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## **Testing of Altman's Z - Score Model, a Case Study of Ambuja Cement Limited**

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### ***Abstract***

*Ratio Analysis is extensively used tool for checking financial health of the firm. Different ratios are used to estimate financial health are Profitability Ratios, Liquidity Ratios, Solvency Ratios and Activity Ratios. In this paper the financial health of Ambuja Cement Limited has been evaluated by using Ratio Analysis and the chances of bankruptcy in the near future by using Edward Altman's Z score. From the study of five years (2010-11 to 2014-15), it is figure out from the analysis that profit earning capacity of Ambuja Cement Limited. Here it must be noted that Altman's Z score shows likelihood not a prediction. From financials of Ambuja Cement, it may look likely that the company may face bankruptcy, but proper managerial decisions, the managers may succeed in improving the results.*

***Keywords:*** Ratio analysis, Z score, bankruptcy, financial health



## Testing of Altman's Z - Score Model, a Case Study of Ambuja Cement Limited

### Introduction

Most of the organizations exist with an intention of profit maximization. To achieve profit maximization objective, firm requires proper utilization of funds, effective work force, proper material management etc along with external favorable environment such as economic, political & socio-cultural conditions. Firm can survive for longer period of time with good financial health i.e. with more profits, less expenses and good return to investors.

To check financial health and situation of bankruptcy, some of the tools widely used are Ratio Analysis, Common Size statement, Trend Analysis etc. Bankruptcy is a situation where the firm's total liabilities are more than its total assets. The net worth of the firm is negative and situation becomes worse due to declining amount of sales, increasing expenses and losses. It is difficult to attract investors to invest in the firm.

### Objective of Study

The study is being done with the following objectives:-

- To investigate the overall financial soundness of Ambuja Cement Limited using Altman Z score model.
- To predict the possibility of bankruptcy of Ambuja Cement Limited using the Altman Z score model.
- To analyze the working capital position of Ambuja Cement Limited
- To find out the retained earnings level of Ambuja Cement Limited
- To interpret the profit of earnings before interest and tax of Ambuja Cement Limited
- To evaluate the market capitalization of Ambuja Cement Limited
- To provide suitable suggestions for Ambuja Cement Limited to avoid bankruptcy.

### Literature Review:

**H W Beaver** used 30 financial ratios and selected 79 non-failed and 79 failed firms for his study and concluded that cash flow to total debts ratio is the best business failure predictor. (Beaver W. H., 1967)

**Edward Altman** in his Article analyzed the financial position with the help of ratio analysis and multiple discriminant analysis and discriminant coefficient was determined. The model was formulated to determine the bankruptcy of any company. (Altman, 1968)



In the year 2007 **Eden and Meir** examined Shamir Salads (which collapsed in 2005) data for 2003 and 2004 and found that various Ratios used by the Altman Z model clearly shows that the companies are in financial distress. (Eden I, 2007)

**M.S.Ramaratnam, R.Jayaraman** analysed JSW Steel, SAIL, Steel exchange of India, Tata steel and Visa steel based on secondary data for the years 2006-10. They found that Altman's Z score plays a vital role in deciding the financial bankruptcy of a firm and there by a firm can judge its financial position. The study revealed that all the selected companies are financially sound during the study period. (M.S.Ramaratnam, 2010)

**Sarbpriya Ray** in her Research paper examined the combined effect of various financial ratios with the help of Multiple Discriminate Analysis and found that corporate failure is due to poor management decisions and the path of this process can be found with the help of accounting ratios. (Ray, 2011)

**Y. M. Satish & B. Janakiram** in their study found quantitative factors and some qualitative factors such as Character, Capacity, Capital and Condition of customers should also be considered in assessment of creditworthiness. This study also indicates that company should introduce assessment of creditworthiness before providing credit sales and changes should be made in the present credit policy. (Janakiram, 2011)

**Ms. S. Praveena, Dr. K. Mahendran, & S.Moghana Lavanya** in their study tried to determine the combined effect of various financial ratios with the help of Z-score analysis of Andhra Pradesh seeds, Ajeet seeds, Kumaon seeds and Unicorn seeds. They found these firms have a good financial health. According to research these companies have to maintain an appropriate balance between the equity and the debt. (Ms.S.Praveena, 2012)

**Sheela & Karthikeyan (2012)** studied the efficiency and the financial health of Cipla, Dr. Reddy's Laboratories and Ranbaxy Laboratories Ltd from ten years secondary data from 2001-02 to 2010-11 using Altman's Z Score model and found that Ranbaxy lies in gray area with a score of 2.34, while Cipla and Dr. Reddy's are in safe zone with scores higher than 3. Cipla got a Z-score of 3.07 while Dr. Reddy's obtained 3.37. (Sheela S C, 2012)

**Venkataramana, Azash & Ramakrishnaiah (2012)** analyzed selected cement companies in India. They used Altman Z score, Springate and Fulmer models and ratio analysis for these companies. The objectives of the study included finding the liquidity and solvency positions of the select Indian cement companies. The period of study was for ten years from 2001 to 2010. (Ramana N, 2012)

**N.R.V. Ramana Reddy, K. Hari Prasad Reddy** in their Z score analysis found that the poor financial performance resulted to bankruptcy of Chittoor co-operative sugars Ltd. However, the Z-score was in increasing trend from the year 2004 to 2010 indicating the company became aware of the financial performance and taken corrective steps to increase the financial performance. Comparatively the financial performance of Sri Venkateswara Sugars Factory Ltd. is good. All the three companies are facing financial distress. (N.R.V. Ramana Reddy, 2013)

**Nilanjana Kumari**, evaluated Financial Health Of MMTC of India using Z Score Model and found that Z score is much higher than 3.00. So, it can be predicted that bankruptcy is unlikely to occur for MMTC in the next two years and overall financial health of MMTC is good, and it can be quoted as an investor friendly company. (Kumari, 2013)



**Bal and Raja (2014)** examined the earnings management and solvency position of Indian Oil Corporation using Z-score. They found that according to original Z-score the financial position of the company is not good. (Bal G R, 2014)

### **Research Methodology**

The study was concerned with Ambuja Cement Limited. The study was on the secondary data, which was obtained from the online sources for a period of 05 years from; 2010-11 to 2014-15. The collected data was analyzed with the help of Ratio Analysis. Accounting ratios and Z score analysis were used to measure, predict financial health of the company, avoid business failure and subsequent bankruptcy. There are four key ratios which identify the complete financial position of a company are - Liquidity Ratio, Activity Ratio, Solvency Ratio and Profitability Ratio. Liquidity Ratio helps to determine the company's capacity to meet the short term debt. The Solvency Ratio determine the debt service capacity of a firm in the long run. The Activity Ratio calculates the company's capacity to use the assets in a competent way. The Profitability Ratio calculates the profit earning capacity of a company.

### **Measuring Financial Health**

Ratio analysis is normally used to measure liquidity, leverage, activity, profitability and growth. No single ratio can give a meaningful complete picture of a company's financial health. 'Z' score model captures the predictive viability of a company's financial health with a proper combination of financial ratios that ultimately predicts score, which are helpful to determine the financial health of a company.

### **'Z' Score Model**

In the year 1968, Edward Altman, developed a model for predicting the possibility of a bankruptcy of a company. This model uses five financial ratios that combine in a precise technique to produce a single number. This number, called the Z - score, is a general measure of corporate financial health. The most famous failure prediction model is Altman's Z Score Model. Based on Multiple Discriminate Analysis (MDA), the model predicts a company's financial health based on a discriminate function of the firm. In 1983 Altman revised his model by complete re-estimation and the revised Z score model took the following form:

$$Z = 1.2T1 + 1.4T2 + 3.3T3 + 0.6T4 + T5$$

**Where:**

**Z = Discriminate function score of a firm**

**T1 = Working Capital / Total Assets**

**T2 = Retained Earnings / Total Assets**

**T3 = Earnings Before Interest and Tax / Total Assets**

**T4 = Market Value of Equity / Total Liabilities**

**T5 = Sales / Total Assets**

In the above formula, T1 gives the liquidity position to the total capitalization, T2 measures the cumulative profitability overtime and leverages, T3 measures the operating performance and productivity of assets, T4 gives a quick test of how far the company's assets can decline



before the firm becomes technically insolvent and T5 gives the sales generating capacity of the assets.

### Altman Guidelines For Healthy Zone

Following table shows Altman's guidelines to check financial health of a company

Situation	Z-Score	Zone	Remarks
I	Below 1.8	Bankruptcy	Failure within 2 years
II	Between 1.8 to 2.99	Grey	Failure unpredictable
III	More than 2.99	Safe	Good Financial health

According to Altman if the Z-Score is  $< 1.8$ , the company is considered to be in bankruptcy zone, and high probability of failure. If the Z-Score is in between 1.8 to 2.99, the company is considered to be in grey zone, where the company should be under careful watch. If Z-Score is  $> 2.99$ , then the company is said to be in good financial health, and will be solvent in the future.

### Limitations Of Study :

Following are the limitations of the study

1. Z-Score is not perfect technique for financial analysis. Z-score is useful only on manufacturing companies and tested in the US market. Bankruptcy rules of India are different from US therefore in India rarely companies go liquid.
2. It is based on financial statement data; if data given is wrong then analysis also proves to be wrong.
3. The study is limited to five years only, (i.e. from 2010-2011 to 2014-2015).
4. The study has been done by using secondary data. i.e. Annual Reports of the company.

### Analysis and Results

Analysis: Table 1: Value of Z score indicators

Year	Net Working Capital	Total Assets	Retained Earnings	EBIT	Net Sales	Market Value of Equity#	Total Liabilities
2010-11	574.65	8,112.24	738.17	1755.5	8,554.26	152	8,112.24
2011-12	801.36	8,839.69	742.26	1977.49	9,730.30	175	8,839.69
2012-13	968.83	9,514.69	738.23	1579.2	9,160.35	195	9,514.69



<b>2013-14</b>	1,032.41	10,122.42	721.75	1847.89	9,978.12	202	10,122.42
<b>2014-15</b>	1,597.27	10,329.55	373.03	1264	9,461.40	286	10,329.55

Source: Annual Reports of company 2010-11 to 2014-15

# Market Value on Bombay Stock Exchange in the month of March of a particular accounting year.

**Net working Capital = Total Current Asset, Loans & Advances –Total Current Liabilities**

**&Provisions**

**Retained Earnings =Earnings Reinvested in company**

**EBIT=Earnings Before Interest and Tax**

**Market Value of Equity = Value of Equity share of the company**

**Table 2: Calculated value of Ratios**

	<b>Financial Ratios</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>
<b>T1</b>	<b>NWC to Total Assets</b>	0.07083	0.09065	0.1018	0.10199	0.1546
<b>T2</b>	<b>R.E to Total Assets</b>	0.0909	0.08396	0.0775	0.0713	0.0361
<b>T3</b>	<b>EBIT Total Assets</b>	0.2164	0.2237	0.1659	0.1825	0.1223
<b>T4</b>	<b>Market Value of Equity to Total Liabilities</b>	0.0187	0.0197	0.0204	0.0199	0.0276
<b>T5</b>	<b>Net Sales to Total Assets</b>	1.054	1.10	0.962	0.985	0.915

**Table 3: Value of coefficients and Z score**

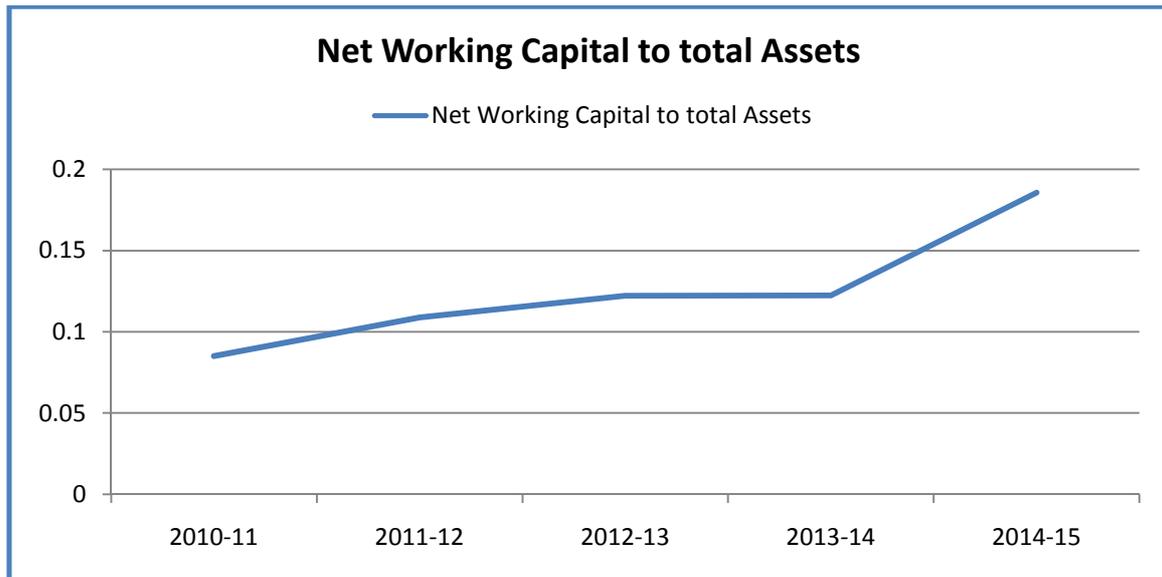
<b>Year</b>	<b>1.2T1</b>	<b>1.4T2</b>	<b>3.3T3</b>	<b>0.6T4</b>	<b>T5</b>	<b>Z Score</b>
<b>2010-11</b>	0.08499	0.12726	0.71412	0.01122	1.054	<b>1.9915</b>
<b>2011-12</b>	0.10878	0.11754	0.73821	0.01182	1.10	<b>2.0763</b>
<b>2012-13</b>	0.12216	0.1085	0.54747	0.01224	0.962	<b>1.8626</b>
<b>2013-14</b>	0.12238	0.09982	0.60225	0.01194	0.985	<b>1.8213</b>
<b>2014-15</b>	0.18552	0.05054	0.40359	0.01661	0.915	<b>1.5712</b>



## Findings

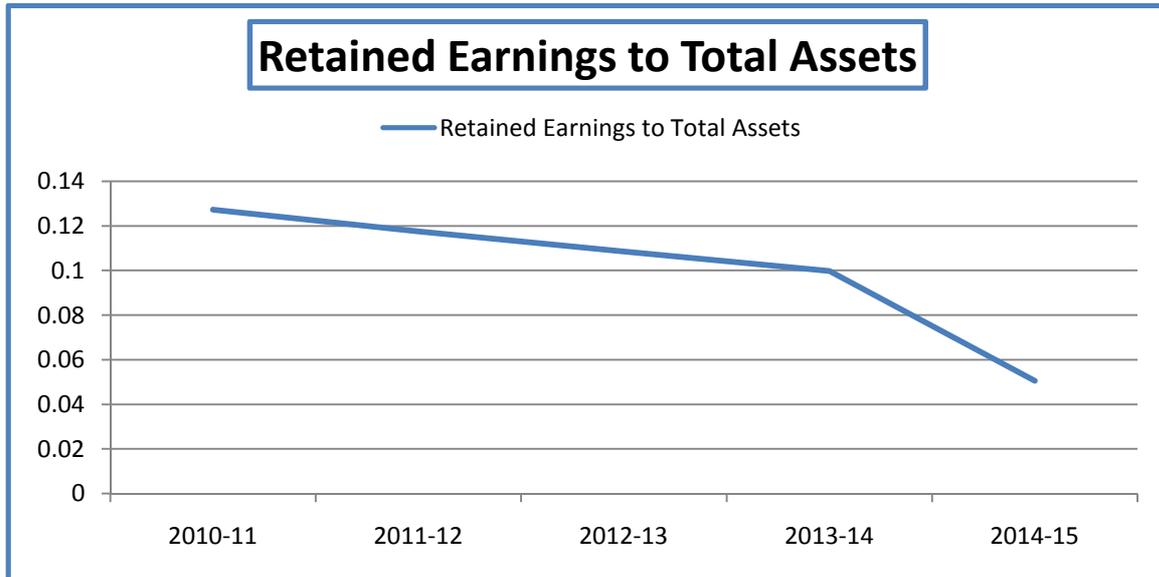
### Net Working Capital to Total Assets

The ratio of net working capital to total assets shows the liquidity position of the company. The ratio (T1) ranges from 0.08 to 0.18 (from table 3) It was highest in the year 2014-15 and lowest 2010-11.



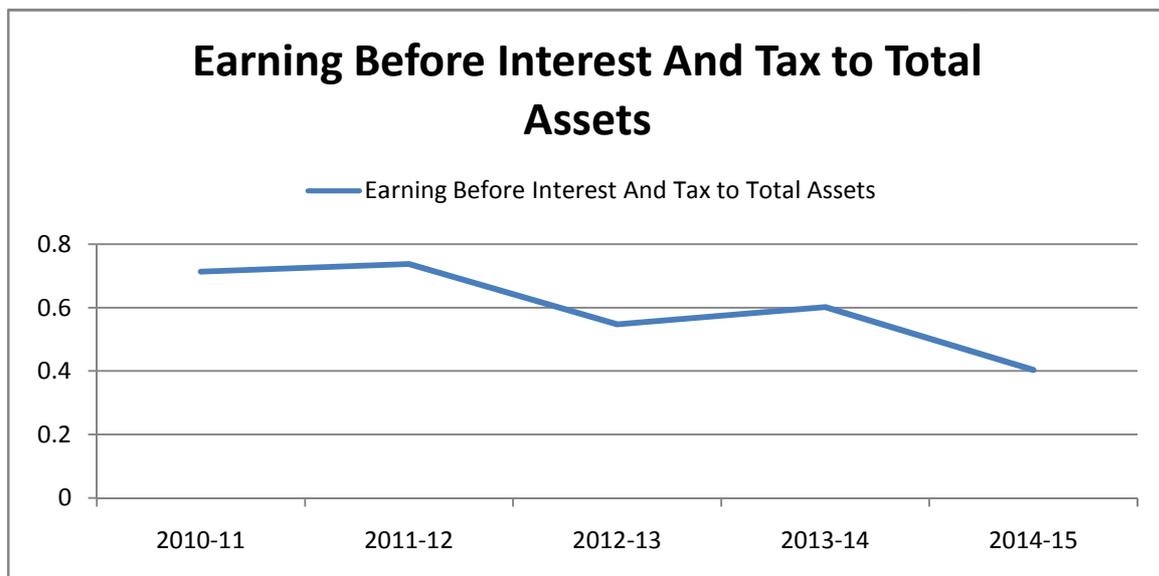
### Retained Earnings to Total Assets

The ratio of retained earnings to total assets indicates that the proportion of fixed assets is financed by the retained earnings i.e. reserves. Retained earnings are the free reserves and cheaper source of finance than debt. A low ratio in the analysis indicates that the growth is not a real growth, because the company is financed through increasing debt, rather than of reinvesting profits. The ratio (T2) ranges from 0.05 to 0.012(from table3) which indicates that 5- 12% of fixed assets are financed through the retained earnings indicating a weak position of Ambuja Cement because they are relying more on the external sources of finance rather than internal sources.



### Earning Before Interest And Tax to Total Assets

EBIT to Total Assets ratio shows the operating performance and productivity capacity of the assets. The ratio (T3) ranges from 0.40 to 0.73 (from table 3) showing a low operating efficiency of Ambuja Cement and also indicates that the company is unable to operate the assets properly.

