religion, women who will go for sterilization, the last rituals (Janaja) will not be done after their death. Their religious priests (Moulabi) do not take food from them if they undergo the process of sterilization. 11 respondents constituting 28.2% feel unsafe and scared to go through the process of sterilization. Another 7 respondents feel it risky for future because they feel that it they have to become mother or have to rethink it, once they will go through sterilization, motherhood will be impossible.

FINDINGS

1. According to NFHS-4 (2015-16), Nalbari, 52.1% rural households have been using improved sanitation facility. It was found that 5.1% respondents use open space toilet which may leave them vulnerable to attack and sexual assault. Further, 27.8% respondents use kachcha latrine for toilet and it may leads women to the vulnerability of communicable diseases, like RTIs, STDs, etc.
2. NRHM, under its newly launched RMNCHPA programme, has included the reproductive health as one of its core part. Under this programe, this study found that though 95.6% respondents are aware of the methods of spacing, 80.4% of them used different methods of spacing for family planning. A larger section of respondents reported of using contraceptive pills as a method of spacing.
3. According to the calculated data from HMIS Reports, Nalbari, since 2012-13 to 2016-17(March), 2, 31,709 oral pills were distributed among eligible couples along with 1715 weekly pills and 2335 emergency pills. But research reveals a very negative scenario regarding the free contraceptive pills distributed to the needful. It was found only 5% respondents received free contraceptive tablets from ASHA and sub-centres, while 94.4% revealed a negative result. 2.5% respondents are not aware about the distribution of oral pills by ASHA and ANM to the households.
4. Regarding family planning method, 19 respondents out of 158 reported using of IUCD/PPIUCD and 35 respondents have done female sterilization. But only 13 respondents received the incentive for sterilization.
5. 94.3% respondents did not get the pregnancy kit from ASHA. Respondents, who received, reported that even if they get it, they have to pay for the pregnancy kit.
6. Safe abortion is another aspect of protecting women's reproductive health. 15.8% respondents have mentioned about abortion due to different reasons among which unwanted pregnancy was the major one. 5 respondents were found aborted due to medical complications and 19 respondents were found aborted through surgical process.
7. It was revealed that 2 respondents were found to be aborted using traditional method at home which is against the safe abortion norms but cannot be neglected as it is culturally acceptable. Respondents from Mukalmua Char areas reported that sometimes they go to Unani doctor, who are very much available in those areas for medication regarding the problems arises with them and their children.

8. During the research, 76% respondents among the total abortion were found to be aborted through surgical procedure with the presence of skilled health personnel or doctors.
9. It was revealed that for abortion too respondent had to pay the doctors in public hospital. One respondent reported that she had miscarriage and had to go for abortion due to unwanted pregnancy for 3 times. Every time she paid the doctors to operate the surgical procedure which cost minimum Rs. 500/- for each abortion procedure. This expenditure and inaccessibility of services is due to lack of information regarding the provisions under NRHM.
10. Seven respondents reported that they had complications after abortion, like— pain, headache, excessive bleeding and menstrual problem.
11. Emphasis was given on quality sterilization using laparoscopic operation in hospitals. For motivating them a provision of incentive is there. But study showed that 62.9% respondents did not get the benefit as per the provision.
12. 11.4% respondents feel it risky and unsafe because of its repercussion during post-sterilization period as they have seen in case of other women. Respondents reported that there are so many cases of its failure which also prevent them to undergo through this procedure. They are sceptic about the quality of operation and the operators specifically the operations held in health camps.
13. It was revealed that women, who were either against spacing or did not use the family planning methods, most of them were from the Muslim religious group. They reported that using the method of spacing or going for sterilization is against their religion. Society excludes them from taking part in some religious rituals if they go for sterilization.
14. During the discussion of the researcher with health personnel, it was reported that motivating women for sterilization or to make them understand for adopting the methods of family planning is difficult due to their religious barriers. It was revealed by an ANM from Barkhetri Block, herself who is a Muslim. The same report came from the ASHA's from different blocks too. But, exceptions were also there as a few women were found who have gone for tubal ligation procedure even though they were Muslims from different villages.

PROBLEMS IN REALIZING THE PROVISIONS OF REPRODUCTIVE HEALTH SERVICES UNDER NRHM

1. Scarcity of manpower, irregular supply of medicines, non-functioning laboratory, poor quality of equipments etc. have been hampering in the enjoyment of reproductive health services under NRHM.
2. It was observed that regarding preparation of survey reports from the villagers by the ASHA, ANM and AWW regarding 'eligible couples' it is not proper. Evidence was found that they do not go to the households for survey and prepare it of their own. It creates problem in rendering services according to the needs.
3. The Health Information System is not strong under NRHM. People do not get information on the schemes, provisions and facilities under NRHM.
4. Again, there is a gap between the planning and execution of different provisions under NRHM. Planning in higher level and its implementation at ground level is mismatched which is one of the major defects of NRHM.
5. The major problem in implementing NRHM was found as huge corruption in each and every layer of the health system in the study area. It was found that despite the provision of free reproductive health services under NRHM, women had to give bribe in different layers of the health sector for availing these facilities. For this kind of expenditure, women are not interested to avail the facilities of the provided schemes.
6. Some socio-cultural and religious barriers creates problem in realizing the provisions of reproductive health services under NRHM and to make it acceptable and accessible.

SUGGESTIONS AND CONCLUSION

1. Initiatives should be taken from the Govt. in contributing their development of socio-economic background through housing (IAY) and sanitation (Swaswa Bharat Abhiyan)) under the Department of Panchayat & Rural Development which should be implemented properly to the need based. It will help women preventing from communicable diseases like STDs and RTIs etc.
2. Health infrastructure should have to be developed in a medically approved and scientific way.

3. Women should have to be made aware about the dangers related to reproductive health. ASHA and other health workers should have to be more active and efficient.
4. There should be proper monitoring on the record of home visit so that actual services could have to be given to the needy women.
5. It is the utmost necessity to make women aware about the services through Health Information System so that they can avail the facilities. Otherwise, implementation of the schemes will be a myth and corruption will be unstoppable.
6. Cultural and religious barriers are very sensitive issues and have to be dealt with very carefully respecting their emotions and values. A strong scientific approach is necessary to get rid of these barriers. For this, academicians, social activists, women group organizations, health personnel, PRI members, NGOs and common people should come together to motivate people for availing the services under NRHM. Counselling is necessary for family members and society too along with women.
7. Media can play a very important role in making women aware of their reproductive rights and showing them the way for taking care of it.
8. Above all, true empowerment of women should have to be ensured in the patriarchal society to take initiative in the decision-making process which is an essential part of reproductive health.

Thus, the study on NRHM showed that NRHM is an important inclusion in the Indian Health Sector and hence RMNCH+A too. Though Nalbari district stood first among all the districts of Assam in delivering health services, Reproductive Health Service shows that despite the awareness regarding reproductive health, services are not satisfactory and cannot fulfil the expectation. But the problems in accessing reproductive health service can be solved with an adequate strategy, active manpower, proper monitoring, accessibility of information, technical support, involving different stakeholders and collaboration from every group of people living in the society with their strong mental and moral support.

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GROWTH OF TOURISM INDUSTRY IN NER WITH SPECIAL REFERENCE TO ASSAM

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ABSTRACT

Tourism is the one of the fastest growing industry in the world. Liberalisation has unlocked the mind of the people to tour on the one hand and modern communication and technology has made easy the business globally on the other hand.

Touring is not an imposed matter. To which destination an individual will go for travel around is completely a spontaneous matter. Touring may be for several reasons. Among them, sightseeing is an important one. Growth of tourism basically depends on both internal as well external environment of a place. Availled different types of facilities, security issue are very important in this aspect. Besides, how the destined people are ready to welcome them is by no means less important.

The position of India in world tourism is not decent. Regrettably, tourism industry of NER is more backward compared to the other parts of the country. In spite of having immense potentialities of North-eastern States in developing the business, why the area is lagging behind is a matter of enquiry. Present study is an attempt in this aspect. The study is dependent on the primary sources of information.

Keywords: Tourism, NER, security, destination, potentialities etc.

1. INTRODUCTION

With the introduction of liberalisation, the world is turned into global village. The in-terdependency as well as interrelationship among the people has grown faster that convenience them moving from one corner to other corner of the globe easefully. Movement of people may be for more than one reason like trade, spending leisure, education, hospital, pilgrimage, job, political and so on. It has enabled people to mutually transact and widen their customs, culture etc.

At present, tourism is the fastest growing industry in the world. It is one of the easiest and cleanest modern businesses. A section of population becomes updated and is willing to spend a luxurious life through tourism either nationally or internationally in accordance with their capability. Tourism gives refreshment to the people and enables to upgrade their activities. In fact, it has been one of the most important sources of income generation too that helps in moulding national economy.

The lexicon meaning of tourism is business activities connected with providing accommodation, services and entertainment for people who are visiting a place for pleasure. For spending the leisure time, people prefers to go for visiting to a suitable place that he thinks sightseeing, pleasant and secure. It is the selection of a particular place that spontaneously comes in mind to go for. Tourism is not an imposed matter, rather a subject of attraction that pull the people by the milieu of the destine place.

North-eastern States are, by and large, the homeland of nature. It's hilly physiography and meandering flow of the river Brahmaputra causes in the beautification of entire NE. Nature was kind enough at the time of providing natural beauty in the area. But up to what extent the area has been the choice of tourist is an important matter of enquiry.

Present study is an attempt to look into the matter of tourism of the NER. It would be tried to find out problems and prospects of tourism in the area.

2. OBJECTIVES

- a) To explore NE as Tourist hub.
- b) To find out the trend of tourists arrival in Assam.
- c) To put policy suggestion on the issue.

3. METHODOLOGY

Present study is an explanatory one which is basically conducted on the basis of secondary sources of information. The study will focus on the landscape of the tourism status of NER as well as state Assam. Besides, it will be tried to find out the tourist status of India in international scene. The data are collected from the directorate of tourism, Government of India, Government of Assam, NEDFi, Directorate of Economics and Statistics, Government of Assam, different books and journals, internet etc.

4. INDIA AS A TOURIST DESTINATION

In India, tourism sector has very strong linkage in socio-economic prosperity [1]. The employment potential of tourism sector in India is higher than any other sector. Tourism in India is economically important and is growing rapidly. The Travel & Tourism Competitiveness Report 2015 ranks India 52nd out of 141 countries all over the world. The tourism generated Rs. 8.31/- lakh crore which is about 6.3% of the nation's GDP and supported 37.31 million jobs is about 8.7% of its total employment in 2015 [2]. In spite of having adequate potentiality in developing tourism, India is lagging behind compared to world tourist countries. Table 4.1 gives an account of the foreign tourist arrivals by source country in 2014.

TABLE 4.1: Foreign tourist arrivals by source country in 2014

Rank	Country	Number (in Lakh)	Share in %
1	United States	11.19	14.57
2	Bangladesh	9.43	12.27
3	United Kingdom	8.38	10.92
4	Sri Lanka	3.02	3.93
5	Russia	2.69	3.51
6	Canada	2.68	3.5
7	Malaysia	2.62	3.41
8	France	2.46	3.2
9	Australia	2.39	3.12
10	Germany	2.39	3.11
Total of top 10		47.27	61.56
Other Countries		29.52	38.44
Grand Total		76.79	100

Source: Ministry of Tourism, Government of India.

It is clear from the above table that the USA, Bangladesh and the UK are the biggest tourist partner of India in 2014 whose share in the total tourist of India recorded 14.57, 12.27 & 10.92 percentages respectively. The other countries registering their name in the top 10 of the foreign tourists inflowing to India are Sri Lanka, Russia, Canada, Malaysia, France, Australia and Germany whose share in the total tourist varies from 3 to 4 per cent each. The top 10 countries contribute as much as 61.56 per cent of the total tourist of India.

To compare, number of total tourist in India was about 8.02 million in 2015 which is much lower compared to the world top ranked 10 countries in terms of tourist destination (as shown in appendix 1). France (84.5 million) is the world first ranked country as the destination of foreign tourists in the corresponding year followed by the USA, Spain, China, Italy, Turkey, Germany, United Kingdom, Mexico and Russia respectively. China is the fourth ranked tourist country in terms of international tourist arrival whose figure records 56.9 million which is about eight times more than India. It is clear from the discussion that India's position is much awful in the world tourism rank. Table 4.2 presents share of top 10 states of India in number of domestic tourist visit in 2014.

TABLE 4.2: Share of top 10 States/UTs of India in number of Domestic & Foreign Tourist visits in 2014

(Number in million)

Domestic Tourists				Foreign Tourists			
Rank	State/UT	Nos.	Share in %	Rank	State/UT	Nos.	Share in %
1	Tamil Nadu	327.55	25.6	1	Tamil Nadu	4.66	20.6
2	Uttar Pradesh	182.82	14.3	2	Maharashtra	4.39	19.4
3	Karnataka	118.28	9.2	3	Uttar Pradesh	2.91	12.9
4	Maharashtra	94.13	7.3	4	Delhi	2.32	10.3
5	Andhra Pradesh	93.31	7.3	5	Rajasthan	1.52	6.8
6	Telangana	72.39	5.6	6	West Bengal	1.37	6.1
7	Madhya Pradesh	63.62	5	7	Kerala	0.92	4.1
8	West Bengal	49.03	3.8	8	Bihar	0.83	3.7
9	Jharkhand	33.43	2.6	9	Karnataka	0.56	2.5
10	Rajasthan	33.07	2.6	10	Haryana	0.55	2.4
Total of top 10 States:		1067.64	83.3	Total of top 10 States:		20.04	88.12
Others:		214.31	16.7	Others:		2.53	11.88
Total:		1281.95	100	Total:		22.57	100

Source: Same Table 4.1.