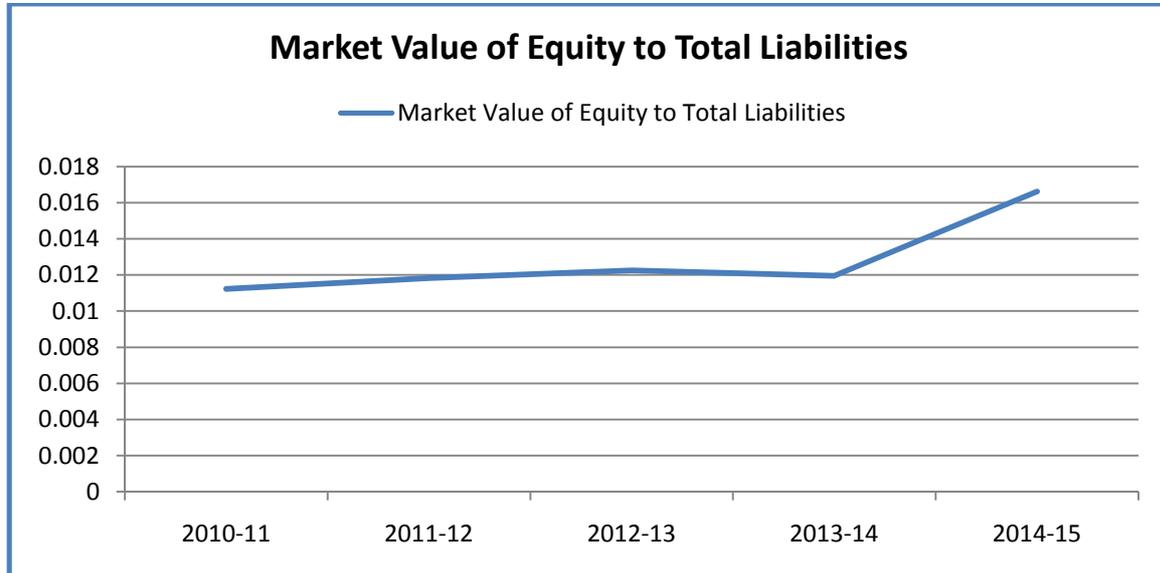


### Market Value of Equity to Total Liabilities

Market value of equity to total liabilities is a common indicator of bankruptcy. It indicates how much the company's assets can decline in value, before the liabilities exceed the assets

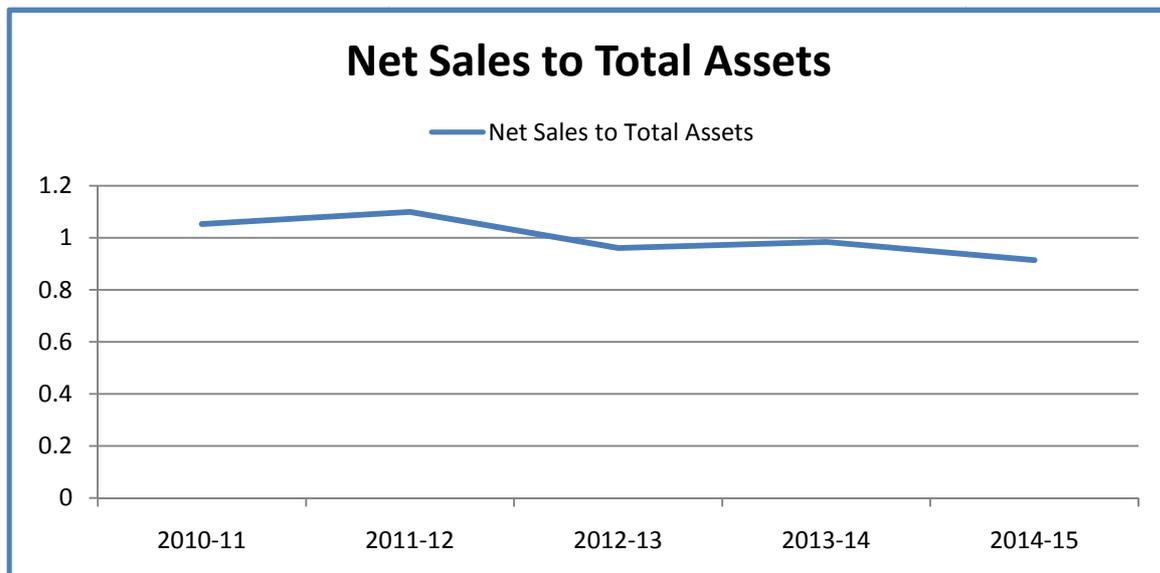


and the company becomes insolvent. The ratio (T4) of Ambuja Cement ranges from 0.011 to 0.016 (from table 3). From the analysis, it can be concluded that Ambuja Cement is relying more on debt rather than equity.



#### Net Sales To Total Assets

The sales are very important in measuring the overall performance of the company since all the activities are directly or indirectly depends on the sales revenue. The ratio(T5) ranges between 0.91 to 1.10 (from table 3) which indicate that the company is gradually decreasing utilization of its assets in inefficient manner to generate sales.



#### Suggestions

- The ratio of working capital ratio shows that the current investment position of the company is decreasing. However if the company does not take care, and if the ratio



dips, then it will be a point of concern, as its current position of investment will be questioned.

- Firms with increasing profit and retained earnings will always fund its assets from its retained earnings, but from the analysis of Ambuja Cement it can be seen that its finances are more reliant on debt than on retained earnings. If it maintains the same position then its debt value will increase which will affect its financial performance. It should finance its assets more from retained earnings than from debt.
- Lower ratio of Earning Before Interest And Tax shows that the productivity capacity of assets is decreasing and if the position continues, it will certainly form an frightening situation for Ambuja Cement, as it's the operating capacity of assets will reach to nil.
- Increasing trend of sales is indicating a better performance of the company, and the trend should be maintained by the company in the future to avoid any situation of bankruptcy.

### Conclusion

The Z-Score of Ambuja Cement Limited based on Altman's model of Z score is ranging from **1.57** to **2.04** during the period of study. It is one of the prominent way to compare a company's Z-Score over a period of time to get a better idea as to how the company is performing. The lower the Z-Score, the more likely a company will be bankrupt. A Z-Score lower than 1.8 indicates that bankruptcy is likely, while scores greater than 3.0 indicates that bankruptcy is unlikely to occur in the next two years. Companies that have a Z-Score ranging from 1.8 - 3.0 are in the gray zone (Safety zone). Here Z-score of Ambuja is less than 1.8 so, company must be cautious. Here it must be noted that Altman's Z score shows likelihood not a prediction. From financials of Ambuja Cement, it may look likely that the company may face bankruptcy, but proper managerial decisions, the managers may succeed in improving the results.

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## **Rural-Urban Transformation and Pattern of Rural Labour Absorption-A Case Study of Gujarat**

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*“Manu Shah’s 12-year-old son asked him, “whether we live in a village or a city?” After pondering Manu bhai had to say neither. This is the plight of 2.5<sup>1</sup> lakh residents of Census towns in Gujarat who are tangled in the same dilemma every time they have to print their visiting cards: what address should they give?”*

*“Unless there is a fundamental shift in the mindset away from one which separates the rural from the urban, Indian planning cannot address the challenges of urbanization in our present stage of development” (Ahluwalia, 2012).*

### **Abstract**

*This study seeks to explore rural transformation and traces the pattern of changes in agriculture impacting labour absorption and transformation of villages into census towns (CT). Through case studies of seven census towns of Gujarat which were villages in 2001 and were declared census towns in 2011, attempt is made to assess the changes happening in economic and social spheres in the rural areas that is spurring urban growth. Findings of the primary survey reveal that in some of the census towns rural non-farm employment growth is distress driven due to stagnation in agricultural activities and low level of irrigation development. There was also the evidence of the existence of strong backward and forward linkages that motivated increase in the level of RNFE. The above had a positive bearing on the per capita income of the communities. Furthermore, the basic infrastructural facilities like roads, connectivity with highway, existence of banks, educational facilities and other infrastructural facilities contributed significantly to the higher level of economic growth. It is apparent that the unregulated construction and development ten years down the line will result in severe congestion, sewage and drainage problems. There is need for adherence to Town planning norms and development of TP schemes especially for large villages in proximity to urban centres. Moreover, the lack of urban amenities is lacking in most of the villages surveyed and require focus of policies on RURBAN schemes.*

**Key Words:** *Census Towns, Rural Non-Farm Employment, Gujarat and labour absorption.*

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<sup>1</sup> Complied and calculated from Census 2011.



## **Rural-Urban Transformation and Pattern of Rural Labour Absorption-A Case Study of Gujarat**

### **Introduction:**

This study seeks to explore processes related to rural transformation in Gujarat and trace the pattern of changes in agriculture impacting rural labour absorption and employment diversification in census towns. Though there is an extensive literature on this area, there is a need to know whether diversification of employment in the countryside- a major factor spurring urban growth, is distress driven or growth induced process in Gujarat.

Growth in urbanization and the resulting growth in non-agricultural employment opportunities are considered as an index of development (Chatterjee, 2014). Driven by economic growth and industrialization, the urban population today is growing two to three times faster than the rural population; a greater part of it being in developed world. This increase in urban population can be decomposed into three major components of urbanisation: natural increase in urban areas, reclassification of rural areas as urban and net migration from rural to urban areas (Goldman Sachs, 2007; Sen, 2014; Bhagat, 2011 Bhagat 2011 states that the increase in urban population in India is due to rural-urban classification rather than rural to urban migration. The boundaries between rural and urban are getting indefinite as there is greater interaction between the two.

In India, a village is transformed into a census town by satisfying 3 criteria:

- 1) Size (Population of 5000 or more)
- 2) Density (at least 400 per sq. kms (1000 per square mile)
- 3) Nature of work (At least 75% of the male workers should be engaged in non-agricultural work) (Sivaramakrishnan, et al., 2005).

Census towns i.e., settlements under rural panchayat administration with strong urban characteristics, appear to have increased in the last census, from 1362 in 2001 to 3894 in 2011 in India and in Gujarat such settlements have increased from 74 to 153. Census towns have contributed to 29.5 per cent of urban growth in India during 2001-11 (source). Growth of census towns inevitably and graphically demonstrate the problems associated with provision of urban amenities in our hinterlands and a focus on urban planning in the lower levels of urban hierarchy.

Occupational choice of an individual is influenced by several factors like the level of education, the assets possessed in household, land ownership, irrigated land, agricultural wages prevailing in the village closeness to a town at a village level, communication and transportation facility at the district level, pressure of the population in the village and infrastructural facilities developed, as well as the demand for non-agricultural goods arising from higher income levels (Kashyap & Mehta, 2005). Other individual factors that also influence the choice of employment include age, sex, household size, and caste. Proximity to nearby town too is an important factor in creation of additional employment opportunities. It may also trigger non-farm, employment growth (Mehta, 2001). However, growth in Non-



Farm Employment leads to greater integration between rural and urban economy, which is crucial for accelerated and balanced development.

In order to gain an insight into the above, the paper seeks to explore the following hypotheses:

- 1) Increase in agricultural income leads to increase in rural non-farm employment due to demand led growth and the savings leads to increase in investment in agriculture.
- 2) Rural non-farm employment and the opportunity to diversify to secondary and tertiary sectors. is a prerequisite for enhanced urbanisation.
- 3) Presence of rural infrastructure (physical and social), and rural market centres, help in the growth of rural enterprises and employment in the same.
- 4) Increase in literacy rate and education levels spur growth in employment by creating a base of skilled and educated human capital.

Main observations from the above analysis are:

Significance of rural non-farm sector is absorbing growing labour force is well recognized. Agriculture is still the dominant employer of rural workers but its ability in further absorbing growing labour force is being questioned in recent time. In many developing countries of Asia, Latin America and Africa, such increasing participation of rural labour force in Non-Farm employment is 32 percent in 2009-10. However, there is considerable variation across the states regarding the incidence of Non-Farm employment. At all points (1993-94 to 2009-10), for male workers, the incidence of Non-farm employment is highest in Kerala and lowest in Madhya Pradesh. West Bengal and Kerala captured the first position interchangeably as regards incidence of non-farm employment for females. Maharashtra and Madhya Pradesh shared the lowest position in this regard at our chosen time points. Non-farm sector consists of heterogenous set of activities. It is, therefore, important to analyse growth of different sectors to identify the emerging sectors in absorbing growing labour force. Present study reveals that, during the period 1993-94 to 2009-10, in case of male Non-farm workers, the percentage share of service, manufacturing, utilities and mining and quarrying have declined and the sectors to gain are construction, wholesale and retail trade, transport-storage etc. Past researchers have identified number of factors for the expansion of non-farm employment. There are mainly two contrasting opinion in this regard. Following Mellor, many researchers have argued that it is distress driven. It is the distress driven conditions of the poor people in the rural areas that force them to diversify for their alternative source of livelihood. According to some researchers, other factors like education, urbanisation, electrification, rural infrastructural facilities, access to formal credit are important for the expansion of non-farm employment.

There are number of studies (Chadha, 1986) (Bhaumik, 2007) that explains the poverty of mitigating role of the non farm sector. However, several empirical studies by different research scholars (Lanjouw, 2008). Reveals that lack of education, limited access of land and financial capital, social and economic barriers prevent the poor people to participate in high return non -farm activities. They confined in some low return work. Therefore the avowed objective of mitigating poverty is barely served by this sector.

However, presence of significant percentage of poor people in the rural areas, raise question about the earnings, conditions of work in which the workers are absorbing. Several studies



reveal that there is an increasing casualisation of labour, increasing employment in the unorganised sector, and decrease in the relative wages of casual workers. All these are depressing features of Indian labour market. Therefore, quality of employment or the productivity of work is required to improve.

It is already stated that non-farm sector consists of heterogeneous set of activities. Expansion of non-farm employment and its impact on poverty eradication are varying from one state to another state and also from one region to another region. Therefore, micro level analysis of both the quantitative significance and quality of employment may provide some valuable insight into the nature of poverty.

Our present study makes an attempt to conduct such analysis at the micro level by considering census towns from different districts of Gujarat. Factors like infrastructure, education and location of the town have an impact on rural non farm employment in census towns.

### **Research Methodology**

For our secondary data analysis, in this study we have mostly relied on the data available from the census and the reports on employment-unemployment, published by National Sample Survey Organisation (NSSO) for various years. The reference period undertaken here has been 1983 to 2011-12. The data available from the quinquennial rounds of the NSSO has been used: 1977-78 (32<sup>nd</sup> Round) 1983 (38<sup>th</sup> Round), 1987-88 (43<sup>rd</sup> Round), 1993-94 (50<sup>th</sup> Round), 1999-00 (55<sup>th</sup> Round), 2004-05 (61<sup>st</sup> Round), 2009-10 (66<sup>th</sup> Round) and 2011-12 (68<sup>th</sup> round).

India possesses most features of urbanisation as in the developing countries. Number of urban agglomeration /town has grown from 5161 in 2001 to 7935 in 2011. This process of urbanisation in India is shown in table 1. The degree or level of urbanization is defined as relative number of people who live in urban areas. Percent urban  $[(U/P)*100]$  and percent rural  $[(R/P)*100]$  and urban-rural ratio  $[(U/R)*100]$  are used to measure degree of urbanisation. The ratio U/P has lower limit 0 and upper limit 1 ie.  $0 < U/P < 1$ . The index is 0 for total population equal to rural population. When whole population is urban, this index is one. From table 4 it is clear that percent urban has increased from 11% in 1901 to 31.16% in 2011, whereas percent rural has shown gradual decrease from 89% to 69% over a century. All these indices pin point that India is in the process of urbanization (Sovani, 1966) and it is at the acceleration stage of urbanization. Tempo of urbanization refers to speed of urbanization and is measured as change registered in the level or degree of urbanization over the years. It shows a fluctuating trend over the years 1901-1981 and a declining trend during 1981-91, 1991-2001 and 2001-11 (Datta, 2006).



Table 1: Population and decadal growth rate of population by residence and degree of urbanisation 1901-2011

Census Years	No. of Towns	Total Population	Urban Population	Rural Population	Urban (%)	Rural (%)	Urban/Rural ratio (%)	Annual Growth rate (%)	Urban Pop.	Rural Pop.
1901	1827	2383963	25851873	21254445	10.84	89.16	12.16			
1911	1825	2520943	25942633	22615175	10.29	89.71	11.47	0.57	0.03	0.62
1921	1949	2513212	28086167	22323504	11.18	88.82	12.58	-0.03	0.79	-0.13
1931	2072	2789772	33455989	24552124	11.99	88.01	13.63	1.04	1.75	0.95
1941	2250	3186660	44153297	27450728	13.86	86.14	16.08	1.33	2.77	1.12
1951	2843	3610880	62443709	29864438	17.35	82.65	20.91	1.25	3.47	0.84
1961	2363	4392347	78936603	36029816	17.97	82.03	21.91	1.96	2.34	1.88
1971	2590	5981596	10911397	48904565	18.24	81.76	22.31	3.09	3.24	3.05
1981	3378	6833290	15946254	52386655	23.34	76.66	30.44	1.33	3.79	0.69
1991	3768	8443242	21717762	62714659	25.72	74.28	34.63	2.12	3.09	1.8
2001	5161	1027015	28535494	74166029	27.78	72.22	38.48	1.96	2.73	1.68
2011	7935	1210193	37710576	83308762	31.16	68.84	45.27	1.65	2.82	1.16

Sources: Various Census reports



No. of towns in class one, two, three and four is continuously increasing whereas the no. of towns in class five and six kept fluctuating but since independence it is majorly decreasing. Over the years, the concentration of population has continuously increased in class one town whereas the concentration of population in class two and three has fluctuated and class four, five and six has declined. India is going through over urbanisation, pseudo urbanisation or messy urbanisation.

To understand the pattern of each state we have segregated population growth rate of rural-urban for 2001-11.

**Table 2: Number of Towns and percentage of Indian Urban Population in Various Size Categories**

Cen sus Yea r	Number of Towns						Percentage of Urban Population					
	Clas s I	Clas s II	Class III	Class IV	Clas s V	Class VI	Clas s I	Clas s II	Class III	Class IV	Clas s V	Class VI
1901	24	43	130	391	744	479	26.0	11.2	15.6	20.8	20.1	6.1
1911	23	40	135	364	707	485	27.4	10.5	16.4	19.7	19.3	6.57
1921	29	45	145	370	734	571	29.7	10.3	15.9	18.2	18.6	7.03
1931	35	56	183	434	800	509	31.2	11.6	16.8	18	17.1	5.21
1941	49	74	242	498	920	407	38.2	11.4	16.3	15.7	15.0	3.14
1951	76	91	327	608	1124	569	44.6	9.96	15.7	13.6	12.9	3.09
1961	102	129	437	719	711	172	51.4	11.2	16.9	12.7	6.87	0.77
1971	148	173	558	827	623	147	57.2	10.9	16.0	10.9	4.45	0.44
1981	218	270	743	1059	758	253	60.3	11.6	14.3	9.54	3.58	0.5
1991	300	345	947	1167	740	197	65.2	10.9	13.1	7.77	2.6	0.29
2001	393	401	1151	1344	888	191	68.6	9.67	12.2	6.84	2.36	0.23
2011	422	454	1232	1546	945	206	70.5	9.63	12.0	5.45	1.45	0.53
Class I - 1,00,000 or more						Class II - From 50,000 to 99,999		Class III - From 20,000 to 49,999				
Class IV - From 10,000 to 19,999			Class V - From 5,000 to 9,999			Class VI - Below 5,000.						
Source: various census survey rounds from 1901 to 2011												

In the table below, we have made a cross tabulation of states which are dependent on agriculture and their high or low growth rate. The pattern of employment diversification



within agriculture sector has depicted a similar trend across different states of India. Gujarat has low dependence on agriculture and it contributes less than 20 per cent in Gujarat's Gross Domestic State Product.

**Table 3: Association between share of Agriculture in GDP and average annual growth rate in GDP from Agriculture and Allied Sector during 1993-94 and 2004-05 (1993-94 prices)**

	High dependence on Agriculture >20% share in GDP	Low dependence on Agriculture < 20% share in GDP
High Growth in Agriculture $\geq$ 2.5%	Andra Pradesh (2.6%) West Bengal (3.1%)	Kerala (-2.5%)
Low Growth in Agriculture < 2.5%	Punjab (2.1%), Bihar (2.1%), Haryana (2.0%), Orissa (-0.02%), Madhya Pradesh (0.6%), Rajasthan (1.9%) and Uttar Pradesh (2.2%)	<b>Gujarat (1.7%),</b> Karnataka (0.9%), Maharashtra (0.8%), Kerala (-2.5%) and Tamil Nadu (-0.9%)

Source: Calculated based on data obtained from CSO, National Accounts Statistics (2007 and back issues)

Basically, to see the pattern of employment and its share of net domestic product we have tried to see the sector wise contribution to net domestic product in India and its share in employment.

In the table below, we have tried to see changes in employment and the share of net domestic product in rural economy. The employment in agriculture used to be 78.7 per cent and it has reduced up to 75 per cent whereas the contribution in the rural economy has increased from 43 per cent to 46.5 per cent.

Post globalization the rate of growth of state domestic product began shooting up from 2000 to 2008; GDP of India grew at 7.68% whereas Gujarat grew at 10.76%. We have compared the share of agriculture, manufacturing, service, industries in GDP and GSDP of India and Gujarat.

**Table 4: Sectoral shares in Domestic Product and State Employment in 2004-05 and 2008-09**

Sector	Gujarat SDP % Share at current price			Gujarat % share in Employ. (P+SS)			India % Share in Employment		
	2004-05	2008-09	2011-12	2004-05	2008-09	2011-12	2004-05	2008-09	2011-12
Primary	18.33	14.8	17.94	49.9	54.4	48.78	54.09	57.3	48.9
Secondary	37.98	37.1	35.07	24.4	22.3	25.87	19.64	18.7	24.26



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Tertiary	43.69	48.1	46.97	25.7	23.3	25.35	26.29	24.1	26.84
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Source: National Sample Surveys (NSS) of 2004-05, 2008-09 and 2011-12 and Socio-Economic Review, Gujarat, February, 2013-14.

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Though more than 82.06% of the SDP comes from non-primary sectors, these sectors provide employment to only about 51.22% of the workforce (2011-12). That is, the primary sector has 48.78% of the workforce but contributes less than 1% of the SDP. There is a huge gap between the labour productivities in the primary and non-primary sectors, implying that 1% of gross state domestic product (GSDP) is produced by 3.34% of the workforce in the primary sector whereas 1% of GSDP is produced by 0.54% of the workforce in the non-primary sectors (almost one-seventh that of the primary sector).

The paper is drawn from the ongoing doctoral work of the author and presents preliminary findings from the primary survey conducted to substantiate the larger processes aiding employment diversification and urban growth in Gujarat. We have conducted a primary survey of 7 census towns i.e. Bhiloda (Aravalli), Kanodar (Banaskantha), Kakoshi (Patan), Becharaji (Mehsana), Ichhapore (Surat-), Kabilpore (Navsari) and Chhiri (Vapi). These villages in 2001 were declared as census towns in 2011 and belong to different agro-economic zones, to assess the changes happening in economic and social prospects. All the above trends have been looked at through tabular analysis to unravel the transformational processes.

In the study an attempt is made to assess the changes happening in economic and social spheres in the rural areas, that is also spurring urban growth. The field work for the study was conducted in April 2016. CTs chosen had varying agro climatic conditions, population, nature of agriculture, location, proximity to a district centre/national highway amongst other characteristics. These criteria aid in strengthening the rural urban linkages, and result in increase in levels of non-farm employment in a region. The methodology comprised of interviews with sarpanch, talati and other prominent citizens, followed by Focused Group Discussion (FGD) with senior citizens of the village. Attempt was made to include people from varied occupations, social and economic classes in the FGD to get views from different strata of the village society. Thirdly information was also gathered from employers/employees belonging to non-farm enterprises in the village to aid the 360-degree analysis of prevailing conditions. Household level survey was also conducted to ascertain the changes in employment, migration, consumption patterns and the social fabric of the village life as it became increasingly urban.

### Primary Analysis

Rural Gujarat is not as homogenous as the villages vary in sizes, population is divided by castes and religions, there is skewed distribution of land and assets, and presence of gender divide. This leads to varying impacts and diversity in development outcomes often hidden under the garb of apparent growing rural prosperity. The characteristics of the selected census towns is given in appendix 2. Table below highlights by way of a matrix the nature of activities that have contributed to the villages' identification as census towns.



**Table 5 Total, Main, Marginal, Farm, Non-Farm and Non-Workers**

Name of CT	Total Workers		Main Workers		Marginal Workers		Farm (Main + Marginal) Workers		Non-Farm (Main + Marginal) Workers		Non Workers	
	200	201	200	201	200	201	200	201	200	201	200	201
	1	1	1	1	1	1	1	1	1	1	1	1
Bechar Alias Becharaji	35. 03	36. 43	83. 36	95. 44	16. 64	4.5 6	17. 09	10. 65	82. 91	89. 35	64. 97	63. 57
Bhiloda	31. 53	34. 29	84. 72	77. 63	15. 28	22. 37	31. 69	26. 85	68. 31	73. 15	68. 47	65. 71
Chhiri	50. 49	45. 48	96. 73	96. 03	3.2 7	3.9 7	2.5 5	0.8 5	97. 45	99. 15	49. 51	54. 52
Ichchhapor	42. 20	43. 77	94. 63	93. 48	5.3 7	6.5 2	6.0 9	10. 01	93. 91	89. 99	57. 80	56. 23
Kabilpor	37. 13	35. 12	95. 85	92. 15	4.1 5	7.8 5	3.7 1	3.7 7	96. 29	96. 23	62. 87	64. 88
Kakoshi	24. 92	29. 84	90. 13	94. 29	9.8 7	5.7 1	24. 77	27. 06	75. 23	72. 94	75. 08	70. 16
Kanodar	30. 79	27. 78	93. 90	94. 92	6.1 0	5.0 8	6.3 6	4.3 9	93. 64	95. 61	69. 21	72. 22

Source: Census Surveys, 2001 and 2011

Findings of the primary survey as summarized in the table reveal that in some of the census towns rural non-farm employment growth is distress driven due to stagnation in agricultural activities and low level of irrigation development. There was also the evidence of the existence of strong backward and forward linkages that motivated increase in the level of RNFE. Construction was an important activity observed in the some of the towns surveyed. The absence of and adherence to building regulations (eg. those related to Floor Space Index



(FSI), restriction on height of the building) and other norms was spurring unregulated construction activity in some of the towns surveyed.

contributed to the villages' identification as census towns.

The next interesting point that we wanted to see is the availability of amenities in census towns i.e. availability of water, school, electricity, drainage, Pucca road and for the increasing population.

Bhiloda and Kabilpore has 30kms and 10kms of pukka roads adding to our exiting knowledge through our field visit we also came to know that Kanodar has 12 kms of pukka roads. Only Kabilpor and Chhiri has open and closed drainage system all others have closed drainage system. Almost in all CTs more than 70% of HHs have electricity. In fact, in Bhiloda, Kanodar and Chhiri more than 90% of HHs have electricity connection. Availability of buses have led to migration of people from various other villages. The basic amenities provided have also led to increasing number of migrants from surrounding villages and also from other states who lack in these facilities.

**Table 6: Status of basic amenities in the selected census towns**

Town Name	Households	Pukka Road Length (in kms.)	Drainage System (Open-1/ Closed-2/ Both-3/ No-4)	Bus in area	Electricity-Domestic Connection (Numbers)	% of households who have electricity
Bhiloda	3464	30	2	Y	3464	100.0
Kanodar	2625	6	2	Y	2404	91.6
Becharaji	2709	4	2	Y	2377	87.7
Kabilpor	3486	10	3	Y	3103	89.0
Chhiri	4757	6	3	Y	4310	90.6
Ichchhapor	2870	3	2	Y	2100	73.2

Source: Census Survey, 2011

Water facility is one of the most important input for agricultural production and for household consumption. The facility of water availability has helped economy of Bhiloda and Kabilpore. As Kabilpor has food processing units which are pushed by the water in agriculture production.

The non-farm activities were often traditional and also tied to the local conditions. For instance, it was observed that presence of strong rural urban linkages, proximity to industrial areas and location along a major national highway facilitated the growth in employment in automobile services and auto-parts units near Kanodar. Employment in the textile, gems and jewelry sector in Ichchhapor near Surat were the main drivers for the village acquiring urban characteristics. Small scale food processing activity (eg.Sweet (penda) making) in the temple town of Becharaji (Mehsana) and retail and service sector activities catering to the tribal



hinterland in Bhiloda (Aravalli) were the drivers for rise in the non-farm employment, a prominent criterion for identification of “urban” in India.

The above had a positive bearing on the per capita income of the communities. Furthermore, the basic infrastructural facilities like roads, connectivity with highway, existence of banks, educational facilities and other infrastructural facilities contributed significantly to the higher level of economic growth. Some of the common features of all the census towns were level of in-migration of workers in search of employment prospects, rather than out migration. This was especially observed in the towns belonging to the industrial districts in south Gujarat, eg., Chhiri in Valsad which actually has 60,000 populations largely comprising of migrant industrial workers, against the census figure of 18829.

The transformation of the villages is aided by the changes in the land uses. As local bodies do not strictly enforce by-laws regarding the restriction on height of the building i.e FSI (Floor Square Index) etc., all the villages are viewing a construction boom. The problem of land acquisition and change to non-agriculture is also quite rampant. This is facilitated by the fact that the Jantri bill that is to be paid is lower if the place is designated as a village rather than a town. It is apparent that the unregulated construction and development ten years down the line will result in severe congestion, sewage and drainage problems. There is need for adherence to Town planning norms and development of TP schemes especially for large villages in proximity to urban centres. Moreover, the lack of urban amenities is lacking in most of the villages surveyed and require focus of policies on RURBAN schemes.

### **Implications**

Our study shows that excessive dependence on agriculture as a source of livelihood has continuously moved downwards along with the workers’ employment base, witnessing a modest degree of diversification. In particular, their base of non-farm employment has expanded from 21.6 percent in 1993-94 to 32.1 percent in 2011-12 in rural areas and from 87.6 percent in 1993-94 to 92.5 percent in 2011-12 in urban areas. However, such diversification is more pronounced for male workers than their female counterparts. For rural females, extremely weak human capital base and social regulations create an obstacle in the way of their switchover to non-farm employment.

The sharp increase in rural urban discrepancies in Gujarat after decades of planned development is alarming. Planning is considered as an instrument to narrow down such disparities. With respect to other development indicators rural areas are far behind. If rural areas are given adequate amenities large scale migration would be curbed. The benefits of globalization have largely accrued to the urban sector, while the rural sector has been left behind. It is foreseen that the larger study would lead to policy recommendations so as to promote rural development in an inclusive manner. For Gujarat the study would be useful for formulation of policies specifically focused on employment diversification, skill development, as well as creation and stepping up of urban infrastructure in rural areas.



**Appendix**

Table 1: The range of options for diversification under differing conditions			
		Attractiveness of economic opportunities in non-farm activities	
		Strong pull: Vibrant agriculture and Good links with growing cities	Weak pull: Low to moderate growth of agriculture, cities relatively remote and costly to reach
Need to find some other livelihood	Strong push : stagnant farming, smaller farm sizes and growing population	<ul style="list-style-type: none"> <li>• Out-migration by educated persons for urban white-collar jobs and by the less educated to find jobs in construction, factories and the urban informal sector. Some migration, especially of educated youth</li> <li>• Jobs in agro-processing, rural services and recreation, etc., allow people to work full- or part-time off the farm.</li> <li>• Those unable to migrate take up poorly rewarded local jobs such as cutting firewood.</li> <li>• Some jobs in construction as remittances from migrants are spent on improved housing</li> </ul>	<ul style="list-style-type: none"> <li>• Some out-migration, but the prospects for those with little education and few skills are limited and they may have to take up badly-paid or hazardous work.</li> <li>• Widespread resort to poorly rewarded crafts or carrying out local services for low returns—firewood, laundry and cooking snacks.</li> </ul>
	Weak push : Agriculture (forestry, fishing) offers a reasonable livelihood	<ul style="list-style-type: none"> <li>• Jobs in agro-processing, rural services and recreation, etc., allow people to work full- or part time off the farm.</li> <li>• Some migration, especially of educated youth</li> <li>• Commuting to nearby towns possible jobs in rural factories linked to urban industries</li> </ul>	<ul style="list-style-type: none"> <li>• Most off-farm work responds to seasonality, spreading risk and overcoming failures in markets for finance and land.</li> <li>• Widespread engagement in a range of low-paid activities to generate some earnings, but for limited periods.</li> </ul>
Source: Steve Wiggins & Peter Hazell (2008) Access to rural non-farm employment and enterprise development			



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## **History of the Efficient Market Hypothesis: A Conceptual Understanding during Last Decade**

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### **Abstract:**

*A market is said to be efficient with respect to an information set if the price 'fully reflects' that information set, i.e. if the price would be unaffected by revealing the information set to all market participants. Efficient Market Hypothesis (EMH), also called theory of stock market behavior, has inspired a new dimension of research in behavioral finance in the last two-and-a-half decades. Within a short period of time, EMH has emerged as the cornerstone of modern-day finance theory, dominating the mainstream of finance research. Thus, empirical testing of EMH has been conducted overwhelmingly in a variety of ways, utilizing data from different countries, across different time periods and using different event studies.*



## **History of the Efficient Market Hypothesis: A Conceptual Understanding during Last Decade**

### **Introduction:**

The history of the equity market of India spans 200 years. It is the oldest in Asia and older than New York stock market. The formal inauguration of the stock exchange at Bombay dates back to 1899. Since then it has been witnessing many booms and slumps. The second world war of 1939 gave a sharp boom which was followed by a slump. As in December 1946, there were only 7 stock exchanges in India having 1125 listed companies. This scenario radically changed as on December 1985 with 14 stock exchanges and 4344 listed companies.

In 1991 Indian economy has accepted the norms of liberalization and globalization. As a consequence it was found inevitable to lift the Indian stock market trading system at par with international standards. So, on the basis of the recommendations of High Powered Pherwani Committee, the National Stock Exchange was incorporated in 1992 by IDBI, ICICI, IFCI, all insurance companies, selected commercial banks and others. Hitherto, the equity market of India has caught the attention as an important alternative source of funding for the corporate sector and its role in the process of overall economic development has started assuming importance.

Historically, any bull market experiences corrections – the 2003-2007 market witnessed a number of 10% falls as well as some that were over 20%. India's Nifty index surged by close to 30% in 2014, yet despite this rally, market returns have been modest for the 2008-2014 periods. The significance of the 2014 rally is that it has heralded the birth of a new bull market in India. The bull market came about because of three factors; cheap starting valuations, a turnaround in the economic cycle and a change in political leadership. The initial period of the bull market has seen the returns dominated by ratings of price-to-earnings ratios rather than earnings growth. So a correction can reasonably be expected to take place at some stage. The key lesson for investors is that they should not fret too much on the short-term ups and downs of the market and instead focus on the maturing bull market which still has a number of factors driving it in 2015.

A market is said to be efficient with respect to an information set if the price 'fully reflects' that information set (Fama, 1970), i.e. if the price would be unaffected by revealing the information set to all market participants (Malkiel, 1992). The efficient market hypothesis (EMH) asserts that financial markets are efficient. Starting in the 16th century, this note gives a chronological review of the notable literature relating to the EMH. The study of the Efficient Market Hypothesis and Random Walk Theory has attracted the attention of market participants, academicians and researchers for the last several decades. Eugene Fama was one of the earliest to theorize capital market efficiency as an academic concept of study through his published dissertation in 1965, but the empirical tests of capital market efficiency had begun even before that by Louis Bachelier, a French mathematician, in his 1900 dissertation 'The Theory of Speculation.' Paul Anthony Samuelson published a proof for a version of the efficient market hypothesis in 1965 and in 1970 Fama published a review of both the theory and the evidence for the hypothesis.



A market is said to be efficient if it responds immediately and accurately to all available information. On the other hand, the random walk theory asserts that stock price movements are unpredictable and they follow a random walk. Therefore, past stock price movements are of no use to predict future price movements (Fama, 1965). Kendall (1953) suggested that stock prices move randomly. This could be an indication that financial markets operate with high degree of efficiency (Gitman, Joehnk, and Smart 2011).

### **History of the Efficient Market Hypothesis: Focused on the last decade**

The origins of the EMH can be traced back to the work of two individuals in the 1960s: Eugene F. Fama and Paul A. Samuelson. Remarkably, they independently developed the same basic notion of market efficiency from two rather different research agendas. These differences would propel them along two distinct trajectories leading to several other breakthroughs and milestones, all originating from their point of intersection, the EMH. Like so many ideas of modern economics, the EMH was first given form by Paul Samuelson (1965), whose contribution is neatly summarized by the title of his article: 'Proof that Properly Anticipated Prices Fluctuate Randomly'. In an informationally efficient market, price changes must be unforecastable if they are properly anticipated, that is, if they fully incorporate the information and expectations of all market participants. Having developed a series of linear-programming solutions to spatial pricing models with no uncertainty, Samuelson came upon the idea of efficient markets through his interest in temporal pricing models of storable commodities that are harvested and subject to decay. Samuelson's abiding interest in the mechanics and kinematics of prices, with and without uncertainty, led him and his students to several fruitful research agendas including solutions for the dynamic asset allocation and consumption-savings problem, the fallacy of time diversification and logoptimal investment policies, warrant and option-pricing analysis and, ultimately, the Black and Scholes (1973) and Merton (1973) option-pricing models. In contrast to Samuelson's path to the EMH, Fama's (1963; 1965a; 1965b, 1970) seminal papers were based on his interest in measuring the statistical properties of stock prices, and in resolving the debate between technical analysis (the use of geometric patterns in price and volume charts to forecast future price movements of a security) and fundamental analysis (the use of accounting and economic data to determine a security's fair value). Among the first to employ modern digital computers to conduct empirical research in finance, and the first to use the term 'efficient markets' (Fama, 1965b), Fama operationalized the EMH hypothesis – summarized compactly in the epigram 'prices fully reflect all available information' – by placing structure on various information sets available to market participants. Fama's fascination with empirical analysis led him and his students down a very different path from Samuelson's, yielding significant methodological and empirical contributions such as the event study, numerous econometric tests of single- and multi-factor linear asset-pricing models, and a host of empirical regularities and anomalies in stock, bond, currency and commodity markets.

A few words about the historical origin and the development of hypotheses formulation are in order. Over a century ago, Bachelier (1900) when studying the mathematical theory of random processes speculated that the movement of stock prices followed a Brownian motion. The idea was picked up some fifty years later by a statistician, Maurice G. Kendall. Kendall (1953) documents that the prices of stock and commodity seems to follow a random walk.



Following Samuelson (1965) and Mandelbrot (1966), Fama (1970) formally defines three levels of market efficiency to guide empirical studies and distinguish one from the other by the degree of information reflected in stock prices in an ascending order: Information contained in the past stock prices relevant to the firm under analysis will be fully and quickly reflected in its present stock price, known as the weak form market efficiency. Information contained in publicly available information relevant to the firm under analysis will be fully and quickly reflected in its present stock price, known as the semi-strong form market efficiency. All information—is it made in public or privately held—relevant to the firm under analysis will be fully and quickly reflected in its present price, known as the strong-form market efficiency.

Semi-Strong form of EMH (Fama, 1970) postulates that all the published as well as the historical information is revealed in the current security prices, so no investor can earn abnormal profit by making use of any new information. This implies that the market engrosses the historical prices as well the information that is publicly available and reflects the same in the security prices, so no new information can be used to earn superior return.

Sunil Poshakwale (2001) examines the random walk hypothesis in the emerging Indian stock market. Increasing investor interest in emerging markets has motivated a great deal of research aimed at understanding the return and risk characteristics of stock prices in these markets. In particular, researchers and investors have sought to detect any evidence of informational inefficiency that could be profitably exploited to make large economic gains.

Ramesh Chander and Kiran Mehta (2007) Investors and analysts are unable to predict stock price movements consistently so as to beat the market in information ally efficient markets. Still, concerted efforts are being made to earn abnormal returns discerning some anomalous pattern in the stock price movements. Also, the studies of some structural changes in the market leading to, or removing some anomalous pattern in the stock prices, are of interest to investors and analysts. The present study was conceptualised to scrutinise whether anomalous patterns yield abnormal return consistently for any specific day of the week even after introduction of the compulsory rolling settlement on Indian bourses. Three market series viz., BSE Sensex, S and P CNX Nifty and S and P CNX 500 were observed on daily basis for ten years viz., i) Pre-rolling settlement period, April 1997 - December, 2001 and ii) Post-rolling settlement period, January 2002 - March 2007 to discern evidences in this regard.

Anamika Sharma (2009) an efficient market is a market where share prices reflect all pertinent information and so earning consistent abnormal returns in the stock market using publicly available information is not possible. How promptly and correctly the share prices adjust to any announcement or event shows the efficiency of stock markets. This paper tests the efficiency of the Indian stock market by considering open offer as an event, using the market adjusted abnormal return model, and concludes that markets are not efficient in the semi-strong form.

Mishra (2010), attempted to analyze the market efficiency of Indian capital market over a period from 2002 to 2009. They applied time series econometrics and provided the evidence of greater volatility and weak form inefficiency of the market. Sluggish performance of the market was traced to spread of global contagion that originated from the US sub-prime crisis.



Kaur, Manjinder, Dhillon and Sharanjit S (2011) is aimed at checking weak form of efficiency hypothesis for Indian stock market by using daily data for Bombay Stock Exchange for the period of 1991 to 2006. In this paper the test used was Variance test, Unit root test and Autocorrelation and Ljung Box test.

Sujith Kumar S H & Sadanand Halageri (2011) Stock market efficiency has been of considerable importance in financial literature. The form of efficient market hypothesis (EMH) has been examined by researchers. This paper examines the stock price reactions to stock split announcement which is one of the publicly available pieces of information to test the semi-strong form of EMH. An efficient market is a market in which price fully reflect all information. This means that no possibility exists of making sustainable excess returns and the prices follow a random walk. An efficient and integrated capital market is an important infrastructure that facilitates capital formation. The efficiency with which the capital formation is carried out depends on the efficiency of the capital markets and financial institutions. A capital market is said to be efficient with respect to corporate event announcement (stock split, buyback, right issue, bonus announcement, merger & acquisition, dividend etc) contained information and its dissemination. How quickly and correctly the security prices reflect these event contained information shows the efficiency of stock markets. Present study is an attempt to test the efficiency of Indian stock market with respect to stock split announcement by Nifty constituent companies. The results indicate significant abnormal stock returns are associated with announcements of stock split.

(Kaur, Manjinder, Dhillon and Sharanjit S 2011) The present paper is aimed at checking weak form of efficiency hypothesis for Indian stock market by using daily data for Bombay Stock Exchange for the period of 1991 to 2006. In this paper the test used was Variance test, Unit root test and Autocorrelation and Ljung Box test.

Dr. Amalendu Bhunia & Mr. Islam Uddin Khan (2011) analyses the stock market efficiency based on random walk hypothesis in Indian stock market. Both ADF and PP unit root model entails that the Indian stock market index has a unit root and pursues a random walk process. This confirms the efficient market hypothesis of Indian stock market which means that in this market past movements in stock prices cannot be used to predict their future changes and investors cannot formulate various trading rules or techniques to make abnormal returns from transactions in the exchange market. The presence of efficiency in the stock market has important implications for issuers of equity and portfolio investors.