The table-4.2 shows that Tamilnadu is the leading state in India in terms of both domestic as well as foreign tourist visit in 2014. It shares about 25.6 and 20.6 per cent to the total of domestic and foreign tourists of India respectively. The rationale for Tamilnadu as the most visited place because of having historical, cultural and architectural significance. The places like Ooty, Kodaikanal and Yercaud are well-known place of sightseeing. Also state is a popular destination for medical tourism and the cities of Chennai and Coimbatore has some of Asia's premier hospitals.

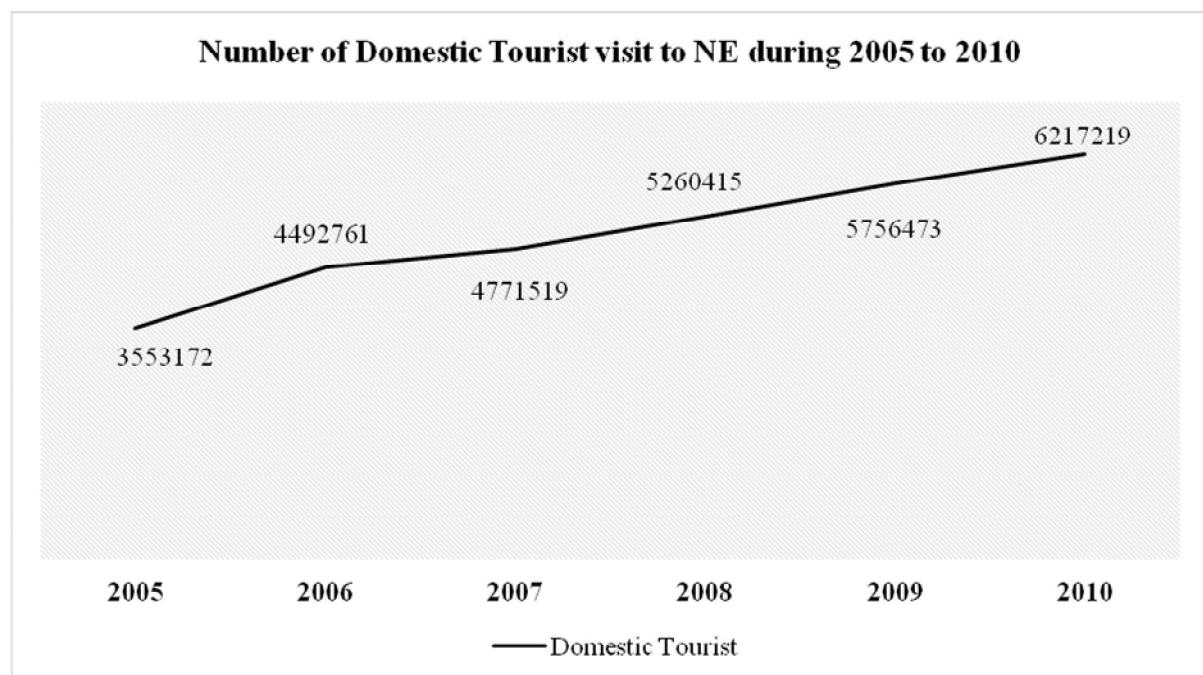
Uttar Pradesh and Maharashtra are the other two destined states frequented by tourists. UP is known as the heartland of India flourished with wealth of historical monuments and religious commitment. It is the home of *Taj Mahal*, and Hinduism's holiest city Varanasi. Moreover, Agra Fort, *Fatehpur Sikri*, *Tomb of Itimad-ud-Daulah*, *Tomb of Akbar the Great* etc. to name a few. Mathura-The birth place of Lord Krishna and Ayodhya-The birth place of Lord Ramaenthuses many to UP for religious sentiment.

However, Maharashtra anchors a large number of popular and revered religious venues that are heavily frequented by locals as well as out-of-state visitors. Ajanta Caves, Ellora Caves, Elephanta Caves and Chhatrapati Shivaji Terminus are the four UNESCO World Heritage sites in Maharashtra and are highly responsible for the development of Tourism in the state. Mumbai is the most popular cosmopolitan city, and a great place to experience modern India. Mumbai is famous for Bollywood, the world's largest film industry.

Other states registering their name in the list of top 10 in both domestic and foreign tourists are Karnataka, Rajasthan and West Bengal. Moreover, Andhra Pradesh, Telangana, Madhya Pradesh and Jarkhand are included in the list of top 10 domestic tourist states and Delhi, Kerala, Bihar and Haryana are included in the top 10 foreign tourist states of India. The top 10 states of India in number of domestic tourist arrival shares more than 83 per cent of which first three states share as much as 49 per cent. However, the top 10 states of India in number of foreign tourist arrival shares as much as 88 per cent of which the first four states share about 63 per cent. Point to be noted here that no state from the NER is in the top 10 states of India in number of tourist arrivals.

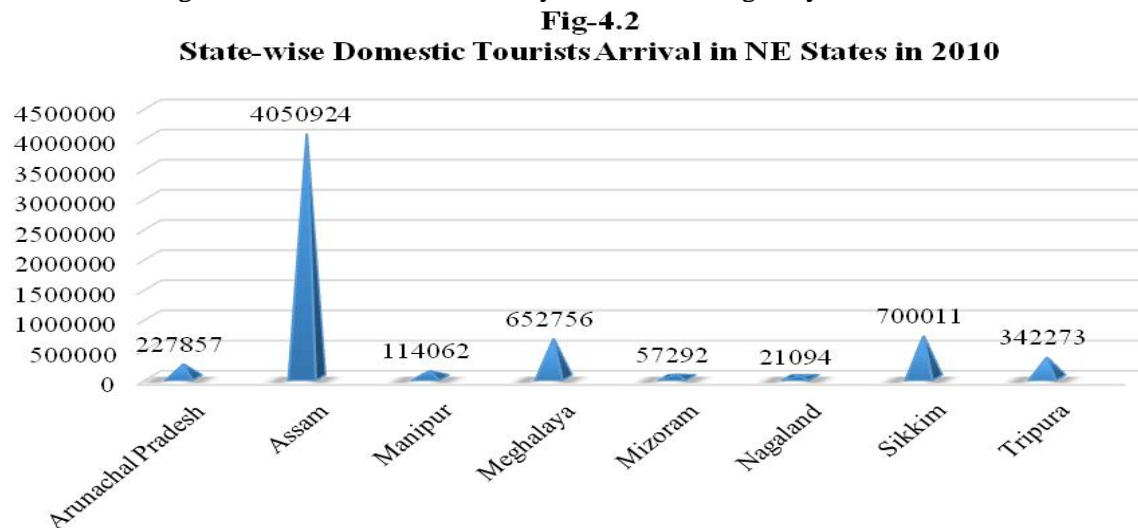
4.1 NE AS TOURIST TERMINUS

The eight state viz., Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura comprises the NER. Hon'ble Prime Minister Narendra Modi terms NE states as "*Osto Lakshmi*". Assam is the gateway and surrounded by rest of the NE states. In order to fulfill the dream of Look East Policy to turn into Act East Policy, NER has a pioneering role to play. The area may be the hub of business of all types with all ASEAN and other neighbouring countries. Although, the physiography of the NE shows a hilly nature except Assam a plain state, the area is naturally beauty that can easily attract anyone. But a matter of fact is that the area is backward almost in all aspect compared to the other parts of India. The area has vast potentiality in developing tourism business. But tourist attendant into the region is not pleasing. The fig-4.1 shows the trend of tourist arrival in the NE states during 2005 to 2010.

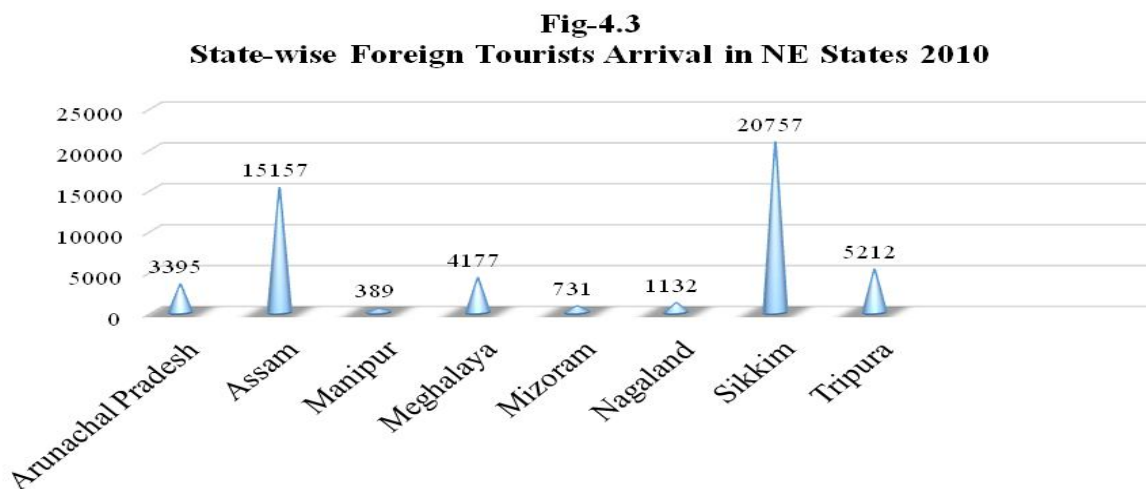


It is seen in fig-4.1 that the tourist arrival in to the NER shows an upward trend during 2005 to 2010 (Details figure is given in appendices 2 & 3). The curve also shows that in 2005 to 2006, the rate of increase was faster which during the latter years increased at a lower rate.

The figure-4.2 shows state-wise number of domestic tourist arrival in North-eastern States in 2010. The state Assam records the highest tourist arrival followed by Sikkim and Meghalaya.



The fig-4.3 presents state-wise number of foreign tourist arrival in to the NE states in 2010. Sikkim registers as the highest foreign tourist arrival destination followed gradually by Assam, Tripura, Meghalaya, Arunachal Pradesh and so on.



It is easy to remark from the above analysis that Assam, Sikkim and Meghalaya are the leading states in terms of inflowing tourists in the NER. The state Assam serves as the gateway while Guwahati the capital of Assam is the biggest city in the NER. Assam boasts of famous wildlife preserves like the Kaziranga National Park, the Manas National Park, Dibru-Saikhowa National Park, Nameri National Park and Pobitora Wildlife Sanctuary (these first two parks are UNESCO World Heritage Site); the religious Kamakhya Temple, the largest river island Majuli known for its *Vaishnavite Sattras*; reinforce in the inflow of tourists. *Sattras* are the centre for learning art and culture [3]. The people of Majuli are very guest greeter in nature. It is very cultural developed resort for visitant. Peculiar benevolent greeting culture of Majulian is an instance in the aspect of tourism.

The root word of Sikkim is *Suk-Heem*, which in the local language means "peaceful home". According to a recent report prepared jointly by Centre for Strategies and International Studies (CSIS), a top American think-tank, and Nathan Associates "Sikkim is at the top of women in workplace index in India" [4]. Sikkim is naturally beautiful tourist place located at higher altitude characterised with calm climate that attract the foreigners to advent. The state Meghalaya is also a hilly beautiful state best known for stomaching 'Cheerapunjee', the world most raining place that causes tourist arrivals.

Table 4.3 gives the trend of tourist inflow to Assam and revenue earned from the tourist during 2000-01 to 2010-11.

TABLE 4.3
Number of Tourists to Assam and Revenue Earned from the Tourists during 2000-01 to 2010-11

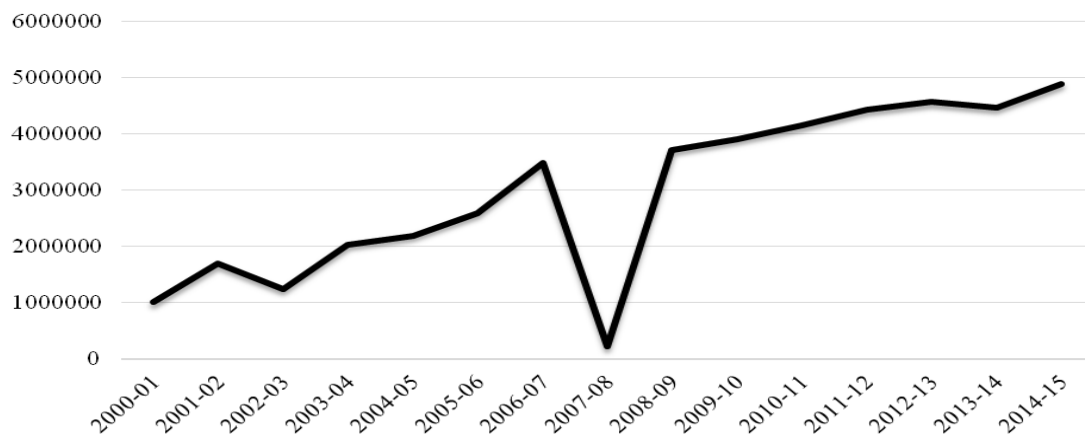
Years	Tourists staying in Tourist Lodges of the Directorate		Tourists in other accommodation like Hotel		TR earned (Rs in Lakh)
	Indian	Foreign	Indian	Foreign	
2000-01	-	-	1001577	5959	-
2001-02	15373	456	1675299	4755	38.89
2002-03	18427	520	1222135	5466	41.03
2003-04	19894	508	2010213	6337	60.44
2004-05	20820	804	2165430	8563	60.44
2005-06	24280	755	2562148	7554	87.11
2006-07	20279	649	3459591	8130	82.30
2007-08	7983	235	211696	6358	95.00
2008-09	26439	674	3672267	13859	103.92
2009-10	25665	669	3869860	14031	131.63
2010-11	25831	594	4101616	15039	143.60
2011-12	26436	696	4381897	15964	184.49
2012-13	22057	711	4522609	16997	248.19
2013-14	26394	726	4417999	18360	191.32
2014-15	21092	422	4842734	19583	211.77

Sources: Statistical Handbook Assam, different issues.

Note: TR means Total Revenue earned from the Tourists lodges only.

It is seen from the above discussion that overall situation of tourism in India is not easeful. There are number of factors work behind the poor tourism status of India. Underdeveloped tourism infrastructure like the nation has very few hotel rooms per capita by international comparison, low ATM penetration, security issue are some of the main bottlenecks in this respect. Tourist can neither be forced nor persuaded but can be attracted. Advent of tourist basically depends on the culture, custom, natural environment, law and order situation etc. that oblige people to select the tourist spot. Toursit status exhibits many thing about a place. Tourist always prefers a destination for touring which is most secured. The existing intolerance issue might have bowed down India in international scenario. According to ex Vice-President of India, a section of people especially the Muslims are suffering from insecurity in India. Mushrooming insurgency rooted in different corners of the country especially in Jammu & Kashmir and NER part is known to the world. Scandal like demolition of Babri-Masjid in Ayodhya (1992) witnesses about the Indian extant of secularism in India, Indian parliament attack (2001) & Mumbai Taj Mahal Hotel attack by terrorist (2008), Dimapur Central Jail lynch (2015) and brutal death of prisoner reveals about the weakness and loopholes of law and order situation in India.

Fig-4.4
Number of Tourists to Assam during 2000-01 to 2014-15



The foreign tourist visiting to India is to vis-à-vis torture in more than one ways. In the historical places like Fatehpur Sikri, Taj Mahal, some walking businessmen torture the foreign tourist in the name of business. The tourist coming from the abroad are targeted as customers and compelled them to purchase their commodities in spite of their reluctance.

Moreover, occurrence of repeated communal clashes, *hartal* and underground activities of extremist are almost unabated issue especially in the state of Assam. Assam is hypothecated as the homeland of terrorist by the other part of India. The prolonged inhuman activities of ULFA, NDFB and some other badly discourage and deteriorate the tourist status in the state.

NER in spite of having immense prospect is lagging behind in tourism. It may be turned into the tourism hub. Assam is not only the entrance of NE but also the dreaming state of fulfilling the Act east Policy as stated. Tourism potential of Assam is so vast and diversified that it will be able to explore the same with a proper work plan. A tourism-based economy of the state could be achieved like that of Singapore, Thailand etc. in abroad and like that of Sikkim, Kerala, Himachal Pradesh etc. in India [5]. For doing so, human resource development is very important aspect that needs to be given adequate emphasis in the tourism development effort so as to improve the quality of services and to ensure that economic benefits of tourism are shared by the local community [6].

5. FINDINGS

- i) Position of India (52nd) in world tourism is not decent.
- ii) Entire NER is backward in tourism. No state of the NER is in the top 10 tourist list in India.
- iii) The State Assam is in better position in the inflow of tourist compared to NER.
- iv) Sikkim is the leading state in terms of inflow of foreign tourist in the NER.
- v) Number of foreign tourist attendants is less compared to number of foreign tourist attendant in Assam.

6. POLICY IMPLICATION

Present BJP led government of Assam has prioritised the tourism department. Launching the “Awesome Assam Campaign” by the state government of Assam for showcasing the state’s tourism resources and launching vigorous publicity campaign at the national and international levels selecting the Bollywood actress Priyanka Chopra as brand ambassador is a welcoming footstep. It is okay that government has lots to do, but we should not limit our accountability to ‘nothing to do’. The first and foremost important thing is that people should spontaneously come forward to accept and welcome in the entry of tourist into India in general and to the NE especially Assam in particular. Thereafter, government should take necessary initiative to avail required facilities to them. Besides, following points may be suggested as the twin obligation of government and people.

- i) The theme of the World Tourism Day celebration by the UN for 2016 “**Tourism for All**” should be well accepted. ‘Tour to understand Tourist’ may be used as our local theme on tourism.
- ii) The tourist should be facilitated with suitable hospitalities like available bus & train service, determination of minimum small vehicle (auto, taxi etc.) fare with meter system to avoid fraud of any kind, hoteling and more ATM points should be disseminated for convenience of the tourist.
- iii) ‘**Avoid intolerance issue**’ all over the country is the need of hour to convince the foreigner to advent our country.
- iv) We should morally embrace tourism as our cultivation with the slogan of *Atithi Devo Bhavo, May I help you* etc. Honest guide should be deployed in order to impart proper services to the tourist. In case of any complain, satisfactory step should be taken with immediate action.
- v) Tourism may be incorporated in the syllabi of school and colleges. A 2-3 days tour may be made compulsory for the learners of higher education for which either institution or government will bear the expenses.
- vi) The government should improve the law-and-order situation to create a tourist-friendly atmosphere minimising communal clashes, frequent agitation & *hartal* so that tourist from around the globe can come to our state without any hesitation.
- vii) Tourist spot of Assam shouldn’t be confined within Kaziranga & Manas sanctuary and Kamakhya Temple only. Government should introduce some new tourist circuits in the places like Majuli, Karbi Anglong, Dima Hasao etc. Majuli and some other charland may be prioritised for upgrading to international tourist spot as to exhibit potentiality of the mighty river Brahmaputra.
- viii) ‘**Event Tourism**’ in Assam may be designed with the major event like Bihu, Puja, Raas Festival of Majuli, Jonbeel Mela, Brahmaputra beach festival, Chandubi festival etc. Tourist should be facilitated with descent package.

ix) Finally, Public Private Partnership (PPP) is very important in prolonging the area as the hub of tourism.

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Appendix 1

The World top 10 international tourism destinations in 2015

Rank	Destination	International Tourist Arrival (In millions)
1	France	84.5
2	United States	77.5
3	Spain	68.2
4	China	56.9
5	Italy	50.7
6	Turkey	39.5
7	Germany	35.0
8	United Kingdom	34.4
9	Mexico	32.1
10	Russia	31.3
52	India	5.89

Appendix 2

State-wise Domestic Tourists Arrival in North Eastern States

Years	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura
2005	50560	2467656	94299	375911	45999	17470	241697	222200
2006	80137	3268656	116984	400287	50244	15850	292486	229621
2007	91100	3436484	101484	457685	44226	22085	331263	243527
2008	149292	3617306	112000	549954	56793	21000	460564	245745
2009	195147	3851000	124000	591398	57639	20953	547810	320931
2010	227857	4050924	114062	652756	57292	21094	700011	342273

Appendix 3

State-wise Foreign Tourists Arrival in North Eastern States

Years	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura
2005	313	10782	316	5099	313	883	16827	2847
2006	706	11151	295	4259	542	426	18026	3091
2007	2212	13105	396	5267	735	936	17837	3177
2008	3020	14426	400	4919	842	1000	19154	4000
2009	3945	15000	300	4522	675	1423	17730	4000
2010	3395	15157	389	4177	731	1132	20757	5212
Total:	13591	79621	2096	28243	3838	5800	110331	22327

CUSTODIAL VIOLENCE AND HUMAN RIGHTS: LEGAL IMPLICATIONS

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ABSTRACT

Police in India have functioned as the principal law enforcement agency of the State throughout the ages. In the early and medieval periods of civilization, the governance of a State was entered in ruling individuals or family groups. Police enforcement of the law as propounded by the ruler practically meant regimented compliance of the rulers' demand and desires. The basic concept of governance in India was Dharma and Danda and there were functionaries to ensure the operation of Danda.

But as the society advanced, the police tried to control the whole state of affairs in the name of maintenance of law and order situation in a brutal manner. The police, now a days, has started abusing their powers entrusted by the State resulting into custodial violence. In spite of the fact that every segment of the society feels concerned about custodial violence, over the years, it has remained unabated. It seems to be on rise every year, in spite of the increasing literacy and growing awareness among the public about their rights and duties. The main arm of the criminal justice system that deals with people in custody is police. It is, therefore necessary to find out ailments, which govern the agency resulting into abuse of those who are there in their custody.

Key Words: Custody, Violence, Police, Dharma, Danda

INTRODUCTION

Police in India, throughout the ages, have functioned as the principal law enforcement agency of the State. In the early and medieval periods of civilization, the governance of a State was entered in ruling individuals or family groups. Laws of the State were the individual rulers felt inclined to pronounce as such from time to time. Police enforcement of the law as propounded by the ruler practically meant regimented compliance of the ruler's demand and desires. The basic concept of governance in ancient India was of Dharma and Danda and there were functionaries to ensure the operation of 'Danda.'

The term 'violence' is the state or quality of being violent, excessive unrestraint or unjustified force, outrage perforate injury. 'Violence' in its literal sense has been defined as the use of force by one person over another so as to cause injury to him. The injury may be physical, mental or otherwise. The simple definition of violence is behaviour designed to inflict injury on a person or damage to property. Custodial violence is a term, which is used for describing violence committed against a person by a police authority. Thus, custodial violence can be defined as "an inhuman trait that springs out of a perverse desire to cause suffering when there is no possibility of any retaliation; a senseless exhibition of superiority and physical power over the one who is overpowered." According to Law Commission of India, crime by a public servant against the arrested or detained person who is in custody amounts to custodial violence.

Although, overcrowding, malnutrition, unhygienic conditions and lack of medical care are some of the factors of death in police and judicial custody, but custodial violence remains the common cause of deaths in prisons and lock-ups. The custodial violence is a generic term and includes all and every type of torture, third degree, harassment, brutality, use of force not warranted by law, etc. custodial violence include illegal detention, arrest which is wrongful or on illegal or on insufficient grounds using third degree method, on the suspects, humiliating them, using filthy language, not allowing them to sleep, extorting confession under pressure, padding up of additional evidence, misuse of the power regarding handcuffing not allowing to meet counsel or family member to accuse, denial of food etc.

CUSTODIAL VIOLENCE

The term custodial violence has not been defined under any law. It is a combination of two word custody and violence. The word 'custody' implies guardianship and protective care. Even when applied to indicate arrest or imprisonment, it does not carry any evil symptoms during custody. In a law dictionary the word 'custody'; has been defined as charge and with regard to a person in imprisonment: judicial or penal safekeeping. As Per Chamber Dictionary, the condition of being held by the police, arrest or imprisonment is called 'custody'. As Per Legal Glossary Dictionary, custody is imprisonment, the detaining of a person by virtue of lawful Power or authority.

Section 167 of the Code of Criminal Procedure speak about two type of custody i.e. police custody and judicial custody. As per section 167(1) of Cr. P.C., "the magistrate to whom an accused person is forwarded under this section may whether he has or not has jurisdiction to try the case, from time to time, authorize the detention of

the accused in such custody as he may think fit. Provided that the magistrate may authorize the detention of the accused person, otherwise than in the custody of the police, beyond the period of 15 days if he is satisfied that adequate ground exist for doing so. So as per section 167 (1) of Cr. Pc. 'police custody' can be granted for a maximum period of fifteen days only' Police custody basically means police remand for the purpose of interrogation. In law actually a police officer has two occasion to keep a person in its custody firstly, from the period when he arrest a person till he produce the said person in the court i.e. first 24 hours of the arrest of accuse. Secondly, when police gets, remand from court after producing the accuse in the court which can be extend up to a maximum period fifteen days, thereafter, a person is sent in judicial custody which in general terms means jail or prison, where an accuse remain in custody till he gets bail or if convicted and sentenced to jail till the completion of sentence. As per law, 'custody' of a person begins when the police arrest him.

Custodial violence primarily refers to violence in police custody and judicial custody. Besides death, rape and torture are two other forms of custodial violence. Custodial violence is not a recent phenomenon. Sections 330, 331 & 348 of IPC; Sections 25 & 26 of the Indian Evidence Act; Section 76 of CrPC and Section 29 of the Police Act, 1861 were enacted to curb the tendency of policemen to resort to torture to extract confessions etc.

HISTORICAL PERSPECTIVE

Custodial violence, which includes torture, death and other excesses in police custody or prison, is not a new phenomenon. It has been in the world for ages. The law enforcement agencies had been practicing this on prisoners, criminals and the wrongdoers. Even in ancient Indian history, we find ruler like 'Nanad' Mahapadam in Mauryan era who had put the entire family of 'Chandra Gupta Maurya' into prisons and only as much food was provided to entire family which was sufficient for survival of one person only. Kautilya in Arthashastra, speaks about various kinds of torture such as burning of limbs, tearing by wild animals, trampling to death by elephant and bulls, cutting of limbs and mutilation etc. During the Gupta period (A.D. 320-500 A.D.) trial by ordeal was common. In the post Gupta period, torture of prisoners became a method of punishment.