P K Mishra (2013) the main objective of this study is to investigate whether prices in India's emerging equity market follow a random walk process as stated by the efficient market hypothesis. Therefore, this study examines the weak-form of market efficiency in India's stock market by testing the random walk hypothesis through multi-approaches, specifically unit root, and runs tests on the daily price of S & P CNX Nifty index of National Stock Exchange over the period from January 2008 to Mid-March 2013. The empirical results provide the evidence of stationary indicating that stock prices do not follow the random walk process.

Alfred A. Fote (2015) wish to demonstrate that, when considered mathematically, the distinction between the Efficient and the Behavioural Market vanishes. Behavioural elements merely amplify erratic behavior already present in the ideal efficient market. A continuum, not a sharp divide, actually exists. According to the Efficient Market Hypothesis, new



information constantly enters the arena and thereby causes the second-by-second rise and fall of prices. We cannot predict such fluctuations in detail; we can only model them by introducing a random-number generator in our equation.

### **Conclusion:**

The rationale for the study of history of EMH during last decade is try to provide better information about the stock market, they would improve the pricing mechanisms through the buying and selling activities of better informed investors. Still our accounting practices and disclosure practices are far below the international level. In recent years, the equity markets of developed and developing countries are passing through a critical phase of relatively high volatility and low liquidity thereby generating the forces of market risk. And, India is no exception. The purpose of the study is that, information should be easily available to investors and the quality of the information should be good that means an investor can check the authenticity and reliability of the information, so the market price manipulation would be more difficult.

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## **Empowerment of Persons with Disabilities: Need of the Day**

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### ***Abstract***

*Around 10 percent of the world's population, or 650 million people, live with a disability, according to United Nations. Persons with disabilities are the world's largest minority. Disability may be in vision, in hearing, in speech, in movement or mental disability. In India, according to the Census of India 2011, there are 2.21% of total population are disabled. The proportion of disabled population is varied in different states from more than 15% to 0.006% of total disabled population in India.*

*Empowerment is important for every human being. In case of person with disability, it is more crucial to live life with dignity. Empowerment can be social, legal, economic, educational, etc. Because of various barriers faced by persons with disabilities in accessing their rights they cannot acquire sufficient empowerment.*

*Present paper is giving light on barriers faced by persons with disabilities to achieve empowerment. Paper is focusing on social, legal and economic empowerment of persons with disabilities. There are various issues which can be effect on empowerment of persons with disabilities. Paper is an attempt to emphasize on these issues affecting different types of empowerment.*

**Key words:** *empowerment, persons with disabilities, social, legal, economic*



## **Empowerment of Persons with Disabilities: Need of the Day**

### **Introduction**

Around 10 percent of the world's population, or 650 million people, live with a disability.<sup>2</sup>Persons with disabilities are the world's largest minority. There are two major sources provide data at the national level about population of persons with disabilities in India. These are the Census of India and the National Sample Survey Organisation (NSSO).But because of differences in definitions and methodologies of data collection, both the sources give us different numbers about population of persons with disabilities (Bhanushali, 2005). According to Indian statistics population of persons with disabilities is nearly 2 percentage which is very low compared to global standard. Again these differences are attributed to definitional aspects and methodology in computation of statistics.

### **Disability**

The **World Health Organization (WHO)** defines disability is an umbrella term, covering impairment, actively limitations, and participation restrictions. An impairment is a problem in body function or structure; an activity limitation is a difficulty by an individual in executing a task or action; while a participation is a problem experienced by an individual an involvement in life situations.

**United Nations Convention on the Rights of Persons with Disabilities (UNCRPD)** says the persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others.

**The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995** defines “**Disability**” means (i) Blindness; (ii) Low vision; (iii) Leprosy - cured; (iv) Hearing impairment; (v) Loco motor disability; (vi) Mental retardation; (vii) Mental illness. “**Person with disability**” means a person suffering from not less than forty percent of any disability as certified by medical authority.

**The Census of India (2011)** collected data of disabled population in eight different categories. These categories are: disability ‘In Seeing’, ‘In Hearing’, ‘In Speech’, ‘In Movement’, ‘Mental Retardation’, ‘Mental Illness’, ‘Any Other’ and ‘Multiple Disability’.

### **Population of Persons with Disabilities**

#### **Global**

According to International Labour Organization, people with disabilities make up an estimated one billion, or 15 percent, of the world's population.<sup>3</sup>According to United Nations,

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<sup>2</sup><http://www.un.org/disabilities/convention/pdfs/factsheet.pdf>

<sup>3</sup><http://www.ilo.org/global/topics/disability-and-work/lang--en/index.htm>



in countries with life expectancies over 70 years, individuals spend on average about 8 years, or 11.5 percent of their life span, living with disabilities.

### **In India**

According to the Census of India 2011, total population of India is 1,21,08,54,977 out of which disabled population is 2,68,14,994. This consists 2.21% of total population. At the Census 2001, disabled population in India was 2,19,06,769 and it consisted 2.19% of total population. During the period 2001 to 2011 disabled population has increased by 22.41% in India. Gender ratio of disabled population shows 56% are males and 44% are females in total disabled population in India, according to the Census of India 2011.

The classification of disabled population of India by different categories of disability, according to the Census of India 2011 is presented in table no. 1.1.

**Table No.: 1.1**

#### **Disabled Population of India by Different Categories of Disability (Census 2011)**

<b>Categories of Disability</b>	<b>Persons</b>	<b>Percentage</b>
In Seeing	5,033,431	18.77
In Hearing	5,072,914	18.92
In Speech	1,998,692	7.45
In Movement	5,436,826	20.28
Mental Retardation	1,505,964	5.62
Mental Illness	722,880	2.69
Any Other	4,927,589	18.38
Multiple Disability	2,116,698	7.89
Total	26,814,994	100.00

Source: The Census of India - 2011 (Table C-23)

It can be seen from the data that among total disabled population of India, about 20% having disability 'in movement' followed by disability 'in hearing' and 'in seeing' at the Census 2011. The lowest percentage of disabled population is nearly 3% in 'mental illness' at the Census 2011.

If we are looking on state wise data of the Census of India 2011, the uppermost proportion of disabled population is in Uttar Pradesh state (above 15%) followed by Maharashtra state (above 11%) in India. Bihar, Andhra Pradesh and West Bengal have disabled population of above 8 to 9% in each states of Indian disabled population. The bottom proportion of disabled population in Lakshadweep (above 0.006%) followed by Daman & Diu (above 0.008%) in India. Dadra & Nagar Haveli, Andaman & Nicobar Islands and Chandigarh have disabled



population of below 0.05% in each states of Indian disabled population. According to the Census of India 2011, disabled population of Gujarat consists 4.07% of total disabled population of India.

## **Empowerment**

The empowerment term is “an intentional, ongoing process centered in the local community, involving mutual respect, critical reflection, caring, and group participation, through which people lacking an equal share of resources gain greater access to and control over those resources” (Cornell Empowerment Group). According to Rappaport's (1984) definition on empowerment includes: “Empowerment is viewed as a process: the mechanism by which people, organizations, and communities gain mastery over their lives.” Empowerment states to measures designed to increase the degree of autonomy and self-determination in people and in communities in order to enable them to represent their interests in a responsible and self-determined way, acting on their own authority. It refers both to the process of self-empowerment and to professional support of people, which enables them.

## **Empowerment of Persons with Disabilities**

“A society can be considered progressive only when it is holistically inclusive of all its member.”<sup>4</sup> Persons with disabilities have to face many problems in their daily life. Problems faced by persons with disabilities in the society starts from their birth till death. Present system has created many barriers for persons with disabilities. Persons with disabilities have to face accessibility problems because of absence of barrier free environment. Along with these infrastructural and architectural barriers persons with disabilities have to face societal barriers such as negative attitude of the public, discrimination by non-disabled persons, etc. They have to also face problem in interaction with the society. Persons with disabilities have to face various barriers in accessing their rights to education, employment, marriage, social interactions, transportation, political rights, etc.

Empowerment is more crucial for persons with disabilities to live life with dignity. To reduce barriers faced by persons with disabilities empowerment is necessary. Empowerment of persons with disabilities states to increase the degree of independence and self-determination in persons with disabilities with the purpose of enable them to represent their interests in a responsible and self-determined way, acting on their own authority. Both to the process of self-empowerment of persons with disabilities and to support of people to them is required. It can be reflected in several ways. Present paper is to study factors affecting empowerment of persons with disabilities. Empowerment of persons with disabilities can be considered as social empowerment, legal empowerment and economic empowerment.

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<sup>4</sup><https://www.facebook.com/DoEPWDs/?fref=nf>



## **Social Empowerment**

Social empowerment is basic necessity of persons with disabilities. It can create autonomy and self-confidence among persons with disabilities. Social empowerment include accessibility, assistive devices, perception and attitude of non-disabled persons towards persons with disabilities, disability models, etc.

Barriers faced by persons with disabilities in forms of staircases, narrow doors, in accessible washrooms, transportation, etc. Because of these barriers persons with disabilities have to depend upon others. Person with having 80% or more disability have to face more problem.

To maintain and increase efficiency of persons with disabilities assistive devices can play better role. The use of assistive devices can make easy life of persons with disabilities without any hinders on account of disability. Assistive devices are such as wheel chair, calipers, crutches, hearing aids, etc. are used by persons with disabilities to combat disability. But because of unawareness about suitable assistive device for their disability or because of costly devices, sometimes persons with disabilities cannot use it. In some cases, they have not need of any assistive device.

## **Legal Empowerment**

Various laws relating to disability are enacted for legal empowerment of persons with disabilities. Legislations with regard to disability had been passed by international organisations, the central Government and the State Government. Legal provision for person with disabilities in India are the Constitution of India, the Persons with Disabilities (Equal opportunities, Protection of Rights and Full Participation) Act, 1995, United Nations Convention on the Rights of Persons with Disabilities, the Rights of Persons with Disabilities Bill, 2014, the National Trust for the Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities Act, 1999, the Mental Health Act, 1987, the Rehabilitation Council of India, 1992, the Gujarat Physically Handicapped Persons (Employment in Factories) Act, 1982, etc.

The Constitution of India emphasize on equality, prohibition on discrimination, right to work, to education and to public assistance in certain cases.

The Persons with Disabilities Act, 1995 includes provision relating to the central coordination committee, the state coordination committee, prevention and early detection of disabilities, education, employment, affirmative action, non-discrimination, research and manpower development, recognition of institutions for persons with disabilities, institution for persons with severe disabilities, the chief commissioners and commissioners for persons with disabilities, social security and miscellaneous provisions, etc.

General principles of United Nations Convention on the Rights of Persons with Disabilities are: Respect for inherent dignity, Individual autonomy including the freedom to make one's own choices, and independence of persons; Non-discrimination; Full and effective participation and inclusion in society; respect for difference and acceptance of persons with disabilities as part of human diversity and humanity; Equality of opportunity; Accessibility; Equality between men and women; Respect for the evolving capacities of children with disabilities and respect for the right of children with disabilities to preserve their identities, etc.



Legal rights to persons with disabilities under the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995 are such as reservation in education, vacancies in government establishment, special employment exchange, vocational rehabilitation and rural extension centers, poverty alleviation schemes, etc. Barrier free environment at public places, non-discrimination, parking facilities for persons with disabilities, etc.

### **Economic Empowerment**

Economic empowerment includes education and employment of persons with disabilities. Because of barriers faced by persons with disabilities education and employment of persons with disabilities are low.

Education provides knowledge, skills and self-confidence to participate entirely in the development process. Empowerment of persons with disabilities through education is essential. According to the factsheet of United Nations, ninety percent of children with disabilities in developing countries do not attend school, says UNESCO. The global literacy rate for adults with disabilities is as low as 3 percent, and 1 percent for women with disabilities, according to a 1998 UNDP study. In the OECD (Organisation for Economic Co-operation and Development) countries, students with disabilities in higher education remain under represented, although their numbers are on the increase, says the OECD. According to the Census 2011, about 45% of disabled population are illiterate in India.

**Table No.: 1.2**

#### **Disabled Population by Type of Disability and Literacy Status in India (Census 2011)**

<b>Type of disability</b>	<b>Literate</b>	<b>Illiterate</b>	<b>Total</b>
In Seeing	52.76	47.24	100.00
In Hearing	56.94	43.06	100.00
In Speech	58.29	41.71	100.00
In Movement	60.19	39.81	100.00
Mental Retardation	41.31	58.69	100.00
Mental Illness	48.77	51.23	100.00
Any Other	60.02	39.98	100.00
Multiple disability	33.27	66.73	100.00
Total disabled population	54.52	45.48	100.00

Source: The Census of India - 2011 (Table DISAB03-0000)



The classification of disabled population by type of disability and literacy status in India according to the Census 2011 is presented in table no.: 1.2. It can be seen from the data that 54.52% of total disabled population are literate while 45.48% are illiterate. The literacy status of disabled population from different type of disability reveals that 'in seeing' disability, 52.76% are literate while 47.24% are illiterate. 'In hearing' disability, 56.94% are literate while 43.06% are illiterate. 'In speech' disability, 58.29% are literate while 41.71% are illiterate. 'In movement' disability, 60.19% are literate while 39.81% are illiterate. In 'mental retardation' disability, 41.31% are literate while 58.69% are illiterate. In 'mental illness' disability, 48.77% are literate while 51.23% are illiterate. In 'any other' disability, 60.02% are literate while 39.98% are illiterate and in 'multiple disability', 33.27% are literate while 66.73% are illiterate. It can be seen from the data that in multiple disability, illiterate population are largest followed by mental retardation. The lowest proportion of illiteracy is observed in movement disability.

According to the Census 2011, states with high literacy rate among persons with disabilities are Kerala (nearly 71%) followed by Goa (about 70%). The other states with high literacy rate are Chandigarh, Maharashtra and Tripura having more than 66% literacy in each states. States with low literacy rate among persons with disabilities are Arunachal Pradesh (nearly 39%) followed by Rajasthan (about 40%). The other states with low literacy rate are Jammu & Kashmir, Nagaland and Sikkim having less than 46% literacy in each states, as per the Census 2011. The literacy rate among persons with disabilities in Gujarat is nearly 63% (Census 2011).

Employment also creates self-dependency in individual. Employment accomplish needs of individuals. Empowerment of persons with disabilities through employment is required nation as well as global level. According to the factsheet of United Nations, in developing countries, 80% to 90% of persons with disabilities of working age are unemployed, whereas in industrialized countries the figure is between 50% and 70%. In most developed countries the official unemployment rate for persons with disabilities of working age is at least twice that for those who have no disability. According to the Census 2011, about 50% of disabled population are non-workers in India.

**Table No.: 1.3**

**Disabled Population (Age group of 15 - 59 years) by Type of Disability and Workers & Non-Workers in India (Census 2011)**

Type of Disability	Workers	Non-workers	Total
In Seeing	55.37	44.63	100.00
In Hearing	57.69	42.31	100.00
In Speech	55.86	44.14	100.00
In Movement	49.48	50.52	100.00
Mental Retardation	28.06	71.94	100.00



Mental Illness	24.78	75.22	100.00
Any Other	57.84	42.16	100.00
Multiple Disability	28.67	71.33	100.00
Total disabled population	50.50	49.50	100.00

Source: The Census of India - 2011 (TableC-23)

The classification of disabled population by type of disability and workers & non-workers in India according to the Census 2011 is presented in table no.: 1.3. It can be seen from the data that 50.50% of disabled population (age group of 15 - 59 years) are workers while 49.50% are non-workers. Workers and non-workers of disabled population from different type of disability reveals that 'in seeing' disability, 55.37% are workers while 44.63% are non-workers. 'In hearing' disability, 57.69% are workers while 42.31% are non-workers. 'In speech' disability, 55.86% are workers while 44.14% are non-workers. 'In movement' disability, 49.48% are workers while 50.52% are non-workers. In 'mental retardation' disability, 28.06% are workers while 71.94% are non-workers. In 'mental illness' disability, 24.78% are workers while 75.22% are non-workers. In 'any other' disability, 57.84% are workers while 42.16% are non-workers and in 'multiple disability', 28.67% are workers while 71.33% are non-workers. It can be seen from the data that disability in mental illness, non-workers are largest followed by mental retardation and multiple disability. The lowest proportion of non-workers is observed in hearing disability.

According to the Census 2011, states with high employment rate among persons with disabilities are Nagaland (nearly 65%) followed by Sikkim (about 61%). The other states with high literacy rate are Arunachal Pradesh, Himachal Pradesh and Manipur having more than 58% employment in each states. States with low employment rate among persons with disabilities are Lakshadweep (nearly 29%) followed by Kerala (about 33%). The other states with low employment rate are Goa, NCT of Delhi and Puducherry having less than 42% employment in each states, as per the Census 2011. The employment rate among persons with disabilities in Gujarat is nearly 49% (Census 2011).

### Findings

Highest disability in India shows in movement, in hearing and in seeing, according to the Census of India 2011. Persons with disabilities have to face problem to obtain social, legal and economic empowerment. Major problem have to be face by persons with disabilities is because of form of non-accessibility. Percentage of disability, assistive devices, attitude of public can also effect on social empowerment of persons with disabilities. There are various laws regarding disability at international as well as national level towards persons with disabilities, but because of lack of proper implementation of these laws persons with disabilities have to do struggle to obtain legal rights. To acquire economic empowerment also, persons with disabilities have to face problems. Obtaining higher education and employment are major difficulties for persons with disabilities.

### Suggestions & Conclusion



To empower world's largest minority and to reduce problem of persons with disabilities, various steps and producers are going on global as well as national level. In India, Department of Empowerment of Persons with Disabilities (DEPwD), Ministry of Social Justice & Empowerment has launched 'Accessible India Campaign' to achieve universal accessibility for persons with disabilities. The main objective of Accessible India Campaign is to create accessible environment for persons with disabilities with the motto of 'Accessible India - Empowered India'. To empower persons with disabilities there must be removed architectural barriers towards disability. Accessibility must be create in terms of ramps, disabled friendly washrooms, wide doors, elevators, disabled friendly lifts, etc. towards social empowerment of persons with disabilities. Attitude of public towards persons with disabilities should be changed. However, Sin model to Right based model shows some changed in attitude of public. There must be proper and strict implementation of laws regarding disability especially, the Persons with Disabilities Act, 1995 to empower persons with disabilities legally. To empower them economically, education and employment are necessary. Atmosphere should create for higher education and more employment opportunity of persons with disabilities.

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## **Three Pronged study of Banking Sector in India**

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### **Abstract**

*In any economy, banks perform the most important function relating to financial intermediation, the effectiveness of which have an imperative bearing on the overall economic health of the country.*

*The Indian banking industry, time and again, has advanced various regulatory measures to regulate the practices being adopted by banking players in day to day operations. The question, then, is, how effective are these regulatory measures?*

*Besides this, in India where the banking sector is already facing fierce competition among the existing players, further increase in competition is expected because of recently passed Banking Law (Amendment) Bill 2011, under which the government has already started inviting applications to issue new banking licences. What sought of performance targets these banks, old and new alike will be getting to attain profits?*

*Furthermore, it is because of the robust policies which Reserve Bank of India (RBI) introduced way back in 2008 economic crisis, which could safeguard Indian economy. Today, again when India is facing the rupee depreciation crisis, RBI has shown timely and cautious interventions to stabilise the situations. It shows the kind of challenges banking sector faces in an economy.*

*This is a conceptual paper in which three pronged approach has been adopted to study and discuss the following parameters of Banking Sector: -*

- 1. Performance,*
- 2. Regulatory and compliance*
- 3. Market Challenges before the banking industry in India.*

*By this paper the author is making an effort to argue the pros and cons on the above parameters which the banking sector is facing.*

*Key words: - Banking Sector, Performance, Regulations, Challenges.*



## Three Pronged study of Banking Sector in India

### Introduction

In the debate over the Re-charter of the Bank Bill (1809), if we pick very famous quote of Thomas Jefferson, American founding father, the principal author of the Declaration of Independence and the third President of United States, it goes like-

“If the American people ever allow the private banks to control the issue of their currency, first by inflation, then by deflation, the banks... will deprive the people of all property until their children wake up homeless on the continent their father conquered... The issuing power should be taken from banks and restored to the people, to whom it properly belongs.”<sup>1</sup>

This proposition indeed doesn't fit well in prevailing scenario but a key point we get in above statement is, for the growth of any economy, most vital tool is governance and mechanism of the banking system of country in question.

Further, if we quote Thomas Jefferson again, “I believe that banking institutions are more dangerous to our liberties than standing armies.”<sup>5</sup>

We will realise that unlike earlier quote, this quote fits well in current scenario and this can easily be illustrated by the most recent example of Cyprus crisis which is reportedly marked initiating in the year 2011. According to a working paper #13-09, version 13/3/13 by Prof. Stavros A Zenios for The Wharton Financial Institutions Centre, The Wharton School, University of Pennsylvania, PA, Cyprus Economic Crisis can be summarized as<sup>6</sup> :-

1. Debt of Non-financial corporations and households is a drag on growth and is significantly higher than in other crisis countries.
2. Government debt is a drag on growth and is higher than in Ireland, similar to Spain but not quiet at the level of Greece.
3. Banking sector problems are the same order of magnitude as Ireland.