In the Mohammedan period the Shariat, law was applied to crimes; a thief hands to be cut off; life for life; tooth for tooth was the basic principle of Muslim criminal Jurisprudence which is still followed in Islamic country. The British Raj was also notorious for using violence in police custody. Men, women and children were caught, beaten and tortured to make them confess to crimes, which they did not commit. During this period political workers were picked up for questioning and if they did not provide the desired reply they were subjected to torture. The naked lying on ice, the denial of food or insufficient quantity of food, excess physical work and physical beatings were some of the methods employed during British Rule to punish law breakers mostly political prisoners and workers.

One important point which needs to be mentioned is that the perpetrators of atrocities and immoral acts were the servant of the foreign Government. Their judiciary, police, jails and all the laws were made for their own benefit and convenience. But we in independent India follow the same model and the same penal code without many amendments. Our police system is same which was prevalent during British system. It was introduced by Britishers; in the year 1861 primarily to enable their administration to have at their disposal a force at a cheap cost to help them rule the country by suppressing anti governmental forces and guided by such an objective the police became the symbol of colonial repression and were for obvious reason hated by the masses. The "Prison Act", which was passed in 1894, has also remained unchanged. The Act gives vast power to jail officials to punish prisoners if they break jail rule. Probably mind set of peoples as well as police and rulers i.e. executives both political and bureaucracy has remained same only power has been transformed from foreign ruler to our native ruler.

The phenomenon of custodial crime is not new in India. We had reference of Torture and violence with the police in India, even since the Vedic age (2000-1400 B.C.). The ordeals of fire, water and single combat were used. In the Epic period (1400-800 B.C.) torture was practiced on prisoners by the police. Torture in various forms was widely prevalent in age of laws and philosophy (800 B.C. -320 B.C.). Kautilya's Arthashastra speaks about various kinds of torture such as burning of limbs, tearing by wild animals, trampling to death by elephants and bulls, cutting of limbs and mutilation etc. Manu, the law giver of this age emphasized the necessity of torture to protect the society from the hands of the criminals. The Buddhist period (B.C. 300-300 A.D) was an age of great humanitarianism and administration of justice had become correspondingly imbued with the humanitarian ideals. Torture in any form was strictly forbidden and special favours were shown to prisoners, who happened to be women, aged or who had many dependents. In Gupta Period (A.D. 320-500) if the facts against prisoners were not clearly established by evidence, recourse was to be held to the four kinds of ordeals, trial by ordeal fairly common. Under the Mughals, no criminal or civil code existed. Torture to extort confession was widely spread (Ghosh and Rustomji 1993).

CAUSES OF CUSTODIAL VIOLENCE

In spite of the fact that every segment of the society feels concerned about custodial violence, over the years it has remained unabated. It seems to be on rise every year, in spite of the fact that rate of literacy has increased and the people have become aware about their rights and duties. The main arm of the criminal justice system that deals with people in custody is police. It will, therefore, be necessary to find out ailments, which govern this agency resulting into abuse of those who are in their custody. In this section, an attempt is made to find out as to what lies at the root of the problem of custodial violence. For this it is essential to study the conditions under which police works and to find out their mode of operation in dealing with the accused persons. The basic causes for Custodial violence can be grouped in the following categories:

1. Work Pressure

The police in India has to perform a difficult and delicate task in view of the deteriorating law and order situation, riots, political turmoil, student unrest, terrorist activities, increasing incidence of bribery, corruption, tax evasion, violation of fiscal laws, smuggling and money-laundering. Organised criminal gangs are gaining strong roots in the society. They use ultra-modern weaponry, explosives and many other devices of committing crimes without leaving any evidence of their crime many a time. Similarly, dealing with insurgent and terrorist groups is also completely different from dealing with ordinary criminals. This category of criminals is well-trained, hardened and equipped with ultra-modern weapons. An ordinary policeman carrying a small revolver or even a gun ordinarily provided to him is invariably no match to them. Indeed, a resourceful criminal can escape the clutches of law almost indefinitely. The Indian police today finds itself handicapped not in its numerical strength but its inadequate infrastructural facilities like modern weaponry and equipment, transport and communication network and, more importantly, need-based training which is of paramount importance to make it more efficient and effective instrument of law enforcement.

A very important reason for continuing brutal behaviour by the Police is pressure. The sources of pressure are several, but basically they relate to performance or output beyond the narrow confines of police role, in spite of constraints on adequate role performance. Policemen have to deal with crime and disorder not on bits of paper but in the raw, directly. This generates lot of pressure, both from the people and the government. In addition to the constraints of the system are the constraints arising out of its actual operation. The outcome of Police efforts as they lead to deterioration of evidence and thereby reduces the chance of conviction in a court of law. Medical and legal reports are often received very late. TIP's (Test Identification Parade) are often delayed considerably, before which the accused are bailed out, thus defeating the purpose of holding such a parade. In our accusatorial system, a person is presumed innocent unless his guilt is proved beyond reasonable doubts and thus, the degree of proof, which is required on part of prosecution, to secure conviction is exceedingly high. Thus, in a trial the chances of conviction are roughly one out of four. But results have to be achieved as quickly as possible or else the officer is transferred. So a shortcut is required to achieve result and for them, the UP Police Commission 1970-71 observed,

“An accused or suspect may be kept under Police custody for a maximum period of 24 hours as per law. In the meanwhile, a great deal of information remains to be elicited from the suspect especially in offences involving property, on recovery of which the success of prosecution greatly depends. Whenever the investigating officer finds it practicable, he records arrest after quite a few days of unrecorded and illegal detention. Thus the pressure of securing maximum information in the available time implies the investigating officer to use shortcut methods.”

2. Greed for Money

This is the most hateful reason for custodial torture and one that seems to be on the increase. At the level of Police Station, a number of Policemen use brutality to extract money from suspects and innocent persons. The legal situation and the nature of evidence facilitate the process of making SHO very powerful and giving what he does an air of finality, which gives him the unintended power to extract money and escape the corrective process of supervision. The courts give enormous importance to the FIR and what kind of FIR is actually written depends on the policeman on duty. Investigating a dacoity case, he can always threaten to implicate an honest man, even beat him up or simply keep him hanging about the police station until he gives him money. Supervision takes place after the fact and while an attempt can be made to punish the policeman concerned, it can seldom undo the wrong done, recover the evidence that has deteriorated. Each and every person gives the priority of money, they want money anyway, and this is mental condition of our primitive to higher society. For that in Police system made chains from minister to police. Now a day police machinery a means for producing money for officers and minister. In each police station have some cost, if any police ready to pay such amount they got the post at that particular location.

3. Punitive Violence

There are few honest but misguided policemen who believe in not letting the criminal get away with it. It is genuinely believed by them that except for a sound beating, there is no other way of controlling criminals. U. P. Police Commission 1970- 71, stated,

"The reason for use of third degree method is born out of wrong convictions. There is cross-section of the people and the police and a sizeable one at that, which believes in the efficacy of third degree methods alone in dealing with criminals, particularly hardened ones. They say that a jail term is no more a deterrent to the criminals. They remain happy there, particularly as conditions inside the jails have begun to score over conditions outside and the only thing they are scared is a beating by the police. It is not unusual to find rotaries against third degree methods pleading for use of 'police methods' for working out a case in which they happen to be interested."

The whole tenor of the criminal justice system is punitive, hence a subsystem of it expected to be of service to the people cannot so operate. On account of the constraints of the system, the nature of the police function also becomes punitive, and many policemen see their brutality as extension of the punitive role of the organisation.

4. Positive re- enforcement

No matter what the constraints are, results have to be produced. As things are, a policeman, say a sub Inspector, who is brutal, who operates only on short cuts and is unscrupulous about the means he uses, produces results. The production of result ease the pressure on his superiors, even wins the acclaim of all and sundry, with the result that all his sins are and have to be forgiven. In due course and sometimes earlier, such a policeman rises in his hierarchy. This reinforces his use of third degree methods not only in his own eyes but also in the perceptions of his peer group and his subordinates. Sometimes the expertise at third degree of some policeman receives such wide appreciation that other policeman confronted by an intractable situation or a case, requests for his assistance. He then goes like a superior performer 'tackles' the suspect and produces results, gathering a reward in the bargain. This constant positive reinforcement of third degree method when it produces results is a very important cause of violence by Police in custody. Thus, positive reinforcement of Police violence takes place because it produces results and produces them fast, at least quicker than otherwise.

5. Police Sub- culture

The police sub-culture is the sociological side of the same coin. What it amounts to is the belief that a policeman reacts to a situation in a manner peculiar to him as a policeman and thus different and identifiable from how other people would react to the same situation. The sub-culture of our police includes use of third degree methods. The police sub -culture is strengthened by alienation, cynicism, law-esteem in society, a degree of pariah feeling, conflicting demands made of policeman, inconsistent judgment of their work, all forcing them into a corner. In this situation a policeman finds succour among others of his community with whom he identifies, leading to group solidarity, which in turn provides a sense of security against the hazards of his occupation, and a basis for a medium of self-esteem and some social affiliation in spite of the irregular hours of his work. Thus develops the culture of group that which demands greater conformance to threats, tortures, rather than rules, regulations, orders etc. However can one explain the fact that a young man of good family, trained in a reasonably good manner, starts behaving, within a few years only and particularly if he is in an operational rank such as that of sub inspector, in a brutal manner, true to the stereotype of his profession in general and rank in particular.

6. Lack of Proper Training

Lack of proper training to the Police officials, often result in use of third degree methods. The utterly inadequate training given to constables, the general absence of any attention to the necessity for keeping temper, being civil and respectful to the public, avoiding brutality or unnecessary harshness, are the factors that which leads to violence. Gore committee on Police Training 1972, was of the view that one of the objectives of training should be to inculcate the right attitude towards the public which consists is never forgetting that the civil servant is the servant and not the master of the community. However, unfortunately, till date no adequate training with the objective mentioned, has yet been provided to police. Police should be given proper training which should include a separate course to impart them knowledge about the human rights and that they are here to protect the human rights and not to infringe them.

7. Other factors

Apart from the reasons mentioned above, the other reasons for custodial torture can be sexual weakness, sadism etc. Male police personnel may have a tendency of attraction towards opposite sex prisoner. For satisfaction of this lust he may use force and commit rape in the custody or he may use his official position to obtain consent

for sexual intercourse. An amendment has been made in the IPC, 1860 to provide for stringent punishment for those officers, who use their official position to obtain consent of female prisoner in the custody for having sexual intercourse with them. The third degree methods are also applied for 'teaching a lesson' or 'vomiting out anger'. It is the stage, where professional competence of the individual policeman surrenders before a situation and then he almost goes out of his mind. This can be averted if the policeman could keep their cool, not be overcome or torn by emotions, maintain a philosophical detachment and as a parallel requirement, have sufficient professional skill.

Another reason of custodial violence can be the social factor. In our country, we are accustomed to think in terms of 'an eye for an eye' and 'tooth for tooth'. Therefore, the Society tacitly expects and approves the use of violence on suspects to get the truth. Complainants themselves urge the police to use force or violence to break a suspect. Therefore, in a Society, where the public are indifferent to the use of force on fellow human beings, policemen gets, as it were, social support for these illegal acts.

- a) The third degree is a short act to quick results. As per the report of National Police Commission, an investigating officer is able to devote only 37% of his time in investigation while the rest of his time is consumed in law and order duty, VIP and security duty, court attendance and other miscellaneous duties. The result is naturally short cut and extra legal.
- b) Lack of knowledge of application and experience of scientific methods in crime investigation and interrogation of accused. Inadequate training etc.
- c) Sometimes society expects police to take tough action not sanctioned by law against criminals. Use of third degree is their service right and accepted part of profession.
- d) Political and bureaucratic influence and interference, collusion with rich and influential people and dancing to their tune.
- e) They feel immune to the fact that whatever they will do won't be questioned.
- f) Disproportionate ratio between crime rate and manpower.
- g) Lack of effective supervision and inspection of Police Station by superior officers.
- h) Delay in trial gives more time to interrogate.
- i) Erring police officials go unpunished due to lack of evidence.
- j) Psychological aberrations of the custodian – sadism, sexual weakness, social hatred, etc.
- k) Lack of time for investigation.
- l) Inability to keep a person for longer duration in custody for interrogation than 24 hours are such factors which induce police to keep suspect in 'unofficial custody' which ultimately encourage the police to indulge in custodial violence.
- m) Long duration of work and deplorable conditions of work. A study carried out by National Productivity Council had shown that a policeman has to work sixteen hours a day and seven days a week.

CUSTODIAL VIOLENCE AND INDIAN CONSTITUTION

The legal framework in India both constitutional and statutory contains provisions relating to safeguards arrest, detention, custodial torture and other crimes in custody. The substantive law (Indian Penal Code, 1861) provides punishment of a person causing injury, torture or death on the body of a person in custody. The procedural law (Criminal Procedural Code, 1973 and Indian Evidence Act, 1872) contains several provisions safeguarding the legal rights of a person in custody. The Constitutional and the relevant statutory provisions on the subject have been supplemented by the significant judicial pronouncements. In addition, the Protection of Human Right Act, 1993 provides institutions of the National and State Human Rights Commissions as well as Human Rights Courts for better protection of human rights of a person in custody. India has ratified, acceded and signed the International Declarations, Covenants, Conventions and treaties such as Universal Declaration of Human Rights(UDHR), International Covenant on Civil and Political Rights (ICCPR), International Covenant on Economic, Social and Cultural Right (ICESCR), International Convention on the Elimination of All forms of Racial Discrimination(ICERD), Convention on the Elimination of All Forms of Discrimination against Women(CEDAW), Convention on the Right of the Child (CRC), Convention against Torture and Other Cruel, inhuman or Degrading Treatment and Punishment (CAT), and the International Convention on the protection of

the Rights of All persons against Enforced Disappearance (CPAED). This apart, the UN Declaration on Basic Principles of Justice for Victims of Crime and abuse of Power is relevant.

Article 21 of the Constitution of India provides that no person shall be deprived of his life or personal liberty except according to procedure established by law. Right to life is a fundamental right. Right to life does not mean just bare existence it means life full of dignity necessary for human existence in a society, personal liberty is taken care of by Article 22 which provides that the arrested person should be informed about the grounds of his arrest and should be produced within 24 hours of his arrest before magistrate. "Liberty is the most cherished possession of man."

The protection of life and liberty and protection from or against arrest of a citizen are contained in our constitution. The protection of life and liberty of a citizen includes the person so arrested, as the person so arrested is also a citizen of India and he is protected by Article 21 of the Indian constitution and, as much if at all his life and liberty is to be curtailed, it must be according to Article 21 of the Indian constitution which says that 'no person shall be deprived of his life or personal liberty except according to procedure established by law'. The expression personal liberty is not limited to bodily restraint or to confinement to prison only as has been illustrated by Hon'ble Supreme Court in *Kharak Singh V. State of U.P*

The Constitution in its part III deals with Fundamental Rights. The prohibitions imposed by Article 20, 21 and 22 of the Constitution are directly relevant to the criminal process. Article 20 (1) prohibits retrospective operation of penal legislation. Article 20(2) guards against double jeopardy for the same offence. Article 20(3) provides that no persons accused of any offence shall be compelled to be a witness against himself. Of course, constitution article protects against testimonial compulsion on the premise that such compulsion may act as a subtle form of coercion on the accused. Article 21 of the Constitution provides that no person shall be deprived of life or personal liberty except according to procedure established by law. The expression "Life and personal liberty" occurring in the Article has been interpreted to include Constitutional guarantee against torture, assault or injury against a person arrest and custody. The following are the illustrative decisions, in *Dastagir v. State of Madras*, it was held that Punishment which has an element of torture is unconstitutional.

In case of *Inderjeet v. State of Uttar Pradesh*, the Apex Court hold the view that prison restrictions amounting to torture, pressure or infliction and going beyond what the court authorities, are unconstitutional further it extended that an under-trial or convicted prisoner cannot be subjected to physical or mental restraint, which is not warranted by the punishment awarded by the Court, or which amount to human degradation (*Sheela Barse v. State of Maharashtra* Article 22(1) and 22(2) of the Constitution are also relevant for the present purpose because one of their objects is to ensure that certain checks exist in the law to prevent abuse of power of arrest and detention. Article 22(1) provides that no person who is arrested shall be detained in custody without being informed as soon as may be, of the ground for such arrest, nor shall he be, of the grounds for such arrest, nor shall he be denied the right to consult and to be defended by legal practitioner of the choice. Article 22(2) provides that every person who is arrested and detained in custody shall be produced before the nearest Magistrate within a period of 24 hours of such arrest, excluding the time necessary for the journey from the place of arrest to court of the Magistrate and no such person shall be detained in custody beyond the said period without the authority of a Magistrate.

The "Police" figure as Entry 2 in State List in the Seventh Schedule of the Constitution, thereby making State Government primarily responsible for maintaining public order. Invariably, police, which is a part of the civil administration, is at the forefront in maintaining law and order under the framework of constitutional governance based on principles of "Sovereign Socialist Secular Democratic Republic to secure fundamental right of its citizens. In consonance with the idea of democratic policing, a Code of Conduct for the Police in India was adopted at the Conference of Inspectors General of Police in 1960 and circulated to all the State Governments.

3.3 MEANING AND DEFINITION OF POLICE, CUSTODY, CUSTODIAL VIOLENCE AND HUMAN RIGHTS Violence is a mechanism used to assert one's will over another in order to prove or feel a sense of power or superiority. It is generally perpetuated by those in power against the powerless. Violence therefore operates as a means to reinforce subordination. When a person is in duress either because he is held by the investigating agency or other police or allied authority or is under the control of the court having been remanded by Judicial Orders, or having offered himself to the court's jurisdiction and submitted to its orders by physical presence. This word is of elastic semantics but its core meaning is that the law has taken control of the person.¹³ Pre-conviction custody is known as under trial custody which is chiefly of two types- police and judicial. In police custody, the suspect is detained in the police lock-up by the investigating agency during the

period of investigation which can't be more than 24 hrs. Any detention beyond this period has to be with the permission of the magistrate and in total it can't exceed 15 days. In judicial custody there is incarceration of the suspect which is authorized by a magistrate pending investigation or trial in a jail which is distinct from a 12 S.P.Srivastava, Human Rights and the Administration of Criminal Justice in India (1993) p.73; V.V Devasia and Leelamma Devasia, Human Rights and Victimology (1998) pp. 6-7. 13 Niranjan Singh v. Prabhakar Rajaram Kharote, AIR 1980 SC 785. 53 police lock-up. The investigating agency can have access to such convict in the judicial custody only with the special orders of the court only. There is no statutory upper limit to under trial judicial custody save a provision which is commonly known as 'default bail'. The charge sheet has to be filed by the police and some other agencies who have the power of arrest and investigation like Narcotics Control Bureau, the Directorate of Enforcement and the Central Board of Excise and Customs (unless specifically some provision of CrPC has been ruled out) within 90 days in case the offence is punishable with death, imprisonment for life or imprisonment for a term of ten years or more and within 60 days in other cases. If the charge sheet is not submitted within such stipulated period then the detainee get a right to be released as a matter of right. But if the charge sheet is submitted within time then the under trial custody can continue for months and years, despite several judgments calling for speedy trial. Section 436A of CrPC provides for releasing the under trial on bail if he has been in the custody for more than half of the maximum period prescribed as punishment for which his trial is going on. But in postconviction custody, the whole term of sentence of imprisonment is to be served in the jail. There are other kinds of custody as well such as protective custody, deportation camps for foreigners whose presence has been declared to be illegal and military custody. The juveniles are housed by a special order in protection homes. For destitute women also, protection homes have been established. Under the Mental Health Act, persons may be committed to mental hospitals. Military custody is subject to the law of armed forces where only military personnel can be taken into custody and not the civilians by them. The paramilitary forces, when they exercise powers of arrest are required by law to hand over the arrested persons to the police. (http://shodhganga.inflibnet.ac.in/bitstream/10603/75380/11/11_chapter%203.pdf)

The expression 'Human Rights' has not been specifically defined in any declaration or covenant of the United Nations or in the Constitution of India. But these are generally understood as the rights which are inherent in our nature and without which we can't live as human beings. We get these rights by merely being born as human beings. Recognition of these natural rights of human beings is as ancient as the human civilization. The Human Rights trace back to the Magna Carta (1215-AD), the Petition of Rights (1627AD) and the Bill of Rights (1688) in the United Kingdom. The Declaration of Rights of Man (1789) by the French National Assembly influenced the framing of the Constitution of the United States of America and in the 19th century these rights became the basic principles of the constitutional law of modern civilized States.²² The Universal Declaration of Human Rights was unanimously adopted and proclaimed by the United Nations General Assembly on December 10, 1948. For giving legal form to the provisions, the Universal, Social and Cultural Rights came into force on January 3, 1976 and the International Covenant on Civil and Political Rights came into force in March 23, 1976. India was one of the signatories of the Universal Declaration of Human Rights, and acceded to the two International Covenants by depositing the Instrument of Accession on April 10, 1979. The Vienna Declaration and Program of action adopted on June 25, 1993 by the World Conference on human rights declared that "Human Rights and Fundamental Freedoms are the birth right of all human beings". The human rights are now recognized as the limits to the exercise of power by the State over individuals.²³ The origin of police can be traced to the time in the early human history when small nomadic groups sought the help of the strong and dependable man for watch and ward purposes and to guard against the attack of animals and the selfish human beings. As these groups organized themselves into tribes and ²² P.K.Mishra, Custodial Death: A Crude Action of Human Rights Violation Indian Human Rights Law Review vol.1.no.1 June 2010. ²³ S.K.Awasthi and R.A.Kataria, Law Relating to Protection of Human Rights (2001) p.832. 59 settled down in small communities, they began to evolve rules and regulations for the protection of persons and property. Simultaneously, the agency for the enforcement of these tribal laws also originated. Thus, the earliest law enforcement agency was, perhaps, a kind of military police. Policemen have existed since time immemorial and are found almost everywhere in the world. It is unfortunate that the exact details of police organisation in ancient India are not available and so different materials scattered in various scriptures and Shastras are to be stitched together to have a coherent picture of the police system.²⁴(http://shodhganga.inflibnet.ac.in/bitstream/10603/75380/11/11_chapter%203.pdf)

Custodial violence and abuse of power of law by the enforcing machineries like police is not only peculiar but it is widespread in this democratic country. It has been the concern of international community as the problem is universal and challenge is almost global. The Article 5 of the Universal declaration of Human Rights, 1948

clearly states that "No one shall be subjected to torture or to cruel, inhuman or degrading treatment or punishment".

Further, Article 7 of the International Covenant On Civil and Political Rights, 1966 also states in a similar way - "No one shall be subjected to torture or to cruel, inhuman or degrading treatment or punishment" Article 9(1) of the said covenant also says that "Everyone has the right to liberty and security of person. No one shall be subjected to arbitrary arrest or detention. No one shall be deprived of his liberty except on such grounds and in accordance with such procedure as are established by law."

India has already ratified the aforesaid declaration and covenant. Despite such ratification, the custodial crimes continues unabated. In all custodial crimes what is of real importance is not only infliction of body pain but the mental agony which a person undergoes within the four walls of police lock up.

ARTICLE 21 OF THE INDIAN CONSTITUTION PROVIDES

"No person shall be deprived of his life or personal liberty except according to procedure established by law." Personal liberty, thus is a cherished right under the Constitution. The expression life or personal liberty has been held to include the right to live with human dignity and thus it would also include within itself a guarantee against torture and assault by the State and its law enforcing machineries. Article 22 guarantees protection against arrest and detention and declares that no person who is arrested shall be detained in custody without being informed of the grounds of such arrest and he shall not be denied the right to consult and defend himself by a legal practitioner of his choice.

Article 22(2) states that person arrested and detained in police custody shall be produced before the nearest Magistrate within a period of 24 hrs. of such arrest, excluding the time necessary for the journey from the place of arrest to the Court of the Magistrate. Section 50 of the Criminal Procedure Code, 1973 enjoins every police officer arresting any person without warrant to communicate to him the full particulars of the offence for which he is arrested and the grounds for such arrest. The police officer is further enjoined to inform the person arrested that he is entitled to be released on bail and he may arrange for sureties in the event of his arrest for a non-bailable offence.

In spite of the constitutional and other provisions for safeguarding the life and liberty of the public growing incidence of torture and deaths in police custody has been a disturbing factor. Incidents of violation of human rights take place during the course of investigation, when the police with a view to secure evidence or confession often resorts to third degree methods including torture and adopts technique of screening arrest by either not recording the arrest or describing the deprivation of liberty merely as a prolonged interrogation. There are various newspaper reports of torture, assault, rape and death in the police custody or other law enforcing machineries. The increasing incidence of torture and death in custody has assumed such alarming proportions that it is affecting the credibility of rule of law and the administration of criminal justice system.

Police is, no doubt, under a legal duty and has legitimate right to arrest a criminal and to interrogate him during the investigation of an offence but it must be remembered that law does not permit use of third degree methods or torture of accused in custody during interrogation and investigation with a view to solve the crime. The interrogation and investigation into a crime should be in true sense purposeful to make the investigation effective. By torturing a person and using third degree methods, the police would be accomplishing behind the closed doors what the demands of our legal order forbid. No democratic society can permit it.

In the case of Nilabati Behra V. State of Orissa reported in (1993) 2 SCC 746, the Hon'ble Supreme Court of India has held that: "It is axiomatic that convicts, prisoners or under trials are not denuded of their fundamental rights under Article 21 and it is only such restrictions as are permitted by law which can be imposed on the enjoyment of the fundamental right by such persons. It is an obligation of the state to ensure that there is no infringement of the indefeasible rights of a citizen to life, except in accordance with law while the citizen is in custody. The precious rights guaranteed by Article 21 of the Constitution of India cannot be denied to convicts, undertrials or other prisoners in custody except according to procedure established by law... The duty of care on the part of the State is strict and admits no exceptions. The wrongdoer is accountable and State is responsible if the person in custody of the police is deprived of his life except according to the procedure established by law."