Due to this when new government came into power in Cyprus, their first strategy was to rationalize the fiscal system to bring the financial crisis under control. After a lot of discussion on 25<sup>th</sup> March 2013, the final agreement was reached and the decisions taken were the closure of most troubled popular bank and the restructuring of Bank of Cyprus. The rescue package of Bank of Cyprus included a deposit haircut for accounts over €100,000 which is kept undefined but if we go to experts view it will be approx. 50%, and the absorption of good assets and deposits below €100,000 of Popular Bank and its Emergency

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<sup>5</sup> On famous quotes on banking, The Money Masters (Anonymous). Retrieved from <http://www.themoneymasters.com/the-money-masters/famous-quotations-on-banking/>

<sup>6</sup> Zenios, A. (2013) The Cyprus Debt: A perfect crisis and a way forward from The Wharton School, University of Pennsylvania, PA. Working paper # 13-09. Website <http://fic.wharton.upenn.edu/fic/papers/13/13-09.pdf>



liquidity assistance (ELA) obligation. Furthermore, all Cypriot banking operations in Greece were sold at relatively low prices at the request of the Troika.<sup>7</sup>

The banking system has been cut to pieces and its public robbed with a viciousness that raises serious questions on the value system of EU. Inevitably there are serious disruptions on all aspects of life. In addition, the economy also could not provide high value added jobs to the growing professionals. In short, what took place was a major failure of the entire system.<sup>8</sup>

This led to furious reaction from Cyprus locals. On Nov 8, 2012, the Radical Leftist Rally organised first protest against austerity and the Troika Negotiations that were still taking place. Protest was expressed by standing outside the House of Representatives with banners and shouting slogans against the austerity. This protest was joined by New Internationalist Left (NEDA) which further on 14<sup>th</sup> November, 2012 organized an anti-austerity protest outside the Ministry of Finance in Nicosia. In the protest, the NEDA distributed the leaflets which mentioned that “The EU is trying to burden the workers with the debts from the collapse of the bankers.” And that “If this happens, the Cypriot economy and the future of new generations will then be mortgaged to local and foreign profiteers and usurious bankers.”<sup>9</sup>

The Cyprus Crisis evidently indicates that the banking failure for any nation could create disorder in national system and hence extra care becomes mandatory to be taken in policy framing, operations and in governance of banking system of respective country.

In recent past a lot of changes have been observed in banking sector of India. Global front has faced number of financial/economic crisis but Indian banking system managed to shield itself from any of its side effect. The current study focuses upon the three pronged study of Indian banking industry: - a. Performance, b. Effectiveness of Regulatory framework and c. Posed challenges for banking industry.

### **Objective of the research work**

The objective of the paper is:-

1. To study and discuss performance of banking industry of India.
2. To discuss the effectiveness of regulatory framework of Indian Banking System.
3. To study and discuss the challenges for the Indian banking industry.

### **Research methodology**

The research paper is primarily based on secondary data. Survey method (descriptive) has been adopted for data collection and data has been collected chiefly from the websites of regulatory institutions/policy making institutions and Credit rating agencies reports (RBI,

<sup>7</sup> Republic of Cyprus, Central Bank of Cyprus (2013), Memorandum of understanding on Specific Economic Policy Conditionality, 12 of April, 2013. Retrieved from <http://www.naftemporiki.gr/cmsutils/downloadpdf.aspx?id=647166>

<sup>8</sup> Theophanous A. (2013) The way out of Cyprus Economic crisis (Policy Paper). Notre Europe Jacques Delors Institute. Retrieved September 2013 from <http://www.notre-europe.eu/media/thewayoutofthecypruscrisistheophanous-ne-jdissept2013.pdf?pdf=ok>

<sup>9</sup> 2012-13 Cypriot Financial Crisis (n.d) In wikipedia. Retrieved November 13, 2013 from [http://en.wikipedia.org/wiki/2012%E2%80%9313\\_Cypriot\\_financial\\_crisis](http://en.wikipedia.org/wiki/2012%E2%80%9313_Cypriot_financial_crisis)



SEBI, CII, KPMG etc), research papers mentioned in the references and which are available in the public domain.

### Performance

A worth of Rs. 77 trillion (US \$ 1.25 trillion)<sup>10</sup> Indian Banking Industry which withstood the uproar of global financial emergency during 2008-09, started showing the signs of stress during subsequent period.

On global front various economic crises has destabilized the global economy like Sub-prime crisis, British banking crisis and Euro-Crisis are a few to name. Despite this according to Ernst and Young’s forecasting, if the fiscal deficit is avoided and if we manage to safeguard our economy from further economic shocks especially in Europe and China then the world economy is expected to recover slowly in 2013 and convalesce more strongly to 3.6% GDP growth in 2014.

Banks in rapidly growing economy are well capitalized and focusing on growth rather than restructuring. Chart 1 shows the Capital to risk-weighted asset ratio (CRAR) of Indian banks in different categories. It shows that CRAR under both Basel I and Basel II remained well above the stipulated norms for the system as a whole as well as for the bank groups during 2011-12, indicating that the Indian banks remained well capitalized.

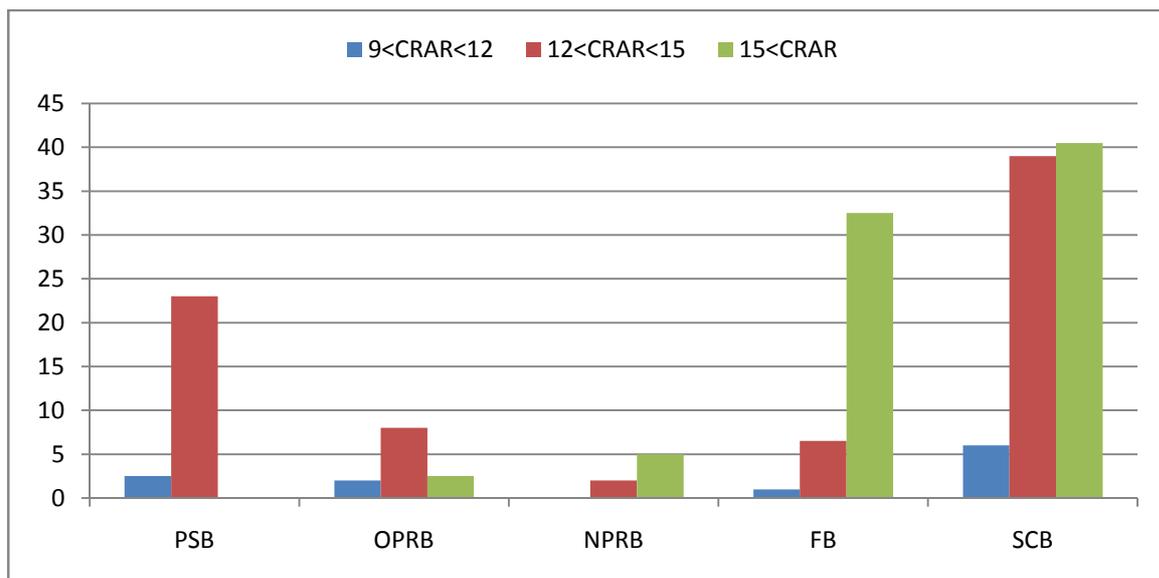


Chart1. Distribution of banks according to CRAR (end-March 2012)<sup>11</sup>

The referred report also indicates that during 2011-12 operating efficiency of banks in terms of cost to income ratio<sup>12</sup> witnessed a substantial improvement as shown in Chart 2.

<sup>10</sup> India Brand Equity Foundation (2013) Banking Sector in India. Retrieved on November 14, 2013 from <http://www.ibef.org/industry/banking-india.aspx>

<sup>11</sup> Reserve Bank of India (2012). Report on Trend and Progress of Banking in India for the year ended June 30, 2012 submitted to the Central Government in terms of Section 36(2) of the Banking Regulation Act, 1949. India. Retrieved from <http://rbidocs.rbi.org.in/rdocs/Publications/PDFs/0TPB021112FLS.pdf>

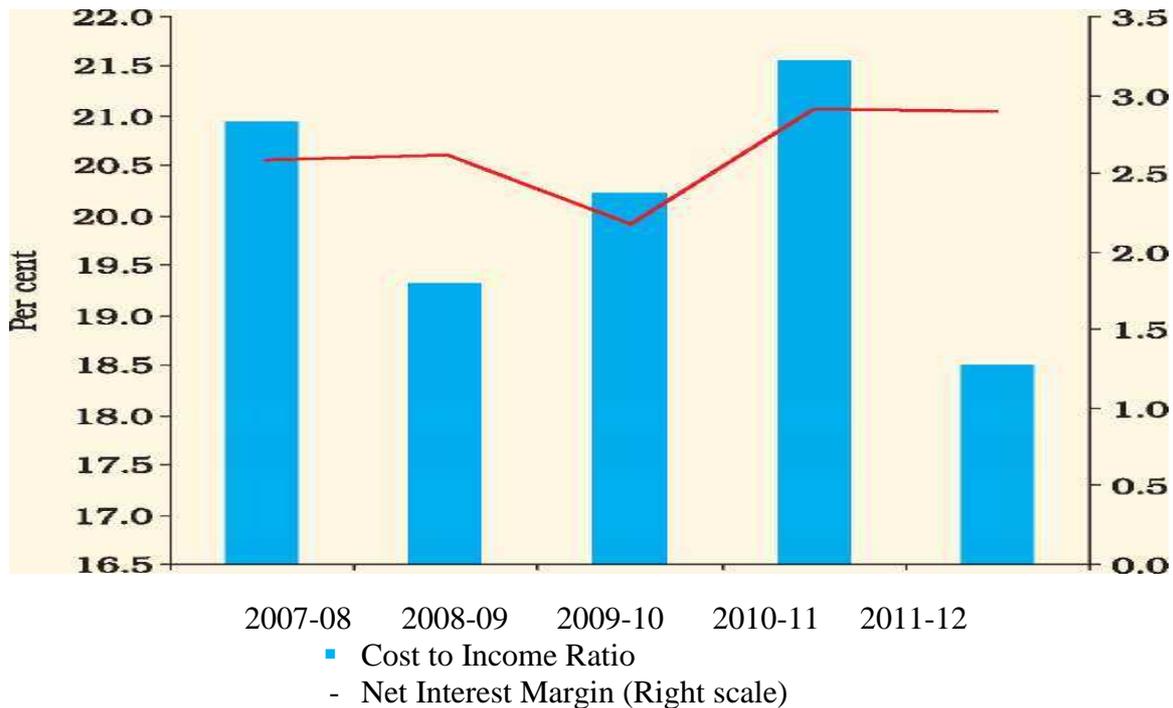


Chart 2. Trend in efficiency indicator<sup>vii</sup>

The chart also shows a marginal decline in Net Interest Margin (NIM) which is measured as excess of interest income over interest expense scaled by total assets. This signifies as to how effectively the banks set up their funds to generate income from credit and investment operations. Lower the ratio, the more efficient is the banking system. But when analysed at the bank level, the bank with high NIM is considered more efficient as high NIM can raise profitability<sup>13</sup>. Hence looking at the system as a whole it seems that the efficiency of banking system has raised with declining in NIM.

A survey was conducted by CII on “*Health of Indian banking sector in current regulatory environment*” in which the feedbacks received from 15 participative banks on the following was aggregated and analyzed:-

1. The prevailing market conditions vis-à-vis asset quality, capitalisation of banks & estimate the growth outlook in the short and long term
2. Regulatory & policy environment and aims to understand the views of banks on the current regulatory and policy environment vis-à-vis its impact on bank business and profitability.

According to its report key performance indicators of banks, i.e. Credit Growth, Growth in Deposits, Growth in Net Interest Income, Growth in Profit After Tax (PAT) and Return on Equity of majority of the surveyed banks have shown drop in the current fiscal (FY 2012-13). However, their performance is expected to improve considerably during the next fiscal (FY 2013-14) as shown in the chart 3.

<sup>12</sup> Calculated as operating expenses as percentage of total income

<sup>13</sup> Reserve Bank of India (2013) Net Interest Margin, Financial Crisis and Bank Behaviour: Experience of Indian Banks. Retrieved on November 14, 2013 from <http://www.rbi.org.in/scripts/PublicationsView.aspx?id=15418>

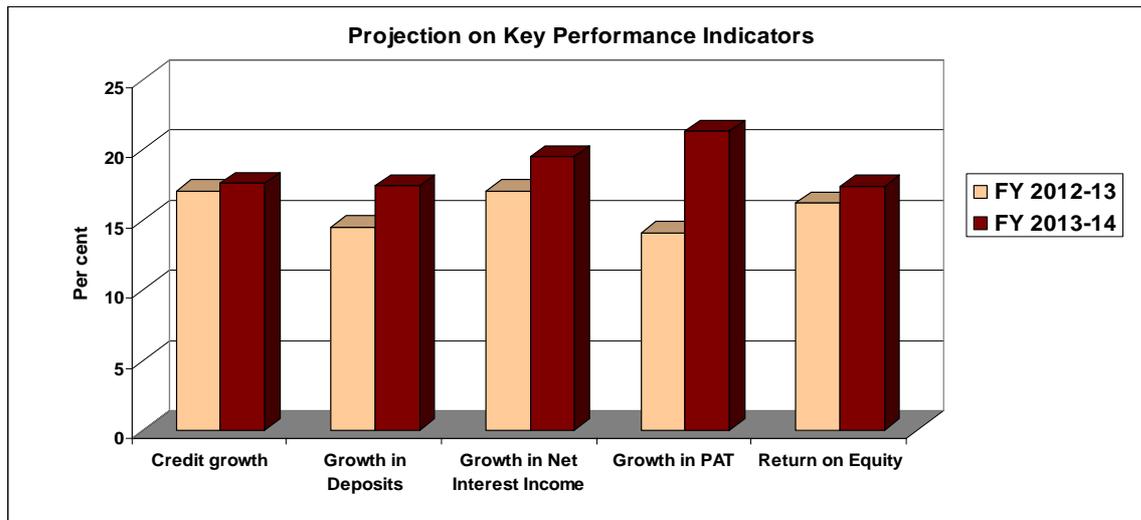


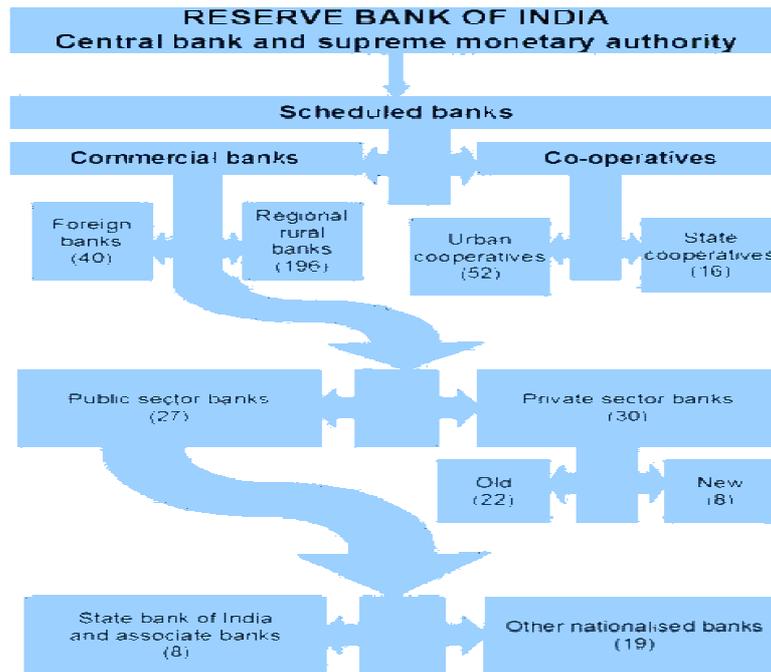
Chart 3. Source- CII survey “Health of Indian banking sector in current regulatory environment”

Although the study ascertains that Indian banking industry has the likelihood to become the third largest in global ranking by 2025 but it is in terms of growth. It raises the question that, “When growth is talked about, whether inclusion and stability given its due importance?” In Indian context, its difficult, hence current regulatory and policy environment becomes critical to make certain that Indian banking institutions stay financially sound and profitable. Let us now discuss few imperative aspects of the regulatory environment which controls Indian banking sector and its effectiveness on banking institutions.

### Effectiveness of regulatory frameworks

Indian banking system, to match with competition coming from foreign banks, is going through a shift from its conventional branch customer channel to more technology-centric channels. In this era of technology, supervising banking sector in a country like India which is an emerging economy is challenging for any regulator.

Fig.1 shows the banking structure prevailing in India. Banking Law Amendment Bill, 2012 which has been passed in upper houses in December 2012 is expected to bring change in the statistics of the banking structure as shown in the figure as government is inviting application and is all set to issue 7 new banking licenses by January 2014 as indicated by RBI Governor Raghuram Rajan.



*Fig.1. Structure of Organized Banking Sector in India*

It poses a challenge to the regulatory agencies as increased number of banking institutions will require stricter regulations to ensure diligent functioning. In India the role of regulatory institutions do not only limits to supervision and oversight functions but it also encompasses the important functions like formation of developmental policies which enables the banking institutions to grow effectively and efficiently in globalised environment by providing innovative and right product mix to customers.

According to CII survey, among the various developmental policies which have been recently introduced in Indian Banking Sector, Basel III regulatory requirement is most likely to have the maximum impact on the profitability of the Indian banking sector. Whereas the other important regulatory requirements like revised guidelines on priority sector lending and higher provisioning of restructured assets is also going to show major impact on the profitability of the banks as highlighted in the given Chart 4.

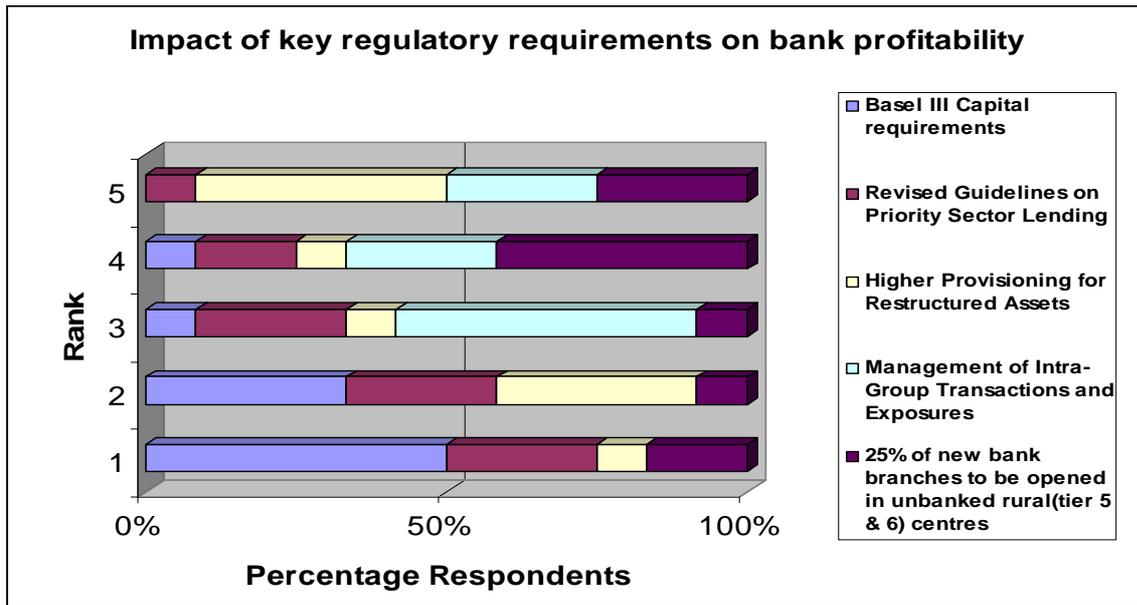


Chart 4. Source- CII survey “*Health of Indian banking sector in current regulatory environment*”

In the abovementioned chart researcher has tried to establish a relationship between set policy and its impact on the profitability. Practically, the banking institutions also have the similar approach. The banking institutions are more concerned regarding the business they are generating from any activity they carry out. This approach is basically to withstand the fierce competition.

Regulations can be made in relation to activities concerning “Steps to be followed” to ascertain that procedural check has been followed (Just for the sake of it being a documentary formality), but, is it possible for regulatory authorities to prepare a framework for employees to abide by “Ethical Conduct” or to inculcate “Ethical Conduct” from within in the employees?

Cobra post exposure is worth mentioning where a video posted on Cobrapost.com (A Delhi based website), which conducted the sting, shows the banking officials of country’s three leading banks, are advising customers on money laundering. Abuse of documents like PAN card, Voter-ID card, Passport or Electricity proof etc has been highlighted in this case. A number of agencies specifically Banks, Government and Regulatory agencies have been observed defaulting in its functions which results into these kinds of scams.

The basic problem with the banks is the culture they adopt and in which they mould their each new employee. The aggressive sales culture with a focus on cross selling, profit maximization culture in which concentration is more on selling equities, mutual funds and insurance and due to which the core task of banking business is fading, improper training to new employees, improper salaries to employees because of which they hawk around for illegal income sources, acceptance of multiple ID proofs for any sort of account opening procedure or for that matter to indulge into any kind of deal with the prospective client and not verifying the addresses and job details of the prospective clients.