In order to prevent and check the misuse of power by the police and other investigating agencies, the Supreme Court of India has laid down 11 (eleven) requirements and directions to be followed in all cases of arrest or detention in the landmark case of D.K. Basu - Vs - State of West Bengal reported in (1997) 1 SCC 416. The following points are also included "The police personnel carrying out the arrest and handling the interrogation

of the arrestee should bear accurate, visible and clear identification and name tag with their designations. The particulars of all such police personnel who handle interrogation of the arrestee must be recorded in a register.

That, the police officer carrying out the arrest of the arrestee shall prepare a memo of arrest at the time of arrest and such memo shall be attested by at least one witness, who may either be a member of the family of the arrestee or a respectable person of the locality from where the arrest is made. It shall also be countersigned by the arrestee and shall contain the time and date of arrest

The arrestee should be subjected to medical examination by a trained doctor every 48 hrs. during his detention in custody by a doctor on the panel of approved doctors appointed by Director, Health Services of the State or Union Territory concerned. Director Health Services should prepare such a panel for all tehsils and districts as well.

The arrestee may be permitted to meet his lawyer during interrogation, though not throughout the interrogation...

A police control room should be provided at all district and State headquarters, where information regarding the arrest and the place of custody of the arrestee shall be communicated by the officer carrying out the arrest, within 12 hours of effecting the arrest and at the police control room it should be displayed on a conspicuous notice board.

The Hon'ble Apex Court further warned that failure to comply with the aforesaid 11 (eleven) requirements shall apart from rendering the official concerned liable for departmental action also render him liable to be punished for contempt of Court and the proceedings for contempt of Court may be instituted in any High Court of the country having territorial jurisdiction over the matter.

In the said case of D.K. Basu, the Hon'ble Supreme Court of India further held that custodial death is perhaps one of the worst crimes in a civilised society governed by the rule of law. If the functionaries of the government become law-breakers, it is bound to breed contempt for law and would encourage lawlessness and everyman would have the tendency to become law unto himself thereby leading to anarchism. No civilised nation can permit that to happen.

In Rudul Shah - Vs - State of Bihar reported in (1983) 4 SCC 141, the Hon'ble Supreme Court of India has held that the supreme Court under Article 32 of the Constitution of India can grant compensation for the deprivation of personal liberty though ordinary process of Court may be available to enforce the right and money claim could be granted by the Court. Accordingly compensation was awarded. This view was reiterated in Nilabeti Behera Vs. State of Orissa reported in (1993) 2 SCC 746 and the Supreme Court awarded monetary compensation for custodial death lifting the State immunity from the purview of public law.

In D.K. Basu case also, the Supreme Court held that grant of compensation in proceedings under Article 21, in an exercise of the Courts under the public law jurisdiction for penalizing the wrongdoer and fixing the liability for the public wrong on the State which failed in the discharge of its public duty to protect the fundamental rights of the citizen. It is therefore settled law that in public law the claim for compensation is a remedy available under Article 32 or 226 of the Constitution of India for the enforcement of the fundamental rights. The defence of sovereign immunity is inapplicable and alien to the concept of guarantee of fundamental rights.

Attention is required to be given to properly develop work culture, training and orientation of the police force consistent with basic human values. Training methodology of the police needs restructuring. The force needs to be infused with basic human values and made sensitive to the constitutional ethos. Scientific methods of investigation also requires to be introduced. To deal with such a situation, a balanced approach is needed to meet the ends of justice. The endeavour should be to achieve balanced level of functioning where police respect human rights, adhere to law and take confidence building measures and at the same time, deal with organised crimes, terrorism, white collared crime, deteriorating law and order situation etc.(http://www.e-pao.net/epSubPageExtractor.asp?src=education.Human_Rights_Legal.Custodial_torture_A_naked_violation_of_human_rights)

The Supreme Court has viewed seriously ineffective implementation of series of directions to curb custodial deaths and sought explanation from the Centre and states after being informed that nearly 12,000 persons died — either in jail or in police stations — in last five years.

A bench of Justices S S Nijjar and F M I Kalifulla was pained when amicus curiae A M Singhvi moved an application seeking implementation of 15 more guidelines to clamp down on custodial excesses, which has

resulted in the death of 11,820 and 3,532 reported cases of custodial torture between 2007 and 2012.(
<http://timesofindia.indiatimes.com/india/11820-custodial-deaths-in-five-years/articleshow/26283098.cms>)

JUDICIARY ON CUSTODIAL DEATH AND VIOLENCE

In *Jogindar Kumar v. State of U.P.* (1994) 4 SCC 260, the Supreme Court has laid down guidelines governing arrest of a person during investigation. This has been done with a view to strike a balance between the needs of police on the one hand and the protection of human rights of citizens from oppression and injustice at the hands of law enforcing agencies.

In a landmark judgement of *Nilabati Behera v. State of Orissa*, (1993) 2 SCC 746, the Supreme Court awarded compensation Rs. 1,50,000/- to the mother of the deceased who died in the police custody due to beating.

In another landmark judgement in *D.K. Basu v. State of W.B.*, AIR 1997 SC 610, the SC has laid down detailed guidelines to be followed by the Central and State investigating and security agencies in all cases of arrest and detention.

Justice Kuldeep Singh and Justice Dr. A.S. Anand observed that custodial death is perhaps the worst crime in a civilised society governed by the rule of law. The court held that the precious rights guaranteed under Article 21 of the Constitution could not be denied to convicts, under trials and other prisoners in the custody, except according to the procedure established by law.

In *People's Union for Civil Liberties v. Union of India*, AIR 1997 SC 1203, the SC held that the killing of two persons in fake encounter by the police was clear violation of the right to life guaranteed under Article 21 of the Constitution.

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IMPACT OF SUPERIOR-SUBORDINATE RELATIONSHIP ON PERSONAL PROGRESS – A STUDY**Dr. Dhananjay Awasarikar**

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ABSTRACT

In the literature, readily available, in the field of Management on the topic of 'Superior –Subordinate Relationship,' in majority Research Studies, several guidelines are given to the Subordinate as to how to manage the Superior and also as to how to adjust one's own Organizational Behavior, as a Subordinate, in order firstly to survive and secondly to progress, within the Organization. At the same time, really, very few Researchers have attempted to look at the same situation from an altogether different angle, that is, from the point of view of the Personalities of both the Superior and the Subordinate.

It is observed in different organizations, on a number of occasions that the two vital factors namely, the nature of the Superior and that of the Subordinate are dependent on each other. In this Research Paper, the Researcher has attempted to study the impact of the nature of the Personality of the Superior on Personal Growth of the Subordinate.

On the basis of four different conceptual definitions developed by the Researcher after relying on his Experience, both Corporate (Ten Years) and Academic (Twenty Five years), the Researcher has put forward his own Observations, in the Research Paper. These vital Observations may act as practical guidelines for several Subordinates, particularly fresh, as these Observations may be helpful and useful for them while arriving at a decision whether to continue in the same Organization or switch over to the other one, after watching forgoing or prevailing signs of Personal Progress in reasonable time.

Key Words : Good Superior, Good Subordinate, Superior Who is not Good, A Subordinate Who is not Good

INTRODUCTION

In the literature, readily available, in the field of Management on the topic of 'Superior –Subordinate Relationship,' in majority Research Studies, several guidelines are given to the Subordinate as to how to manage the Superior and also as to how to adjust one's own Organizational Behavior, as a Subordinate, in order firstly to survive and secondly to progress, within the Organization. At the same time, really, very few Researchers have attempted to look at the same situation from an altogether different angle, that is, from the point of view of the Personalities of both the Superior and the Subordinate.

RATIONALE OF THE RESEARCH PAPER

Gone are the days when the employees used to stay loyal with an organization relatively for long time - that is, until the time they used to retire or after serving for quite a good number of years. Of late, they believe on fast Personal progress. As a result, if they do not obtain the Official Position or Pay Package or other Privileges which they think they desire within the reasonable time which they decide, they do not, at all, hesitate to switch over to the other job just in a very short span of time. While arriving at such decisions, sometimes, it is noticed that they do consult different experts of the concerned field.

Especially because multifarious and dynamic career opportunities are readily available, at present, in Indian Economy, the employees, particularly young employees falling within the age group of twenty five to thirty five, firmly believe that personal progress must necessarily result at a very fast pace, that too, at relatively small stage of age. Further, they do not intend to work till their retirement and prefer to retire voluntarily at an early date. Adoption of this kind of Philosophy in life has changed Human Life Style, quite drastically and dramatically, of late, however, this puts an additional pressure on the wish of their fast Personal Growth.

It is observed in different organizations, on a number of occasions that the two vital factors namely, the nature of the Superior and that of the Subordinate are dependent on each other. In this Research Paper, the Researcher has attempted to study the impact of the nature of the Personality of the Superior on Personal Growth of the Subordinate.

RESEARCH PAPER OBJECTIVE

The Research Paper Objective is as follows.

1. To Study Impact of Superior-Subordinate Relationship on Personal Progress

RESEARCH PAPER METHODOLOGY

The Methodology adopted for writing the Research Paper is as follows.

1. The Researcher has developed four different Conceptual Definitions on the basis of his Social Observations and Human Interactions in different Organizations in order to Create foundation for the Research Paper.
2. The Research Paper is exclusively based on Primary Data which is collected by the Researcher through adoption of Observation Methodology. The specific details of the Organizational Behaviour of both the Superior and the Subordinate in different Organizations are described in the section of Practical Observations.
3. Several inferences, were arrived at and personal views were formed after applying logical interpretations in different situations.

CONCEPTUAL DEFINITIONS

Before proceeding with the detail narration of the Research Topic, the Researcher would like to *introduce and conceptually define* a few terms, on the basis of which the Research Paper, proper has progressed. These terms describe the exact meaning which the Researcher intends to convey through this Research Paper.

The meaning of the word '**Good Superior**' indicates that he relies on subordinate's Merit, Efficiency (Doing things rightly), Effectiveness(Doing right things), Experience, Seniority, moreover, Justice, Equity, Conscience, etc. reflect through his Participative or Democratic Leadership Style.

The meaning of the word '**Good Subordinate**' denotes that the subordinate has trust on his Superior in the sense that he believes (may be blindly) that the Superior would fairly, impartially, judiciously, equitably, humanly, favorably (not, at all, critically) assess his performance, especially, while giving an annual notional increment.

The meaning of the word '**A Superior who is not good**' is that he indulges personally in the Inter-Organizational Politics, reflects Favoritism, Partiality, Inequity, Unfairness, Bias through his irrational and at times, Emotional Decision Making and follows Autocratic Leadership Style.

The meaning of the word '**A Subordinate who is not good**' interprets that he believes in Politics (Less on Merit), he respects only those Organizational members who are in Power and Position, as far as possible, he tries to cheat other Organizational members and selectively and tactfully cooperates with them out of compulsion and not out of liking as one of the own Personality traits.

NATURE OF THE TERMS

In the four terms stated above, the Personality characteristics of 'Good Superior,' 'Good Subordinate,' 'A Superior who is not good,' and 'A Subordinate who is not good,' which are described, quite briefly, are merely representative or simply indicative of the nature of different Personalities. Thus, they are *totally suggestive and not, at all, exhaustive* in their practical nature. So also, depending upon the nature of the Organization, either one or even more Personality Qualities can certainly be added or deleted, as and when the situation would demand. However, different qualities of Personalities described through these four terms can surely be treated as '**Base Qualities**' or an **Organizational Benchmark**.

PRACTICAL OBSERVATIONS

After observing different consequences in different Organizations, the following concrete observations can be put forward.

OBSERVATION NO - I

Wherever both the Superior and the Subordinate were 'Good,' Personal Progress (Going up the Organizational Ladder- Hierarchy) was observed easy. Also, there were no personal barriers or rational reservations on the part of the Superior towards the Subordinate while promoting or giving an annual normal notional increment to the subordinate. Besides, wherever the performance of the Subordinate was indeed, 'Extra-ordinary', extra ordinary increment, too, was given by the Superior to the Subordinate without any hesitation whatsoever.

In such a situation, both the Superior and the Subordinate feel extremely happy and fully satisfied with their Level and Quantum of Achievement. As a result, they enjoy their existing work and also they like to continue working together in order to achieve common objectives of the Organizations, as a whole, in general and in the process, achieving their personal objectives, especially, about their Personal Growth, in particular.

Observation No - II

Wherever the Subordinate was 'Good' and the Superior was 'Not Good,' the Subordinate had to struggle, in fact, a lot to get promoted or to get an annual normal notional increment, forget 'Extra-ordinary increment,'

irrespective of the fact of 'Extra-ordinary Performance' of the Subordinate. Furthermore, in some Organizations, the Subordinates were not given normal increments, even years after years.

Therefore, wherever such increments were given, they were given out of compulsion, that is, because of different objections raised by Regulatory Authorities. It may necessarily not be out of place to point out over here that Regulatory Authorities, in general, do not favor 'Poor' and 'Pure' Subordinate. At the same time, they deliberately tend to support the Superior's Organization, basically because of the possibility of 'Handsome Gain,' to be obtained, may not be overtly or directly, but covertly or indirectly from the Superior's Organization. In practice, in rough technical language, this phenomenon is popularly termed as 'Under the Table Agreement' or 'Below the Carpet Arrangement.'

In such an organization, only the Superior feels extremely happy at the cost of happiness of his Subordinate. Here, the Superior tries his all the best to extract maximum Quality Work from the Subordinate, but, preferably at as low cost as possible. At the same time, he takes adequate care to ensure that the competent, meritorious and efficient subordinate does not get well recognized within the organization. As a result, the Subordinate is observed unhappy and dissatisfied with the work which he performs because he does not get full recognition within the organization, that too, sometimes, at the cost of heavy monetary loss in salary, especially, over a long period.

Observation No - III

Wherever both the Superior and the Subordinate were 'Not Good,' there was absolutely no trouble whatsoever for Personal Progress in the Organization. All the important designations were 'Gifted' to a Non-Deserving 'Subordinate who was Not Good,' by a 'Superior who was not Good,' sometimes, without caring to check whether such designations fit in the nature of the Organizational Hierarchy. No doubt, this did amount to injustice to deserving, thus, 'Good Subordinates,' who were observed frustrated because in spite of putting in the best efforts and exhibiting utmost efficiency in performance, they could not get the Reward or Public Recognition or Qualitative Appreciation in the practical form of either an increment or promotion.

Really, they miserably failed to follow that there existed a very wide gape between the criteria they perceived as appropriate to get either an increment or promotion and the criteria, the Superior (who was not good) adopted while arriving at such significant decisions which affected them, quite adversely, not only personally, but also, morally, psychologically and officially.

Observation No - IV

Wherever the Superior was 'Good' and the Subordinate was 'Not Good,' the Superior had, as a matter of fact, given many chances to the Subordinate to convert himself as a 'Good' Subordinate. Thereafter, either of the following two practical consequences followed in organizations. In some cases, firstly, the Superior could achieve grand success in converting a 'Subordinate who was not good,' into 'Good' whereas in some other cases, secondly, the Superior could not convert a 'Subordinate who was not good,' into 'Good.'

Indeed, it is matter of a challenge for a Superior in any organization to convert a 'Subordinate who was not good,' into 'Good.' For a Superior, such organizational occasions are the occasions of test of technique for meticulous exhibition of appropriate Leadership Styles and Qualities. However, as it is crystal clear, whenever there are involved two or more human beings in any situation, unilateral decision can never ever be arrived at. Thus, unless and until, the subordinate himself decides from within to change himself, he can certainly not achieve that and consequently, the Superior cannot notice the change, in a Subordinate, which he initiates and desires.

At the same time, in some organizations, in spite of an honest attempt on the part of the Superior to change the 'Subordinate, who is not good,' into 'Good,' it was realized by the Superior that nothing can actually be done beyond a certain limit because of personal constraints existing within the Subordinate in the practical form of lack of reasonable level of Intelligence, lack of Creativity, Dedication and Determination, Disinterest to learn new skills necessary for performance of a specific job, etc.

RESEARCH PAPER LIMITATIONS

1. As the Research study for this Paper is based on Human Views, that is, Views of the Researcher, all the limitations of Human Views have direct and deep impact on various views formed and inferences arrived at by the Researcher in this Research Paper.

(At the same time, it may, necessarily, not, at all, be out of place to point out, over here that those views and inferences are based on fully considered, well balanced and sound judgment of past real situations in different Corporate and Academic Organizations.)

2. Various views expressed in this Research Paper are partially based on Organizational Observations of the Researcher himself and his Experiences during Organizational Interactions with many Superiors and subordinates on a number of occasions. As a result, full Concurrence with all the personal views as well as personal opinions of the Researcher is certainly not possible, in practice.

SCOPE FOR FUTURE RESEARCH

During the course of the study of this Research Paper, the researcher found out that there is an ample scope and adequate potential for research in future for the following topic related to the nature of Organizational relationship between the Superior and the Subordinate.

1. Organizational Behaviour Adjustment in the light of the Nature of Superior's Personality – A Study

FOOT NOTES

1. In the Research Paper, the word 'Bad' was deliberately evaded while describing the nature of various kinds of Personalities of the Superior and the Subordinate basically because the Organizational Behaviour of both the Superior and the Subordinate was observed highly and erratically fluctuating on a continuum from 'Very Bad' to 'Bad.' Thus, sometimes, it was, indeed, very difficult for the Researcher to classify the Organizational Behaviour into different categories. Hence, it was rationally decided to avoid such a confusion and describe the same by using the terminology like 'A Superior who is not Good' and 'A Subordinate who is not Good.'
2. The details, like Names, Addresses, Nature, etc. of the Organizations where the Observations was carried out by the Researcher, are not disclosed in the Research Paper in order to maintain the confidentiality.

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MEASURING BANK SERVICE QUALITY IN INDIAN BANKS BY USING SERVPREF MODEL

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ABSTRACT

The service quality as per customer's perspective means that how well the service meets or exceeds expectations. It refers 10 service quality determinants which are used by customers in assessing the service quality. These are reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding/ knowing the customer and tangibles. Also asserts that service quality has six determinants. These are professionalism and skills, attitudes and behaviour, accessibility and flexibility, reliability and trustworthiness, recovery, reputation and credibility. The determinants of service quality are also well explained in the service quality models. Since, services typically require direct human contact, customers and employees interact with each other within the organization's physical facility it is important to measure the level of services quality. Thus to measure the same SERVPREF model is being used for Indian banks to measure the service quality. It has found that out of all 22 variables only 4 variables Sat_11, Sat_19, Sat_3 and Sat_10 explains the satisfaction from quality of service offered by banks operating in India.

INTRODUCTION

Perceived service quality especially in banking sector has been found to be a culture and context specific construct that is influenced by cultural and environmental factors and there are no publicly available standard scales for measuring perceived quality in banks. While measures for perceived quality of banking have been developed in Indian context, they have not been empirically validated through confirmatory factor analysis. The study would thus contribute to the persistent debate over generic versus setting/industry/time specific service quality metrics by empirically testing and validating a model of perceived service quality in banking in Indian context. The awareness has already dawn that prompt, efficient and speedy customer service alone will tempt the existing customers to continue and induce new customers to try the services offered by a bank. Indian banks have already taken lot of initiatives in this regard. The current research work is conducted with objectives including measuring the quality of service offered by banks operating in India and measuring the satisfaction of customers from the quality of service offered banking industry in Indian context.

REVIEWS OF LITERATURE

Surjadaja et al (2003)ⁱ presented three dimensions- service marketing, service design and service delivery- consisting of 20 determinants essential for e-service operations. Zhu et al (2002)ⁱⁱ proposes a service quality model for IT-based service options linked to the traditional service dimension as measured by SERVQUAL. Ibrahim et al (2006)ⁱⁱⁱ in their study of electronic service quality perception, identify six composite dimensions. Zeithaml et.al, (2003)^{iv} draws attention to service delivery through electronic channels but limits the scope to internet banking. Similarly, Parasuraman (2005) confines the study to the service quality of websites. There exists a significant gap in the research carried out on the service quality of technology interfaces.

Mols (2000)^v argued that customer acceptance of new technology-based channels of service delivery in banks may bring a dramatic change in the way banks build and maintain close relationships with their customers. Al-Hawari et al (2005)^{vi} propose 5 dimensions of automated service quality- ATM service, telephone banking service, internet banking service, price perceptions and core service. The introduction of new technology-based channels of service delivery has made customer participation more widely possible and researchers therefore need to adopt new ways to conceptualize technology interfaces service quality, taking into consideration the attributes of all electronic delivery channels.

Mersha, T., Sriram, V., Yeshanew, H. and Gebre, Y. (2012)^{vii} used the SERVQUAL method to assess perceived service quality in selected Ethiopian banks based on customer surveys conducted in three private and the largest public bank in Addis Ababa. For all banks, service expectations were not matched by perceived performance. While there were only a few differences in service expectations between public and private banks, private banks were perceived to be relatively better in delivering service. The findings also indicate that perceived service quality falls short of customer expectations in all the five dimensions of service quality—tangibles, reliability, responsiveness, assurance and empathy—with the largest perception-expectation gap observed for the empathy dimension. As the banking sector becomes increasingly more competitive in Ethiopia, these findings can provide valuable insight to bank managers regarding the specific customer service issues that they need to address in their ongoing effort to attract and retain more customers.

Dai, N., Jo, H. and Schatzberg, J. D. (2010)^{viii} investigated the market structure and the pricing by placement agents of private investments in public equities (PIPEs). Our findings indicate that more reputable agents are associated with larger offers and with firms possessing lower risk. Agent reputation is positively associated with lower discounts and an enhanced post-PIPE trading environment. Issuers pay a higher dollar fee for these benefits, although more reputable agents charge a lower percentage fee. The evidence suggests that it is the quality of the issuing firm, and the pricing and reputational concern of the placement agent, that drives the equilibrium in the PIPE market.

Dick (2007)^{ix} revealed that local banking markets depict enormous variation in population size. Yet this paper finds that the nature of bank competition across markets is strikingly similar. First, markets remain similarly concentrated regardless of size. Second, the number of dominant banks is roughly constant across markets of different size; it is the number of fringe banks that increases with market size. Third, service quality increases in larger markets and is higher for dominant banks. The findings suggest that banks use fixed-cost quality investments to capture the additional demand when market size grows, thereby raising barriers to entry.

Ennew, C. T. and Binks, M. R. (1996)^x explained that the recent developments in relationship marketing have increasingly focused attention on the beneficial effects of customer retention. The notion of building relationships and delivering quality service in order to encourage loyalty is perhaps of particular importance in the service sector where it is often argued that customer attraction costs are significantly higher than retention costs. Central to the idea of investment in the development of service quality and customer relationships is the belief that such investments will enhance loyalty, retention and profitability. Empirical evidence on the extent to which such links exist is still partial. This paper explores the relationship between service quality/customer relationships and customer loyalty and retention using evidence from the UK banking sector and its small business customers.

Oxman, J. A. (1992)^{xi} explained that in 1991 American Express Bank launched a global service quality measurement program. Quantifying timeliness and accuracy of key banking services from a client perspective, the program has provided valuable input toward enhancing client service levels. Program automation and ongoing quality reporting are now helping the bank deliver consistent, superior service worldwide.

Titko Jelena , Lace Natalja , Kozlovskis Konstantins (2013)^{xii} highlighted the importance of managing service quality in banking that can positively affect customer satisfaction. The goal of the given study is to develop an instrument for measuring service quality perceived by Latvian banks' retail customers and to determine the most important contributors to customer satisfaction. To achieve this purpose, randomly selected customers of Latvian banks were surveyed, using the authors' developed questionnaire. The proposed instrument was tested for reliability and validity, using techniques of confirmatory factor analysis. Exploratory factor analysis yielded five service quality dimensions (factors) that allowed constructing customer satisfaction factor model EPICA: E-expenses, P-product, I-image, C-competence and emotional intellect, Access. The subsequent correlation analysis revealed that the strongest relationship is between customer satisfaction and C factor. The results of the current research are crucially important for Latvian banks' executives because the majority of previous studies in the related field off red measurement scales adequate for measuring service quality in other industries. Besides, the proposed questionnaire is exclusively developed for Latvia and considers Latvian banking sector specifics.

Nkululeko Praise God Zungu , Roger B. Mason (2017)^{xiii} Investigated service quality as perceived by younger customers of retail banks in a developing country. The objectives include identifying customers' levels of satisfaction and loyalty to their banks and to identify the levels of service quality associated with such satisfaction and loyalty. The instrument used to collect data via a survey of retail bank customers was an adaptation of the SERVQUAL questionnaire. A total of 448 students were surveyed, using a mix of systematic and quota sampling, with data being collected on university campuses. Data were analyzed using descriptive statistical techniques.

The main conclusions were that most young customers are reasonably satisfied with, and loyal to, their banks. There was little difference, on all the service quality constructs, between the different banks, and between expectations and perceptions of service quality. However, there was no evidence of any bank providing a service that delighted their customers or exceeded their expectations and so all banks are at risk from a competitor who adopts strategies to meet these goals. The study has contributed to knowledge by focusing on attitudes to service quality of young bank customers in a developing country, an aspect that has been under-researched.

Mersha, T., Sriram, V., Yeshanew, H. and Gebre, Y. (2012)^{xiv} used the SERVQUAL method to assess perceived service quality in selected Ethiopian banks based on customer surveys conducted in three private and the largest public bank in Addis Ababa. For all banks, service expectations were not matched by perceived performance. While there were only a few differences in service expectations between public and private banks, private banks were perceived to be relatively better in delivering service. The findings also indicate that perceived service quality falls short of customer expectations in all the five dimensions of service quality—tangibles, reliability, responsiveness, assurance and empathy—with the largest perception-expectation gap observed for the empathy dimension. As the banking sector becomes increasingly more competitive in Ethiopia, these findings can provide valuable insight to bank managers regarding the specific customer service issues that they need to address in their ongoing effort to attract and retain more customers.