Government as an agency has been found defaulting on the execution of Unique Identification (UID) number PAN India Project. Once the customers are possessing UID number, any other identification proof would not be accepted by the regulators and this will eliminate the problem of abuse of other ID proofs mentioned earlier.

Regulatory agencies are found defaulting on number of issues like<sup>14</sup>:-

1. Loopholes in Know your customers (KYC) norms like an employer's letter is sufficient to open up an account.
2. Multiple roles of RBI: - RBI frames the monetary policies and policies for managing debt as well as supervises the bank functioning.
3. Lack of appropriate number of RBI personnel: - There are in total 20000 RBI personnel who are supposed to ensure diligent functioning of about 80000 bank branches.
4. Poorly regulated Co-operative banks
5. Sufficiency of banks' KYC documents to buy products like Insurance.

Recent scams like Cobra post exposure compels us to raise questions on attentive functioning of the banking officials which is against the interest of public at large. Such instances pose questions on apposite implementation of regulatory norms in day to day operation of banks at ground level.

### **Market challenges for banking sector**

Banking Industry generally has to face old challenges repeatedly like employee retention, customer retention, maintaining transparency, obeying the regulatory authorities which have always been existing for banks irrespective of era it is functioning in and category it falls under. For simplified understanding following diagrammatic representation has been adopted

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<sup>14</sup> Adhikari A. (2013, April 14). "Too many loopholes". Business Today. Retrieved on November 15, 2013 from <http://businesstoday.intoday.in/story/cobrapost-expose-on-money-laundering-by-banks/1/193462.html>



to explain the types of challenges banking institutions are facing in prevailing scenario.

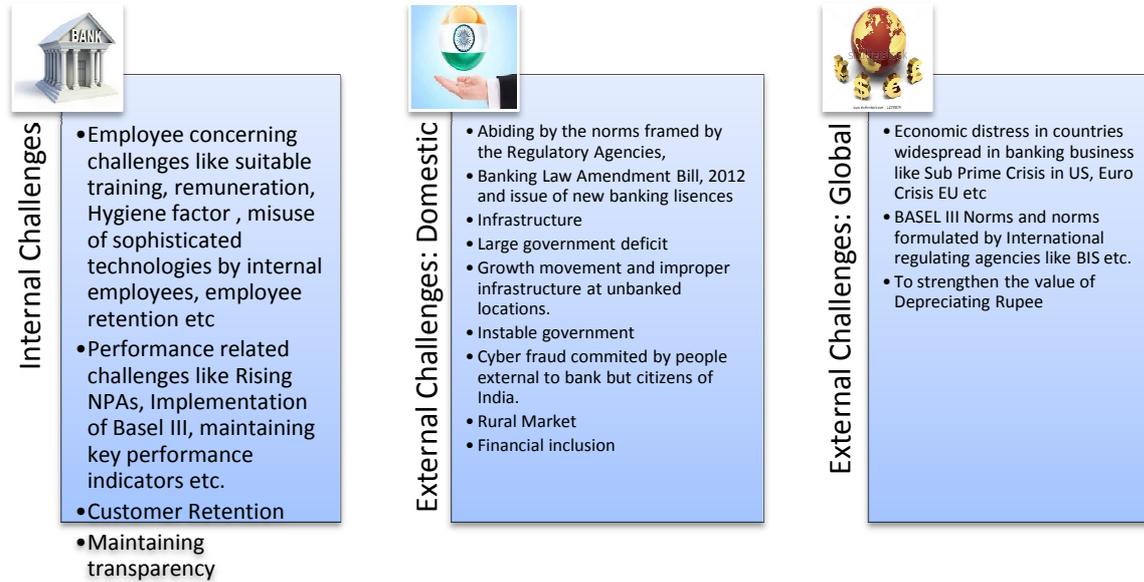


Fig.2. Types of challenges to banking sector in India

### Suggestion

#### 1. Role of Banks:-

- i) Technology enabled transactions to minimise malpractice: Transactions at ground level should be made technology enabled where it is ensured that each new/old customer's alike are giving their personal attribute related details basically fingerprint by way of biometrics, to banks if the transaction is of substantially of large quantum (A quantum of Rs. 1 Lac and above should be fixed as below minimum amount), and this information should instantly be circulated/stored in a data centre which can be accessed by all banking institutions and especially by the regulatory institutions. This will enable the system to know that a person with this fingerprint has procured a given amount from the respective bank. This kind of information circulation will make the system more transparent and the chances of misappropriation will be less.
- ii) Training to employees: In induction and orientation level itself the newly appointed employees should be counselled about the seriousness of any type of business they bring in the bank.
- iii) To devise schemes for customer retention
- iv) To ensure hiring intellectually and experience wise equipped employees over those who will work at low remuneration to ensure quality in service delivery and formulating policies at individual bank level.
- v) To warrant the validity of personal details provided by the prospective customers by following the procedural check in related details like address, employment, other banking transactions.



**2. Role of Government:-**

- i) Empowerment of Consumer forums
- ii) Speed up the UID PAN India Project
- iii) Providing well facilitated infrastructure at rural as well as urban level to facilitate the banks like HDFC to get success in projects like opening up of 500 mini branches by end of 2014. Proper facilities of infrastructure will enable the speedy disposal of services in unbanked location.
- iv) To form one special institution to lessen the burden of RBI because duplication of responsibility on RBI has been observed as it ensures the proper functioning of banks by supervising the banking institutions along with framing of monetary policies.

**3. Role of Regulatory Authority:-**

- i) Increasing the number of employees in RBI to enable more frequent auditing to the banks.
- ii) To pose stringent penalties to defaulter banks as it was observed that monetary penalties was imposed on defaulter banks (5 Crore by Axis bank, 4.5 Crore by HDFC bank and 1 Crore by ICICI bank) in Cobra post exposure, but a monetary penalty sometime becomes negligible penalty for such big banks to pay as these are financial sound. Duration related penalties can be effective like for some period of time those services in which default is observed can be suspended in the respective banks. This will threaten the respective banks to lose their business for that particular period when they would not be able to deliver the service because of suspension.
- iii) Providing technology enabled infrastructure to banks to ensure customer and employee data storage. Such a sophisticated technological solution should be made available in which finger print data (by way of biometrics) of every possible customer from each bank is easily available to the banking institutions if possible to maximum possible managerial level employees by way of data centre but by assuring that the secrecy of the data will be maintained and would not be misused anywhere by anybody who uses the customers personal information for decision making at the time of any transaction. This will enable the employees of banking institutions to refrain from misappropriation or committing any malpractice in banking transactions.

**Conclusion**

Indian banking institutions, in contemporary scenario is expected to face more challenges. The responsibility now lies basically on the enforcement authorities and government alike to ensure transparency and diligent functioning in banking institutions.

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## **A Study on the Effect of Demonetisation on Various Sectors of Indian Economy**

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### **Abstract**

*Demonetization is a well-known practice in monetary policy to tackle black money. It is a process by which a series of currency will lose its legal tender. The series of currency will not be acceptable as valid currency. Governments from time to time resort to demonetisation to remove black money and curb corruption. People who hold huge amounts of black money in cash are at a big loss. Their black money in cash is now a pile of trash. The paper took into account the recent demonetisation in India in November 2017. The present paper highlights the pros and cons of demonetisation. It also analyses the effects of demonetisation on various sectors of Indian economy. The paper highlights the suggestive measures to tackle the situation of recent demonetisation in India. The study is not confined to any particular area; on the other hand it is applicable to whole India. However, opinion of professionals, professors, officers/managers of various banks in Jaipur and Moradabad district of Rajasthan and Uttar Pradesh respectively, has been taken about the need, issues, challenges, and effect of demonetisation of Indian currency. Their views have been incorporated in this paper. The paper also takes the references of various articles written by various experts on money and demonetisation. The paper concludes that demonetisation will act as a deterrent factor to people who occupy large amount of black money and refrain from such actions in future. This move will reward the honest tax payers and punish the culprits.*

**Key words:** *Demonetisation, black money, corruption, legal tender, digital payments*



## A Study on the Effect of Demonetisation on Various Sectors of Indian Economy

### Introduction

Prime Minister Mr Narendra Modi made an extraordinary speech on TV on November 8, 2016 in the evening in which it was stated that all currency notes of denominations Rs. 500 and Rs. 1000 were to lose legal sanction from midnight. Many people have named it as “surgical strike” on black money. The government has banned six lakh seventy thousand crore rupees denominated in Rs 1000 notes and eight lakh twenty five thousand crore rupees denominated in Rs 500 notes. Black money is never been in doubt and this can very well be explained by the fact that out of 131 crore population, only 4 percent pay income tax. This is in such a economy where huge amount has been spent on 30 lakhs cars, 2 crore motorcycles, and 800 tonne gold.

While Rs. 500 currency notes are now to be re-issued, Rs. 1000 currency notes will be completely wiped out. However, Rs. 500 and Rs. 2000 currency notes will be introduced in limited numbers from November 10, 2016. Although all notes below Rs 500 will remain unaffected. Those persons who are having Rs 500 and Rs 1000 currency notes can change or deposit in their bank accounts.

India uses currency more than USA, European countries and many other countries. Indian economy is very much dependable on currency notes. Therefore, demonetisation will create great effect on our economy. India printed and uses maximum currency after China in the world. As compared to other big economies of the world, Indian GDP is highly based on currency notes. Less deposit of money in Jan Dhan accounts also show the importance of cash transactions in Indian economy.

### Proportion of currency notes in Indian GDP

Name of the countries	Proportion of currency notes to GDP	Name of the countries	Proportion of currency notes to GDP
South Africa	2.39 %	Turkey	5.37 %
Britain	3.72 %	South Korea	5.56 %
Brazil	3.82 %	USA	7.9 %
Canada	4.08 %	European Countries	10.63 %
Australia	4.64 %	India	10.86 %

### Currency deposit ratio

Countries	October 2002	May 2016
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India	18.35 %	16.23 %
USA	13.10 %	12.86 %
European Countries	5.86 %	10.49 %

### **Demonetisation Of Indian Currency**

Demonetization is an established practice in monetary policy to tackle black money. It is a process by which a series of currency will not be legal tender. The series of currency will not be acceptable as valid currency.

#### **Objectives of Demonetisation**

The objectives of demonetisation are:

- To curb corruption, black money and terrorism;
- To introduce new currency or there is a currency storage;
- There is an excess of fake currency in the economy

#### **Demonetisation in the past**

On January 11, 1946, the government announced that notes of Rs 500, Rs 1000 and Rs 10,000 will not be legal tender from January 12, 1946. All three notes were reintroduced in 1954.

The Janta Dal demonetised high currency notes of Rs 1000, Rs 5000 and Rs 10,000 in a second such historic move on January 16, 1978, again with a view to curb black money transactions. It was termed as “an act to provide in the public interest for the demonetisation of certain high denomination bank notes and for matters connected therewith or incidental thereto.” People who possessed these notes were given till January 24 the same year — a week’s time — to exchange any high denomination bank notes.

#### **Demonetisation worldwide**

However, demonetisation is not a new phenomenon. Countries in the past have tried to regulate their currencies and mostly failed. There are five instances when governments across the world failed to implement currency reforms.

- **Soviet Union:** Mikhail Gorbachev in January 1991 withdrew 50 and 100 Ruble notes, in order to eliminate black money and increase the currency value. The currency notes accounted for a 1/3 of the total money in circulation. Gorbachev faced a rebellion within eight months in August as the move was not a success. The 1991 attempt led to a successful re-denomination of the Ruble in 1998 where three zeros were removed. Again, currency switch in 2010 was done when two more zeros were removed from the old currency. Also 2010 attempt was not as successful as the timing coincided with a poor harvest.



- **Myanmar:** The country's military invalidated 80 per cent of the currency in 1987. Students demonstrated against this move.
- **Ghana:** In 1982 Ghana demonetised its 50 cedi currency note. The move was backfired, with the public losing faith in the banking system and switching over to physical assets and foreign currency.
- **Nigeria:** Muhammadu Buhari in 1984 issued new currency notes with new colours so that old notes would be rendered unusable within a limited time frame. The purpose to fix a debt-ridden and inflated economy was not achieved.
- **Zaire:** In 1993 Dictator Mobutu Sese Seko's administration laid out back-to-back currency reforms along with a plan to withdraw obsolescent currency from the system. The reform was not well received by the public and resulted in increasing economic disruptions. He was ousted in 1997

### Objective of the Study

The present study aims at the following objectives:

- To study the purpose of demonetisation;
- To analyse the pros and cons of demonetisation
- To analyse the effects of demonetisation on various sectors of the economy.

### Research Methodology

Research in common parlance refers to a search for knowledge. One can also define research as a scientific and systematic search for pertinent information on a specific topic. The present study has been undertaken to examine the issues and effects of demonetisation of high denomination currency notes in India on various sectors of Indian economy.

### Area of Study

The study is not confined to any particular area; on the other hand it is applicable to whole India. However, opinion of professionals, professors, officers/managers of various banks in Jaipur and Moradabad district of Rajasthan and Uttar Pradesh respectively, has been taken about the need, issues, challenges, and effect of demonetisation of Indian currency. Their views have been incorporated in this paper. The paper also takes the references of various articles written by various experts on money and demonetisation.

### Advantages of Demonetisation In India

**The advantages of demonetisation are mentioned herein below:**

1. **Attack on black money holders:** People who hold huge amounts of black money in cash are at a big loss. Their black money in cash is now a pile of trash. Now if a black money holder wants to deposit money in bank account than he/she has to show identity. Also he/she will be liable to pay two hundred percent penalty on income tax calculated for the purpose. Either black money holders have to go to banks to exchange their money into new forms of notes and get under the government radar. Else they forget the money because it will turn into useless paper soon.
2. **Bust of fake currency rackets:** Most of the fake currencies used to be in the high denominations currency notes of Rs. 500 and Rs. 1000. Through demonetisation the



government has ruined all these unethical rackets completely. Now there will be no use of this money.

- 3. End of terrorist funding: A huge amount of black money is used in funding** terrorists, naxalites and other non-state actors which is a direct threat to the national security. Now these organizations will suffer from lack/shortage of funds. Most of the terrorist, maoist organization used these funds for buying arms and weapons. Now buying arms is an extremely difficult task after demonetisation. This will stop funding to Kashmiri separatists. This will also reduce the pelting of stones by Kashmiri kids and youths who are asked to throw stones for Rs. 100.
- 4. Marching towards a cashless economy:** Though practically impossible to have a cent percent cashless economy, the proportion of liquid cash in the economy will decrease and Indian economy will be more digitized. This will lead to greater transparency. Now Indian government has put some limitation for cash withdrawal from accounts. People will go for online payments, they will use Paytm or other online payment options for purchasing goods or making payments. There will be more use of debit and credit cards by the people.
- 5. End of Hawala Transactions:** Most Hawala transactions used to be carried out in the denominations of Rs. 500 and Rs. 1000 currency notes. With this demonetisation, the central government has delivered a fatal blow to the illegal and unethical Hawala traders as they can't trade anymore using Rs. 500 and Rs. 1000 currency notes.

### **Disadvantages of Demonetisation In India**

**The disadvantages of demonetisation are mentioned herein below:**

- 1. Cost of printing new notes:** Printing new notes needs money. Declaring old notes as invalid and putting new notes into system will cost a good amount.
- 2. Shortage of money to common people:** There is a shortage of money for common people. They are finding it difficult to get money for purchasing products for daily use.
- 3. Huge rush at banks:** Banks are extremely over-crowded by account holders for exchanging old denomination notes with new one and depositing old denomination notes in their accounts. As supply of new notes is limited, there is a huge rush for getting new notes.
- 4. Short term inflation:** Due to shortage of money in the market, short-term cost push inflation will occur. Prices of vegetables and fruits have also soared creating unnecessary burden on the common man.
- 5. Cost of printing new notes:** RBI spends Rs 3.17 for printing one note of Rs 1000 and Rs 2.5 for Rs 500 note. With demonetisation new notes have to be printed for which huge cost will be involved. It is estimated that RBI has to spend around Rs 2770 crore for printing new currency.
- 6. Marriage season:** Demonetisation is creating lot of problems and difficulties for those families who have weddings in their houses.

### **State of Affairs after Demonetisation of Indian Currency**

State of affairs after November 8, 2016 is highlighted below:

- 1. Holders of black money gave donations to various charitable institutions, schools and religious organisation in Rs 500 and Rs 1000 currency notes.** There are chances that these people want to convert their black money into white one. Many charitable



- institutions have shown this donation in back dates. The income department may ask them why you have not deposited this amount in the bank.
2. Many employers have given salary to their employees in advance ranging from one year to two year to adjust their black money. When any employee objects to it, he/she is fired. Many employers forced their employees to open their accounts in the bank and deposit the black money.
  3. We find long queues in front of ATMs and bank counters to exchange as well as deposit their old currency and also to withdraw new currency from the bank for daily requirements.
  4. Government declared National Highway toll free till 2<sup>nd</sup> December, 2016.
  5. Income tax officers raid various shops of jewellers because many people exchanges their old currency black money with gold.
  6. General public paid their house tax, water tax, and other taxes with old currency. They have paid their electricity bills. The electricity distribution companies have received lot of amount due to demonetisation.
  7. It has been seen that borrowers have paid their loans i.e. car loans, homes loans, personal loans and other types of loans with old currency and closed their loan accounts.
  8. Government allowed old currency to be in circulation at petrol pumps, railway ticket counters, airport, public transport ticket windows, government hospitals, LPG gas, medical stores, and many other places. People took lot of advantages by spending their old currencies at such places. But holders of black money convert their black money denominated in Rs 500 and Rs 1000 notes at such places by paying commission. When it comes to knowledge of the government, it stopped the payment of Rs 500 and Rs 1000 notes at petrol pumps and airport.
  9. Paytm is now being used even at kirana shops, vegetable stores, and small vendors on the side of the road.
  10. Electricity distribution companies have become cash rich. People paid their electricity dues through Rs 500 and Rs 1000 notes. Various Nagar Nigams also collected huge amount in terms of house tax and water tax.
  11. The Government on December 8, 2016 announced that people can save money if they pay through debit and credit cards. Petrol, diesel, rail tickets, toll tax, insurance premium will become cheaper if paid through cards.
  12. In various income tax raids lots of fake currency and Rs 2000 new currency notes are seized by the officers. When people are getting just Rs 2000- Rs 10000 notes from banks, the question arises now how these so called rich people getting crores of Rs 2000 notes.

### Effects of Demonetisation In India

The effects of demonetisation on the various sectors of the Indian economy are highlighted below:

1. **Effect on Economic Growth:** RBI has informed on December 7, 2016 in its quarterly credit policy review that economic growth may decline to 7.1 % from 7.6 % during 2015-16 due to slow down of economic activities for want of liquid cash.
2. **Effect on the persons who have black money:** These people are devising various interesting methods to convert their black money into white such as paying salaries in advance, paying back loans, exchanging black money with gold, enticing the people with some percentage of money for exchange, depositing money in the accounts of



their relatives and friends, asking their employees to stand in the long queues in banks and ATMs for getting money exchanged, using their links with employees of banks, etc.

3. **Effect on Gross Domestic Product:** The GDP formation could be squeezed by this demonetisation, with reduction in the consumption demand. In the short run, the impact on GDP growth is clearly going to be downward and depends to a large extent on how long the cash problem is going to take. Many International Credit rating Agencies cut India Growth rate prediction. There is a probability of GDP growth rate to slow down by 0.5 % to 2 % from the last year GDP growth of 7.6 percent for at least next 6 months.
4. **Effect on Employment:** Many organisations have postponed their recruitments because of slow down in the economy. Many start-ups have informed various educational institutions that they will go for placement after few months.
5. **Effect on Demand:** The demand for consumer goods, luxury items, real estate and property, automobiles, etc will going to be affected to a certain extent because these sectors will face certain restraint in demand from the side of the consumer, due to the significant amount of cash transactions involved in these sectors.
6. **Effect on Jan Dhan Accounts:** The poor people are being used by black money hoarders and huge amounts are being deposited in their Jan Dhan accounts. As per the government's figures, as on November 30, there were a whopping 25.78 crore Jan Dhan accounts. Of these, 19.88 crore were active accounts and 5.9 crore accounts had zero balance. On November 9, 2016 a day after demonetising Rs 500 and Rs 1,000 notes the active accounts had deposits of Rs 45,636.61 crore. On November 30, 2016 as per the Pradhan Mantri Jan Dhan Yojana website, the amount of deposits in the 19.88 crore active account had swollen to Rs 74,321.55 crore pointing to deposits of Rs 28,684.94 crore.
7. **Effect on Banking Sector:** Old denomination notes now to be deposited or exchanged in banks as a result of which more amounts being deposited in Savings and Current Account of banks. This will enhance the liquidity position of the banks, which can be utilized further for lending purposes. However RBI has increased the CRR for such deposits. Households have kept these funds for emergency purposes; there would be withdrawals at later stage. The banks have focussed their work on the deposits and withdrawal of currency notes. Many other works of the bank have suffered such as loans and advances, draft facility, foreign currency exchange, etc. This is not the case of one bank but the work is suffered in nearly all the banks.
8. **Effect on Parallel Economy:** The demonetisation is expected to remove black money from the economy as they will be blocked since the holders of old Rs 500 and Rs 1000 notes will not be in a position to deposit the same in the banks. This will freeze the circulation of large volume of fake currency in the short term. Also, it would curb the funding for anti-social elements like hawala, smuggling, terrorism, etc.
9. **Effect on Money Supply:** Until the new Rs 500 and Rs 2000 currency notes get widely circulated in the market, money supply is expected to reduce in the short run. To the extent that black money (which is not fake) does not re-enter the system, reserve money and hence money supply will decrease permanently. However, as the new currency notes get circulated slowly in the market and the mismatch gets over, money supply will rise.
10. **Effect on Online Transactions and Alternate Payment Methods:** With cash transactions facing a restraint, alternative forms of payment will see an increase in demand. Use of Debit and Credit Cards, digital transaction systems, e-wallets and



apps, online transactions using e-banking, etc. will definitely see substantial increase in demand. This should eventually lead to strengthening of such systems and the infrastructure required. In spite of the initial hesitation and restraints in the digital system, eventually this revolution will be well assimilated and will prove to be encouraging for the Indian economy in the long run.

11. **Effect on various Economic Entities:** As cash transaction lowering due to demonetisation and until the new notes are spread widely in the market; certain sections of the society could face short term problems and disruption in facilitation of their transactions. The important sectors of the society which may face problems are agriculture and related sector, households, small traders and businessmen, service sector, political parties, kirana and retail outlets, professionals especially doctors, etc. These sections of the society needs more cash transactions on frequent basis.
12. **Effect on unorganised sector:** Nearly 2/3 of India's GDP is a cash economy which is heavily dominated by the unorganized sector. Banking penetration in India is close to 53 percent but since the co-operative banks are kept separate it becomes a harder hit. Also, most of the savings and trade are done in the form of cash; the demonetisation has brought them to a standstill. As sowing season for the Rabi crops is in full swing, it is taking a toll on farmers
13. **Effect on China:** Production in the companies which manufacture products based on Indian needs have shown a decline. Many Indian importers have cancelled their orders due to decline in the demand of Chinese products. It is estimated that import from china will remain slow for another six months.
14. **Effect on booking of railway tickets:** Booking of rail tickets have shown upsurge after two days of demonetisation. People are booking tickets at counters in Rs 500 and Rs 1000 notes with the objective of cancelling it after few days and get back the amount in new currency. According to railway board there is an increase of booking of tickets by more than 70 percent.
15. **Effect on e-commerce companies:** Companies like Amazon, Snapdeal, Flipkart, ShopClues, etc are badly affected due to demonetisation. Their 80 % sales is on cash on delivery (COD) mode. Due to demonetisation their COD sale has reduced to just 1 %.

### **Suggestions to Tackle the Situation after Demonetisation**

The researchers present the following suggestions:

1. People should be encouraged to use plastic money such as debit and credit cards. Also other alternatives such as paytm, net banking, cheques, adhar based digital payment, etc can be used to tackle the situation.
2. The banks should provide pre-paid debit cards to poor people who have no accounts in the bank.
3. India has a buffer stock of food grains of around 4 crore tonnes. State governments should be told to give this food grains to public on credit or free through public distribution system so that nobody should remain hungry for want of money.
4. Various workshops and seminars should be organised by banks, financial institutions and colleges to educate the people towards cashless society.
5. Though the government introduces incentives for cash less transactions but they are very less. These incentives should be increased further so that more people motivated towards digital or online payments.



6. POS machines at shops should be installed. The government should give subsidy to the shopkeepers to purchase these POS machines.
7. Income tax officers continuously raiding on various establishments and lot of new currency is being seized. It is suggested that government should try to complete legal formalities as early as possible so that these seized notes should again be issued to banks so that it can be given to required account holders.

### **Conclusion**

To conclude we can say that India being a welfare state needs finance to spend on social project hence the move will bring out unaccounted black money, this will bring inclusive growth. Demonetisation will act as a deterrent factor to people who occupies large amount of black money and refrain from such actions in future. This move will reward the honest tax payers and punish the culprits. However, there are lot of issues which needs to be taken care of, such as illegal money being deposited in Jan Dhan accounts, duplication of notes, making banking system more effective and efficient. Hence the issue should not be looked from political point of view rather as a ethical step to uphold the principle of right to equality as enshrined in our Constitution.

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## Corporate Whistle-blowers': Policy, Practice and Ethics

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### Abstract

*This was observed under a survey report, released by KPMG in June 2011, that in India about 88 percent of corporate frauds doesn't get reported and it takes longer time to detect occurrence of fraud in the company in India as compared to US or Europe. Not only this, there are few more shocking submissions as well, which suggests that now fraud takes longer to get detected from an average of 2.5 yrs in 2007 to an average of 3.4 years in 2011 analysis. Moreover Fraud goes longer in Asia where it generally takes 5 yrs for the fraud to get exposed and 16 percent of frauds go undetected for 10 years or more.*

*The paper tries to suggest that for bringing a solution to occurrence of frauds in Indian corporate we have an effective measure to make use of which has been talked about many times i.e. "Empowering the Whistle-blowers" and "Streamlining the reporting mechanism by the whistle-blowers".*

*By adopting a conceptual research, the paper tries to bring in focus the important role played by whistle-blowers in the organizational structure, the comparative study of whistle-blowers policy in India with US, UK and Australia. Whistleblowers policy of these three countries is taken into consideration because of the effective reach of their policy which is lacking in India. The practice adopted in real on basis of survey reports and examples of practice adopted by few listed companies in India for protection of whistle-blowers. Along with this, the paper also tries to raise an important issue in relation to "the ethics of Whistle-blowers", which becomes the most important aspect to examine after observing few incidences taking place in U.S companies as an effect of Dodd-Frank Whistleblower rules in 2011 by U.S. Securities and Exchange Commission.*



## **Corporate Whistle-blowers': Policy, Practice and Ethics**

### **Introduction**

Today's competitive business environment forces companies to function in such a fashion which enables them to capture the highest market share to be ahead of all the competitors. In recent past we have come across many such cases where we have observed the well established corporate collapsing overnight while attempting to do so but by wrong means. Here the famous Satyam Scam is being referred. Do we really think that an overnight incidence may lead to fall of big corporate like Satyam? The answer is no. Background of the scam suggests that few inside officials of the organization, continuously indulge themselves into some or the other kind of unlawful activity (Financial or Non-financial) which leads to such a loss, not only to the organization but also to stakeholders of the organization. Hence it is necessary from ethical point of view that organizations create such a professional environment which make each one of the employees empowered enough to raise voice against any unlawful activity they observe in the organization. After all employees (Current employees and ex-employees) are the one, around whom these culprits carry out unlawful activity. If employees don't pin point the wrongdoing, then these activities will not only harm the organization but eventually harm the employees who are the most important stakeholders of the organization.

Here comes the role of Whistleblower: An important element in Organizational set up who needs to perform his/her role by blowing the whistle and giving the information of fraud taking place within the organization at alarming situations which will result into the misuse of peoples money which they have invested in the companies by buying the shares of the company (in present context) or if we talk of government organization then the misuse of peoples money (tax paid by public) again, which government organizations utilize for various developmental projects of country.

"Whistleblowers sound an alarm from within the very organizations in which they work, aiming to spotlight neglect or abuses that threaten the public interest" (Bok1980, p.177).

There is no common legal definition of what constitutes whistle-blowing.<sup>1</sup> The International Anti-Corruption standards, the 2009 OECD Recommendations of the Council for further combating Bribery of Foreign Public Officials in International Business Transactions (Anti Bribery Recommendation) refers to protection from "Discriminatory or disciplinary action public or private sector employees who report in good faith and on reasonable grounds to the competent authorities."<sup>1</sup>

So, if we again refer to the case of Satyam Scam, we will be able to observe that, there existed some loopholes in the governance mechanism of Satyam which facilitated the misconduct and which eventually engulfed investor's money. According to a survey report released by KPMG in June 2011, it was submitted that in India about 88 percent of corporate frauds doesn't get reported and it takes longer time to detect occurrence of fraud in the company in India as compared to US or Europe. Not only this, there are few more shocking



submissions as well, which suggests that now fraud takes longer to get detected from an average of 2.5 years in 2007 to an average of 3.4 years in 2011 analysis. Moreover fraud goes longer in Asia where it generally takes 5 years for the fraud to get exposed and 16 per cent of frauds go undetected for 10 years or more.

Research conducted by various independent Research Organizations suggests that the current laws do not provide protection to Whistleblower’s identity. Yet another study conducted in 2006 uncovers some horrendous facts about the after effect of Whistleblowing on whistleblowers; Study on 233 whistleblowers in a hospital of the US reported the following consequences which has been shown in the chart, faced by them.”(Rost, 2006)<sup>2</sup>

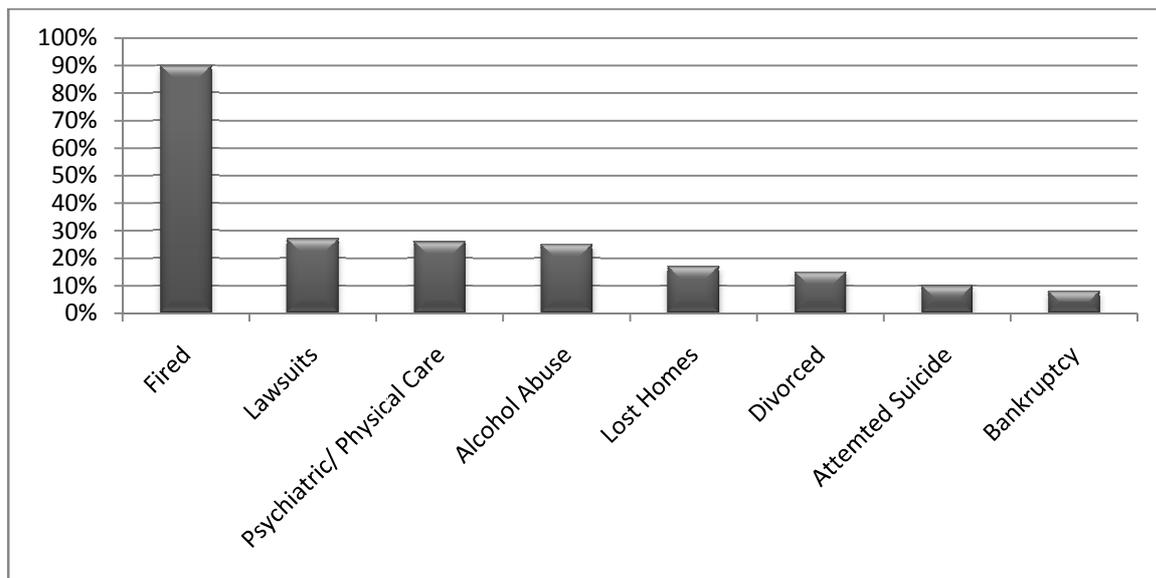


Chart-1: Source of facts is Soft Skull Press ‘the Whistle-blower: Confessions of Health Hitman’“. Rost P. (2006)

These researches showed the importance of stringent frameworks to be formulated by the policymakers for providing a congenial environment to the employees. Such a framework that enables the employee to take action against any fraudulent activity with confidence and authority.

**Corporate whistle-blower: Policy**

With the fluctuating economic scenario the internal business functions are hugely getting affected. This is raising questions on the ethical conduct of the businesses. To maintain transparency, the policymakers are obliged to come with stringent regulations which are full proof and have the qualities of employee (Whistle-blowers) and investor friendliness. National Policymakers and authorities of International Organizations are working alike for achieving this aim of Whistleblowers’ empowerment.

In following paragraph some exemplary, country specific legislations for the “Protection of Whistle-blowers” are discussed along with the legislation which are prevailing in India:

**a. Whistle-blower Policy in the U.S.A:-** In U.S.A the concept of whistle blowers protection incepted century ago in False Claims Act, 1863.<sup>3</sup> under this act financial reward of upto 30 per cent of the proceeds of lawsuit could be shared to the whistleblowers. At the same time



the act imposed penalties on false whistleblowers. Currently Sarbanes-Oxley act (SOX Act), 2002 provides necessary regulations for the protection of Whistleblowers<sup>4</sup> which is equally applicable to public listed companies. It inhibits the publicly traded corporations to take any adverse step towards those employees who reveals about the fraudulent activities in the company.<sup>5</sup> It maintains that the companies which have securities which fall under the category of section 12 of Securities Exchange Act, 1934, are specifically subjected to SOX's Whistleblowers Provisions. The extent of this Act is such if some foreign national citizen working in United States subsidiary of a foreign company which is listed in New York Stock Exchange, also gets protection under the Whistle-blowers provision of SOX Act.<sup>6</sup>

Dodd-Frank Reforms and Consumer Protection Act is another source for the protection of whistle-blowers primarily targeted to protect the private sector employees who complains in good faith about the misconduct happening inside the organization but part of this framework also provide opportunity to the employees of federal government to redress their in relation to whistle-blowing.<sup>7</sup> Racketeer Influenced and Corrupt Organizations Act (RICO Act) which was enacted in 1970 to curb the organized crimes in USA also aims the protection of Whistle-blowers against the misconducts of organizational/related authorities. (Balakrishnan and Sharma, 2011)<sup>8</sup>

**b. Whistle-blowers Policy in U.K & Australia:** - The UK, Public Interest Disclosure Act, 1998, safeguards the whistleblowers from the act of victimization and dismissal. Furthermore, the Public Interest Disclosure Act, 1994 of Australia preserves the identity of whistle-blowers and ensures that they don't get unfair treatment within the organization. (Balakrishnan and Sharma, 2011)<sup>9</sup>

Moreover, the legislations of these two countries adopt a "No loophole" approach to protect the whistleblower covering not only whistleblower (Public Servants and Permanent Employees) but it also encompasses consultants, contractors, temporary employees, former employees and volunteers. Public Service Act of Australia provides whistle-blowers Protection for "In or for an agency" employees hence covering the external/contract employees also. Similarly U.K Law contractor disclosures are also being protected. The "No loophole" approach can also be extended to a wider range of persons like job applicants, the unemployed, the members who have been blacklisted and family members.<sup>10</sup>

**c. Whistle-blowers Policy in India:** - The listed companies in India are governed by Clause 49 of SEBIs listing agreement, but whistle-blower policy in this act is non-mandatory in nature.(Balakrishnan and Sharma, 2011)<sup>8</sup> It clearly states that "listed companies may establish a mechanism to enable disclosure of unethical behavior, actual or suspected fraud or violation of company's code of conduct or ethics policy." RBI also provides provisions for the protection of whistle-blowers eventually to strengthen the financial stability and win over the public confidence on financial sector. The Limited Liability Partnership Act, 2008 has provisions to ensure whistle-blowers safety from that of harassment, termination of employment or any such treatment to make the system more transparent. Apart from this we also have Whistle-blowers Protection Bill 2011 in pipeline, which was passed in Lok Sabha in December 2011 but got entangled in discussion in Upper Houses because of the objections created by the oppositions.<sup>11</sup>

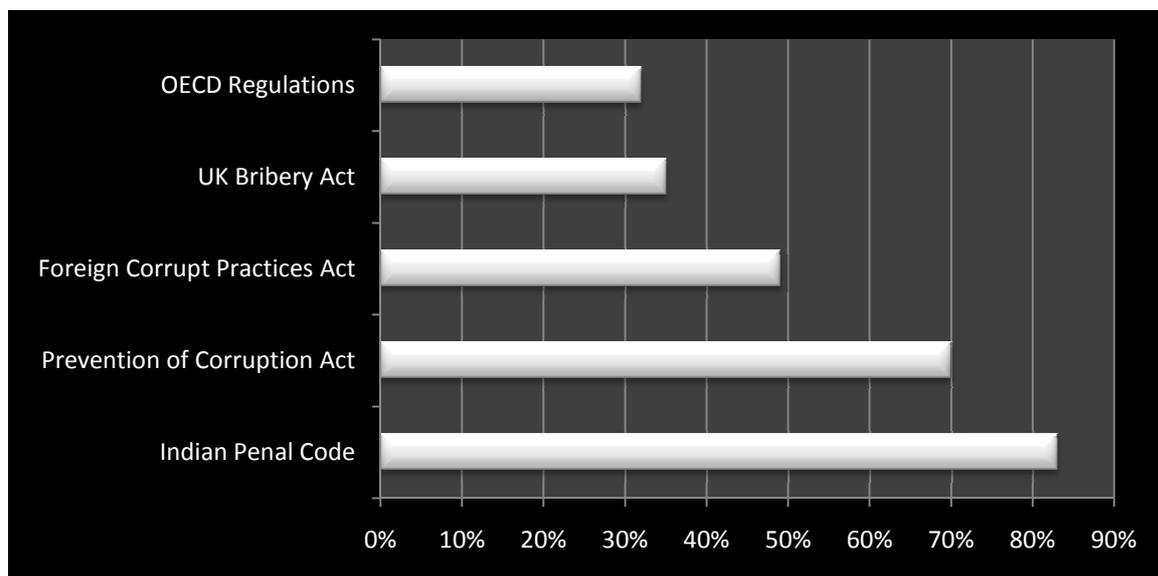


### Corporate whistle-blower: Practice

This section deals with two aspects. One is to understand the survey report presented by one of the independent market research organization on what are the findings related to whistle-blowing mechanism in Indian companies and the other is to lay down the examples of few Indian Companies in terms of whistle-blowing mechanism being enforced in their organization. One of the recent survey conducted by Ernst and Young “Frauds and Corporate Governance- Changing paradigm in India”, A report based on Indian Fraud Survey reveals that 68 per cent of respondents accept that most important factor which could unearth the fraud incidences occurring in organization was Whistle-blowing. At the same time the study also suggests that Whistle-blowing mechanism is weak in Indian Companies. This is supported by the following facts:-

1. Approximately 50 per cent of the respondents representing Indian companies mentioned that their companies do not have Whistle-blower mechanism. And 75 per cent of Indian MNCs claimed they have such mechanisms being practiced in their companies.
2. Less than 50 per cent of the respondents claimed that their offices do have telephone (Hotline) mechanism for Whistle-blowing purpose.
3. Out of those who claimed to have whistle-blowers mechanism, 90 per cent of them further accepted that their telephone (Hotline) mechanism is being handled / operated internally. This clarifies that having such a mechanism will inhibit the whistle blowers to make necessary complaints against the unethical activity being performed by insiders.
4. The following chart shows the companies awareness level of applicable laws. This clearly indicates that respondent Indian Companies have sufficient knowledge about the prevailing Indian laws in concern of fraud detection but are little exposed to the corresponding foreign laws applicable for the same. The point to note here is, in the scenario of Indian companies expanding there to foreign lands and foreign companies entering Indian market to perform business; this is not expected out of professionals, especially when people’s money is involved.

CHART-1- Do companies know the laws: Respondents’ awareness of anti-graft legislation





Source: Ernst & Young “Fraud and Corporate Governance-Changing Paradigm in India” Survey. Numbers denote percentage of respondents and may not add to 100 as respondents could choose multiple options.

Practice adopted by few renowned companies:- i. Cairn India Corporate Policy: It states that “No unfair treatment will be meted out to a whistle blower. The policy condemns any retaliation, harassment or unfair treatment to the whistleblower and ensures to protect his/her identity to the extent possible and permissible under law. It also states that any other employee assisting in the said investigation shall also be protected to the same extent as the whistle-blower.”<sup>12</sup>

ii. Tech Mahindra: Since it is transformed form of Satyam, it is interesting knowing the whistle-blower policy set by Tech Mahindra. Along with the above provisions the company also provides an email id for the written submission of the wrongdoing form the whistle-blower. The company also provides a hotline number for the reporting of the unlawful activity. It provides an interesting provision that protection wouldn’t mean protection from disciplinary actions if the reporting is found bogus. Hence disciplinary action will be taken against those who report with malafide intention.<sup>13</sup>

iii. Titan Industries Limited: The Whistle-blower Policy in Titan is extension of Tata Code of Conduct.<sup>14</sup> Mostly incorporates the points mentioned in the above two examples.

Most of the companies incorporate the points mentioned above as it is put forth by SEBI under Clause 49 of Listing Agreements but real practice is reflected in the Ernst and Young’s recent survey which has been referred earlier.