Tigneh Mersha & Ven Sriram (2012)^{xv} used the SERVQUAL method to assess perceived service quality in selected Ethiopian banks based on customer surveys conducted in three private and the largest public bank in Addis Ababa. For all banks, service expectations were not matched by perceived performance. While there were only a few differences in service expectations between public and private banks, private banks were perceived to be relatively better in delivering service. The findings also indicate that perceived service quality falls short of customer expectations in all the five dimensions of service quality—tangibles, reliability, responsiveness, assurance and empathy—with the largest perception-expectation gap observed for the empathy dimension. As the banking sector becomes increasingly more competitive in Ethiopia, these findings can provide valuable insight to bank managers regarding the specific customer service issues that they need to address in their ongoing effort to attract and retain more customers. Perceived service quality in Ethiopian retail banks.

Josée Bloemer, Ko de Ruyter & Pascal Peeters, (1998)^{xvi} investigated how image, perceived service quality and satisfaction determine loyalty in a retail bank setting at the global construct level, as well as the level of construct dimensions. At the global level the results of a large-scale empirical study reveal that image is indirectly related to bank loyalty via perceived quality. In turn, service quality is both directly and indirectly related to bank loyalty via satisfaction. The latter has a direct effect on bank loyalty. At the level of the dimensions underlying aforementioned constructs, it becomes clear that reliability (a quality dimension) and position in the market (an image dimension) are relatively important drivers of retail bank loyalty.

Carsten HornMarkus Rudolf (2011)^{xvii} examined the concept of service quality in private banking theoretically and empirically and identifies factors which contribute to service quality. A multidimensional and hierarchical model is developed based on the work of Rust and Oliver (in Service Quality, 1994) and Brady and Cronin (2001). The model is then empirically tested among private banking providers with the partial least squares method. Furthermore, the developed model is compared to other approaches, including Grönroos (1984). Another model for comparison excludes the indirect effects of Grönroos (1984) and focuses on the direct effects on service quality. We can conclude that the model based on Rust and Oliver (1994) and Brady and Cronin (2001) produces the best results and can best explain service quality in private banking. Finally, an analysis of various provider groups is conducted in order to identify differences between private banking providers in Germany, Switzerland, Austria and Liechtenstein and between providers with various minimum investment requirements.

As per Lewis and Booms (1983)^{xviii} Service quality measures the level of service delivered and customer expectations. The dominant paradigm of conceptualizing service quality is the disconfirmation paradigm wherein Delivering quality service means conforming to customer expectations on a consistent basis (Parasuraman et al., 1985)^{xix}. The SERVQUAL scale has been widely used for measuring service quality in various studies on service quality (Lai et al., 2007). SERVQUAL was developed by Parasuraman et al. (1988)^{xx}, and is based on the concept of the disconfirmation paradigm.

The original SERVQUAL scale consisted of 22 pairs of items representing five service quality dimensions—tangibles, reliability, responsibility, assurance, and empathy. The 22 items were used to evaluate the level of the customers' expectations over a service delivered by a service provider. The other 22 items were used to evaluate the actual level of the service performance as perceived by the customers (Parasuraman et al., 1988). While the SERVQUAL scale has been applied across a wide range of services, there has been lack of consensus on the same and SERVQUAL has been criticized on the applicability and the generalizability of the SERVQUAL scale across different service industries (Carman, 1990)^{xxi} and other issues. Various researchers have criticized it over its use of gap scores, measurement of expectations, positively and negative worded items, problems with the reliability and the validity, and the defining of a baseline standard for good quality (Oliver, 1993; Brown et al, 1993; Cronin and Taylor, 1992; Bakakus and Boller, 1992; Carman, 1990).

Subsequently, SERVPERF scale were introduced by Cronin and Taylor (1992)^{xxii}, which is a performance-based approach as an alternative method for measuring service quality based on customers' perceptions of service performance only. They reported that the performance-based approach has a higher degree of model fit, and explains more of the variations in an overall measure of service quality than the gap-based SERVQUAL scale Cronin and Taylor (1992).

Though Parasuraman, Zeithaml, and Berry (1994)^{xxiii} defended measuring customers' expectations as appropriate in order for marketing practitioners to understand customers' expectations, they (Zeithaml, Berry, and Parasuraman, 1996) later conceded that the performance-based approach is more appropriate if the primary purpose of a research is to explain the variance in a dependent construct.

Service quality studies in traditional face-to-face banking have mostly adopted the five dimensional SERVQUAL model (Parasuraman et al. 1985, 1988)/SERVPERF (Cronin and Taylor, 1992) approach or some customized version of it (e.g. Yavas et al., 1997; Cronin and Taylor, 1992b; Newman, 2001; Angur et al., 1999; Lassar et al., 2000; Chi-Cui et al., 2003; Balestrini and Huo, 2005; Dash, 2006 etc.). Company proprietary scales have been developed to address specific situations (Bahia and Nantel, 2000)

RESEARCH METHODOLOGY

To conduct the current study the targeted population for study include customers of bank branches in India and by using Stratified convenient Sampling the methodology used is shown in following points:

Population: A population is the aggregate of all the elements that share some common set of characteristics and that comprise the universe for the purpose of the research problem. All the items under consideration in any field of inquiry constitute a 'universe' or 'population'. The universe of present study consists of all banks working in private or public sector out of which 5 Public and 5 private sector banks were selected. That includes SBI, BOB, BOI, PNB, UCO, HDFC, ICICI, KOTAK, YES and HSBC Banks.

Sample unit and size: Customers are selected from 10 Banks to provide help for the current study and out of the total customers 500 were selected for the study.

Primary data source: Primary data was collected from customers of 10 selected banking companies in India. This study involves primary data collection through structured questionnaire filled by customers

Data Analysis Technique: For the current research work one way ANOVA and multiple regression analysis were used.

DATA ANALYSIS

As per the objective (To measure the quality of service offered by banks operating in India.) the agreement of the respondents related with the various areas of satisfaction are checked with the broader hypothesis. The perceptions of the customers are sought in relation to satisfaction with the banking services in all the selected banks. The following hypothesis was developed:

H_{1(a)}: The attributes configuring satisfaction from the quality of service offered dimension significantly influence satisfaction from the services offered by banks operating in India.

To identify key variables in satisfaction from quality of services offered by Indian banks, multivariate regression analysis has been used with SPSS-19 software and results were shown in table -1 as under:

Table-1: Multiple regression analysis of overall satisfaction from banking service provided by Indian banks

Descriptive Statistics			
	Mean	Std. Deviation	N
Overall_sat	3.4260	1.00126	500
Sat_1	4.0540	.81757	500
Sat_2	3.7620	1.02931	500
Sat_3	2.1860	.95773	500
Sat_4	2.6140	.83570	500
Sat_5	3.5480	1.32181	500
Sat_6	3.3820	1.24707	500
Sat_7	2.3140	1.02445	500
Sat_8	3.8400	.93817	500
Sat_9	2.7240	1.56612	500
Sat_10	3.5480	1.46560	500

Sat_11	3.6160	.94144	500
Sat_12	3.6780	1.12108	500
Sat_13	3.7200	1.18169	500
Sat_14	3.7300	1.09339	500
Sat_15	2.4460	1.05133	500
Sat_16	3.6240	1.02211	500
Sat_17	2.5960	1.51967	500
Sat_18	2.6260	1.28117	500
Sat_19	2.3740	.96332	500
Sat_20	2.1100	.76882	500
Sat_21	2.6680	1.26213	500
Sat_22	4.0300	.84767	500

Variables Entered/Removed ^a			
Model	Variables Entered	Variables Removed	Method
1	Sat_11	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
2	Sat_19	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
3	Sat_3	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
4	Sat_10	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).

a. Dependent Variable: Overall_sat

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.699 ^a	.489	.488	.71674	.489	475.802	1	498	.000
2	.715 ^b	.512	.510	.70101	.023	23.610	1	497	.000
3	.726 ^c	.527	.524	.69074	.015	15.882	1	496	.000
4	.729 ^d	.531	.528	.68822	.004	4.641	1	495	.032

a. Predictors: (Constant), Sat_11

b. Predictors: (Constant), Sat_11, Sat_19

c. Predictors: (Constant), Sat_11, Sat_19, Sat_3

d. Predictors: (Constant), Sat_11, Sat_19, Sat_3, Sat_10

ANOVA ^c						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	244.429	1	244.429	475.802	.000 ^a
	Residual	255.833	498	.514		
	Total	500.262	499			
2	Regression	256.031	2	128.016	260.507	.000 ^b
	Residual	244.231	497	.491		
	Total	500.262	499			
3	Regression	263.609	3	87.870	184.166	.000 ^c
	Residual	236.653	496	.477		
	Total	500.262	499			
4	Regression	265.808	4	66.452	140.299	.000 ^d
	Residual	234.454	495	.474		
	Total	500.262	499			

ANOVA ^e						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	244.429	1	244.429	475.802	.000 ^a
	Residual	255.833	498	.514		
	Total	500.262	499			
2	Regression	256.031	2	128.016	260.507	.000 ^b
	Residual	244.231	497	.491		
	Total	500.262	499			
3	Regression	263.609	3	87.870	184.166	.000 ^c
	Residual	236.653	496	.477		
	Total	500.262	499			
4	Regression	265.808	4	66.452	140.299	.000 ^d
	Residual	234.454	495	.474		
	Total	500.262	499			

a. Predictors: (Constant), Sat_11

b. Predictors: (Constant), Sat_11, Sat_19

c. Predictors: (Constant), Sat_11, Sat_19, Sat_3

d. Predictors: (Constant), Sat_11, Sat_19, Sat_3, Sat_10

e. Dependent Variable: Overall_sat

Coefficients ^a											
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	.738	.127		5.794	.000					
	Sat_11	.743	.034	.699	21.813	.000	.699	.699	.699	1.000	1.00
2	(Constant)	1.062	.141		7.517	.000					
	Sat_11	.758	.033	.713	22.650	.000	.699	.713	.710	.992	1.00
	Sat_19	-.159	.033	-.153	-4.859	.000	-.089	-.213	-.152	.992	1.00
3	(Constant)	1.349	.157		8.607	.000					
	Sat_11	.759	.033	.714	23.021	.000	.699	.719	.711	.992	1.00
	Sat_19	-.163	.032	-.157	-5.051	.000	-.089	-.221	-.156	.991	1.00
	Sat_3	-.129	.032	-.123	-3.985	.000	-.114	-.176	-.123	.999	1.00
4	(Constant)	1.191	.172		6.904	.000					
	Sat_11	.751	.033	.707	22.730	.000	.699	.715	.699	.980	1.02
	Sat_19	-.154	.032	-.148	-4.754	.000	-.089	-.209	-.146	.975	1.02
	Sat_3	-.128	.032	-.122	-3.968	.000	-.114	-.176	-.122	.999	1.00
	Sat_10	.046	.021	.067	2.154	.032	.155	.096	.066	.974	1.02

a. Dependent Variable: Overall_sat

CONCLUSION

The final Regression model with 4 independent variables (Sat_11, Sat_19, Sat_3 and Sat_10) explains almost 52.8% of the variance of satisfaction from services offered by Indian banks. Also, the standard errors of the estimate has been reduced to .68822, which means that at 95% level, the margin of errors for any predicted value of satisfaction from banking services can be calculated as ± 1.3489112 ($1.96 \times .68822$). The four regression coefficients, plus the constraints are significant at 0.05 levels. The impact of multi-colinerarity in the 4 variables is substantial. They all have the tolerance value less than 0.974, indicating that only over 2% of the variance is accounted for by the other variables in the equation.

Further, the ANOVA analysis provides the statistical test for overall model fit in terms of F Ratio. The total sum of squares (500.262) is the squared error that would accrue if the mean of Satisfaction from banking services has been used to predict the dependent variable. Using the values of Sat_11, Sat_19, Sat_3 and Sat_10 this errors can be reduced by 53.13% ($265.808/500.262$). This reduction is deemed statistically significant with the F ratio of 140.299 and significance at level of .000^d. With the above analysis it can be conclude that only

four variables i.e., Sat_11, Sat_19, Sat_3 and Sat_10 explains the satisfaction from quality of service offered by banks operating in India.

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ABOUT THE JOURNAL

International Journal of Research in Management & Social Science is a quarterly double blind reviewed research journal of Empyreal Institute of Higher Education, Guwahati, India. It seeks to provide a platform to research scholars, practicing managers, and academicians in business management, commerce and allied fields, to present their research findings and share their views and experiences. Its aim is to promote research education worldwide and to establish acquaintances between management and Information Technology. The journal focuses on issues related to the development and implementation of new methodologies and technologies, which improve the operational objectives of an organization. These include, Project management, logistics, production management, e-commerce, quality management, financial planning, risk management, General Management, Banking, Insurance, International Business, Health Care Administration, Human Resource Management , Non-Profit Organizations, Operations Research/Statistics, Operations Management, Organizational Behavior and Theory, Organizational Development, Organizational Management, Production/Operations, Public Administration, Purchasing/Materials Management, Entrepreneurship, Strategic Management Policy, Technology/Innovation, Tourism and Hospitality, Supply Chain Management, Rural Management, Public Management, Knowledge Management, Business Ethics, Corporate Social Responsibility , Negotiations and Competitive Decision Making, Data Analysis, Hotel Management and emerging trends in allied subjects. The journal provides a forum for researchers and practitioners for the publication of innovative scholarly research, which contributes to the adoption of a new holistic managerial approach that ensures a technologically, economically, socially and ecologically acceptable deployment of new technologies in today's business practices.

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Examples of References

All references must be arranged first alphabetically and then it may be further sorted chronologically also.

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