### **Corporate whistle-blower: Ethics**

We can bifurcate the act of whistle-blowing into: Internal whistle-blowing and External whistle-blowing. Whenever the ethics/morality of whistleblower has been talked, it has been suggested that if unlawful activity is observed, the whistle-blower should report it to the internal authority first so that the organization may take necessary steps to combat the same. It was again brought to notice by Lilanthi Ravishankar, Researcher for Business and Organizational Ethics Partnership with Santa Clara University in Silicon Valley writes in his article “Encouraging Internal whistle-blowing in organization” that if Cynthia Cooper of Worldcom and Sherron Watkins of Enron were awarded People of the year 2002 by Time magazine editor then there the fact of being internal whistleblower was acknowledged (Ravishankar, 2003).<sup>15</sup>

But with the implication of Dodd-Frank Reform and Consumer Protection Act states under its Section 922 that any employee if voluntarily provides original information to Securities Exchange Commission, which enables successful enforcement action yielding monetary sanctions of over \$1 million then the respective employee should be awarded with monetary reward of 10% to 30% of the total monetary sanctions collected by the commission during the action.<sup>16</sup> With the implication of this act companies remained worrisome because according to the management pioneers, if now misconduct would be observed by any of the employee, the Dodd-Frank Act would make them report this misconduct directly to the external authorities rather than bringing it forth to the internal authorities first so that measure can be taken for combating the act by the organization (Mintz, 2012). Here we can say that Whistle-blowers ethics comes in question. According to a survey conducted by Ethics



Resource Centre “Inside the mind of a whistle-blower” in 2011, it was reported that 18 per cent of those who responded to the survey accepted that reporting to the external bodies was their second choice, and 3 per cent of the whistle-blower respondents chose to report that misconduct directly to the external organization looking at the seriousness of the wrongdoing. But the second report showed an increase to 11 per cent of whistle-blowers chose to report it to external bodies. And the reason for this was weak ethical culture of the organization which couldn’t motivate the employee to report inside the organization first fearing that no action will be taken (ERC, 2011).

Therefore the organizations should make effort to create a culture which makes the employees feel secure and confident enough to raise their voices against the crime, by adopting ways like communicating with their employees about Organizational awareness and activeness towards the Protection of Whistle-blowers. Organizations should also provide training and development to their middle and top level managers to ensure create and inculcate such an attitude amongst their subordinates.

### **Conclusion**

The efforts of streamlining the whistle-blowing mechanism and empowering whistleblowers is useless until or unless we are not able to create an environment professional and personal alike such which makes the employees; first, aware of mechanism, rights, duties and provisions under various laws for protection of whistle-blowers and; second, fearless by providing continuously working laws which doesn’t work against the whistleblowers but works with the whistle-blowers.

By looking at the iniquitous incidences where whistle-blowers like Satyendra Dubey, an engineer who exposed the corruption in National Highway Authority of India (2003) and Shanmughan Manjunath, an official of Indian Oil Corporation, who exposed the adulteration racket (2005), had to loose their life to organized racketeers. They were shot dead for exposing the unlawful activities being practiced (Bhuva, 2002). Because of these incidences today employees are scared and least interested in exposing the misconduct of others in the organization. Therefore, to curb the sense of fearfulness and to generate sense of ownership among our employees towards the organization, so that they take interest in raising voice against the unlawful activities taking place in the organization, it becomes most important for the policy makers to first create confidence among the employees by regularly communicating and imparting knowledge about the whistle blowers protection policy.

Even if it is public sector employee and not corporate employee who have lost life but since for people at large act whistle-blowing in Public/Private organization are similar, hence to propagate the idea of “System is with those who speaks ethical”, “Incentive of sufficiently considered amount” to the family members of those who lost their life in exposing the fraudulent activity of the organization should be there to make people have faith on the system. Corporate can also award comparable jobs to the family members of the deceased person to propagate its openness towards idea of empowerment and protection of whistle-blowers to society at large.

As per the study conducted by Ernst & Young “Fraud and Corporate Governance- Changing Paradigm in India” it is submitted in the reports that “Companies do not favor taking legal action against those who have committed the crime. Only 35 per cent of respondents agreed that their company take legal action against the perpetrators.” This brings us to the conclusion



that appropriate actions should be taken against the perpetrators, as this will stop others to commit the same offence and since the perpetrators got defamed because of the whistleblowers, now if proper sentence is awarded to the perpetrators, they will not be in position to create any harm to whistleblowers and whistle-blowers will remain at much secure psyche.

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## **Conceptualization of vicious circle of lower caste and Way toward the Annihilations of caste**

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### ***Abstract***

*Caste system in India has might have any ethnic background in past but has no any ethnic consciousness in present. Without any physical differences, caste system prevailed with identification by socially and culturally imposed occupations and various symbols of appearance, behaviors etc, and then caste wise segregated colonies. Study (Thorat 2012) shows that urbanization process is failed to reduce the intensity of caste discrimination till the caste identity expose. Once a man identify as the member of lower caste (SCs) will be treated to persist the same in urbanization process irrespective of their socioeconomic background. Identified member of lower caste men have to face caste discrimination and such caste discrimination make men's caste identity stronger thus the vicious circle of lower caste can be conceptualized. Thus, today the 'caste identity' is the only foundation of caste system. Present study shows that caste system has no any religious back ground.*

*This paper is about to conceptualize this 'vicious circle of lower caste' with the help of empirical evidence from the sample survey findings, the survey held in 2013 to 15 in Gujarat state as a part of ICSSR sponsored nationwide study on "Educational status among the SCs': Attainments and Challenges". Paper also dealt with policy implication regarding "How to combat the issue?" study find that the lower caste identity is the root cause of entire issue, so that if any steps which can hide the identity can break the vicious circle of lower caste. The study suggests the IPSHD as a way toward the annihilation of caste.*



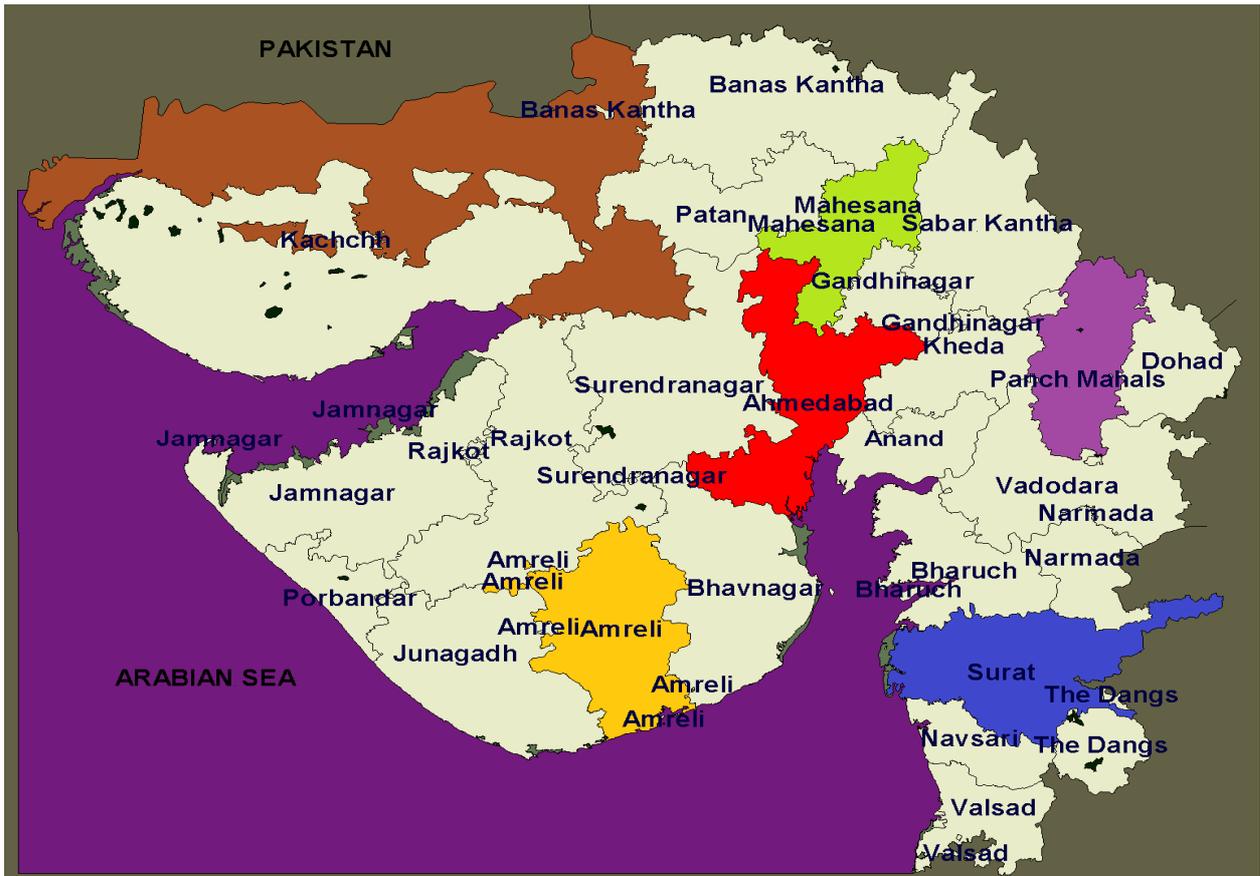
## **Conceptualization of vicious circle of lower caste and Way toward the Annihilations of caste**

### **Introduction:**

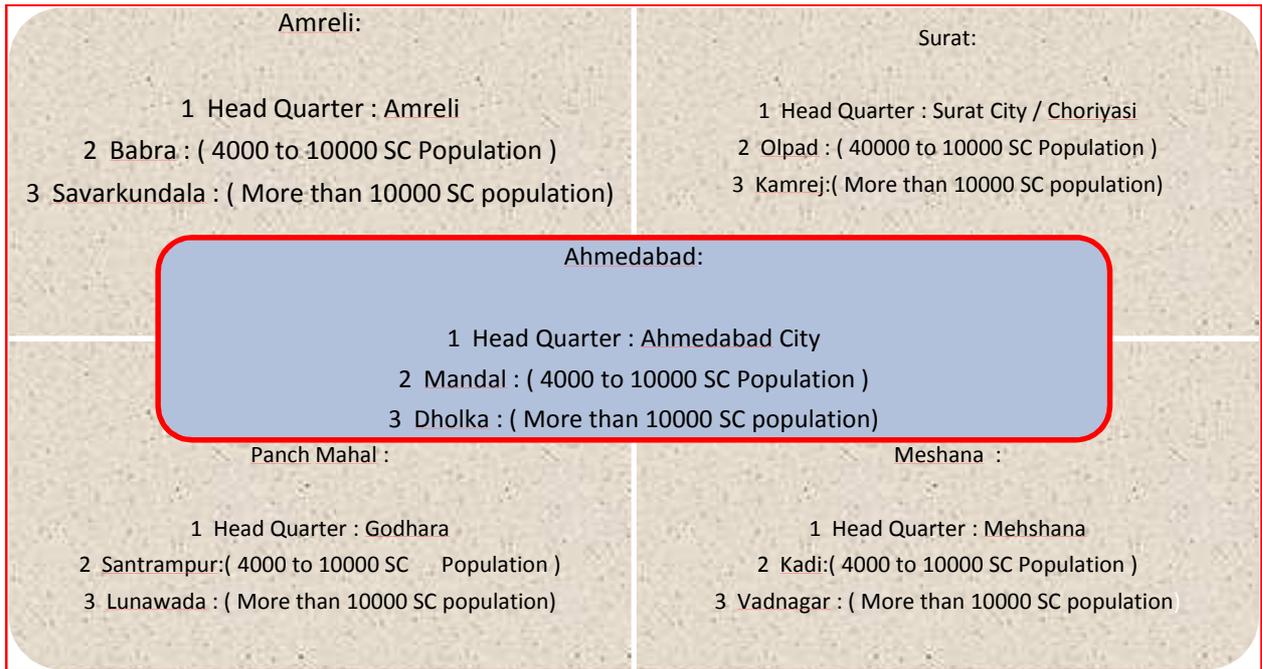
Caste system in India has might have any ethnic background in past but has no any ethnic consciousness in present. Without any physical differences caste system prevailed with identification by socially and culturally imposed occupations and various symbols of appearance, behaviors etc, and then caste wise segregated colonies. Thus, today the 'caste identity' is the only foundation of caste system. Present study shows that caste system has no any religious back ground. The converted Christians and Buddhist also face the caste base discrimination. Study (Thorat 2012) shows that urbanization process is failed to reduce the intensity of caste discrimination till the caste identity expose. Once a man identify as the member of lower caste (SCs) will be treated to persist the same in urbanization process irrespective of their socioeconomic background. Identified member of lower caste men have to face caste discrimination and such caste discrimination make men's caste identity stronger thus the vicious circle of lower caste can be conceptualized. This paper is about to conceptualize this 'vicious circle of lower caste' with the help of empirical evidence from the sample survey findings, the survey held in 2013 to 15 in Gujarat state as a part of ICSSR sponsored nationwide study on "Educational status among the SCs': Attainments and Challenges". Paper also dealt with policy implication regarding "How to combat the issue?" study find that the lower caste identity is the root cause of entire issue, so that if any steps which can hide the identity can break the vicious circle of lower caste. The study suggests the IPSHD as a way toward the annihilation of caste.

### **Methodology and data sources**

This is sample survey based study and criteria for sample selection are uniform for all the states. After following national wide criteria for Gujarat state, we got the five-sample district named Ahmedabad, Panchmahal, Surat, Amreli and Meshana.



Within each district, we have to select three talukas, from each of these three taluka we have to select three Upper primary schools, three higher secondary school, three college and three villages with the given criteria. Total 540 students from each level of education were interviewed within these 540 students of each level of education 405 was belonging scheduled caste. Whereas remaining all were from non-SC, ST community. Within this 180 from these 540 students are from the private administered academic institute from each level of the education. Thus, this sample can cross sectional analysis of prevailing complex social scenario of SC Vs Non-SC/ST as well as Private Vs Public academic institute. Likewise, we also try to include urban rural representation as well as gender disparities in this student survey.



Study also interviewed 1575 household from selected village. The village selection criteria are also uniform for the all states which are as follows. First, from each selected district one village will be selected randomly which has SCs population less than taluka average of village SCs population, Second, one village will be selected randomly which has SCs population more than taluka average of village SCs population and third taluka head place (town) will have to select. Hence each taluka has three sample villages and each district has three sample taluka thus we will have sample of nine village from each district, thus total sample will be summaries as 5 district × 3 talukas × 3 Villages × 25 SCs Households thus the total numbers of SCs households will be the 1125 and 5 district × 3 talukas × 3Villages × 10 Non SCs Households, thus the total numbers of Non SCs households 450 are surveyed. Summation of SCs and Non SCs are 1575 Households are surveyed.



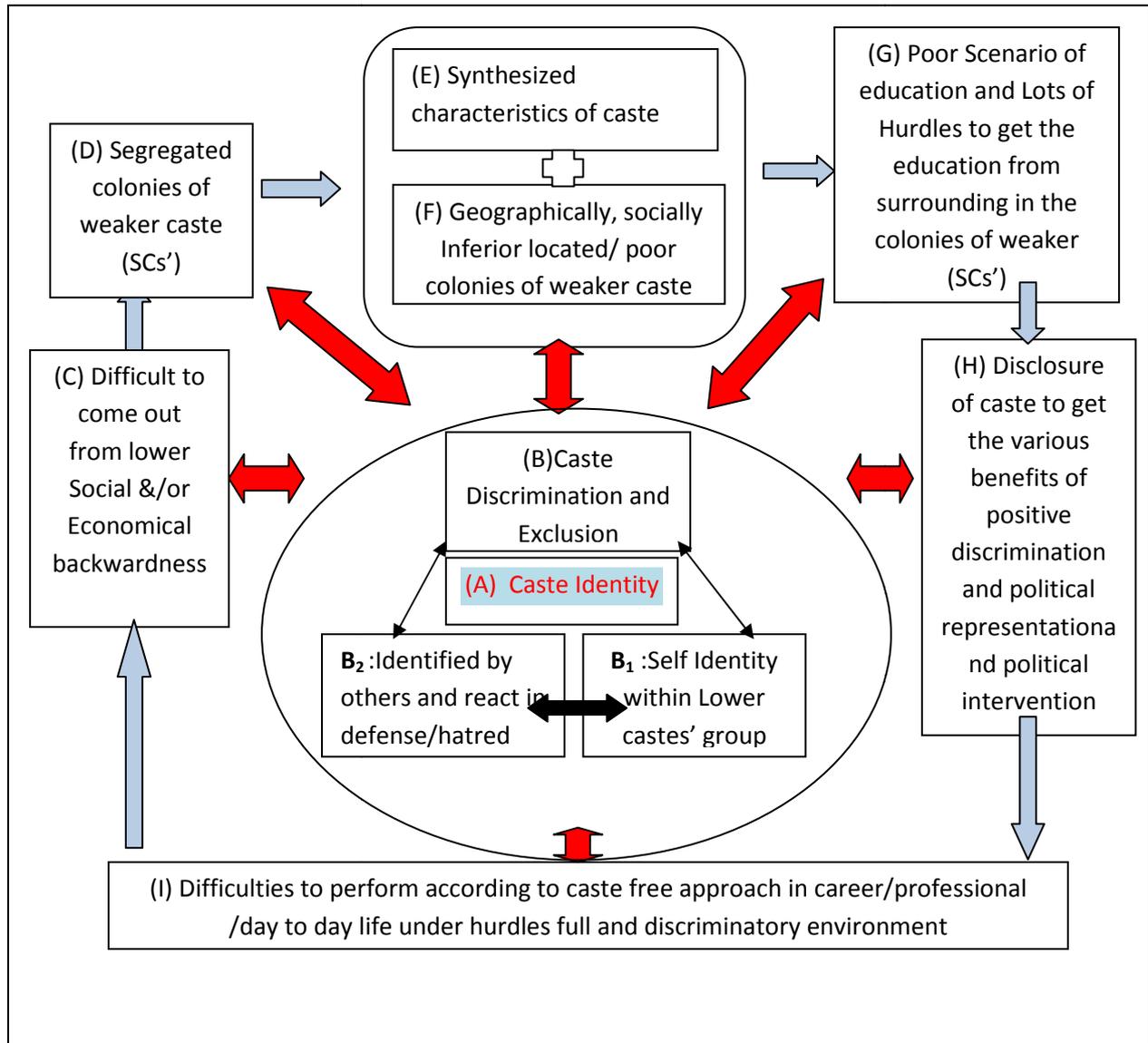
District	Taluka Criteria $\Rightarrow$ Village Criteria $\curvearrowright$	Headquarter of the district	4000 to 10000 SCs' Population of taluka	More than 10000 SCs' Population of taluka
Amreli	Headquarter of T	Amreli	Babra	Savarkundla
	LSCP Village	Monpur	Lonkotda	Gadhakda
	HSCP Village	Ankadya mota	Babra( juna gam)	Ambardi
Maheshana	Headquarter	maheshana	Kadi	Vadnagar
	LSCP Village	Mandali	Dholasa	Shahpur-vad
	HSCP Village	Jotana	Nandasan	Sundhya
Panchmhal	Headquarter	Godhara	Santrampur	Lunawada
	LSCP Village	Chhawad	Ora	Namnar
	HSCP Village	Kankanpur	Doli	Kothamba
Surat	Headquarter	Surat/Choryasi	Olpad	Kamrej
	LSCP Village	Khajod	Masma	Koli Bharthana
	HSCP Village	Kosad	Kim	Dumgra
Ahmedabad	Headquarter	Ahmedabad	Mandal	Dholka
	LSCP Village	Tagad	Vanpardi	Paldi
	HSCP Village	Piplaj	Mandal (Mul)	Badarkha

LSCP Village = Low SCs' Population than Taluka Average SCs' Population of village

HSCP Village = High SCs' Population than Taluka Average SCs' Population of village



Conceptualization of Vicious circle of lower/weaker caste (SCs’):



Conceptualization of ‘Vicious circle of lower Caste’: The vicious can define at the any point of the circle, here it is described in the way of A to I for our convenient as follows

(A) Caste Identity: Caste system works with the identity of lower castes, as there is no any physical dissimilarities among the SCs’ and Non SCs’. Entire caste hierarchy can only perform its role with caste identity. This identification could be based on socially and culturally imposed occupations and various symbols of appearance, behaviors etc.

caste identity works on both the way, in one hand it could be the base of caste based discrimination for Non SCs’ and in another hand, it would be the base for unity and resistance among the SCs’. Dr. Ambedkar said “leave the villages”, in this regard he wants to abolish caste identity. Ambedkar assumed that urbanization could be the solution, which may abolish caste identity as well discrimination, but in presents urbanization has adept new forms of caste discrimination.



(B) Caste Discrimination and Exclusion: several studies show that caste discrimination starts with segregation in urbanization process. Without identification of lower caste there would not be caste based discrimination. Hence, we can say if we abolish the caste identity it would not be any caste based discrimination. Proposed IPSHD is the step toward such attempt.

(C) Difficult to come out from lower Social &/or Economical backwardness: caste wise segregation in urbanization process transmits the caste system from rural to urban in newer forms. Like rural segregation of weaker colonies, urban weaker colonies also established and strengthen the caste identity and then platform for discrimination. with caste identity, it is very difficult to come out from lower social &/or economical backwardness.

(D) Segregated colonies of weaker caste (SCs'): as far as concern the caste identity segregated colonies of weaker caste (SCs') plays the same role as per rural segregation and then discrimination. Though urban labour market and nature of work is not allowing the caste system, even though such segregation provides identity of weaker caste and make platform to discriminate.

(E) Segregated colonies synthesize characteristics of caste:

(F) Geographically as well as socially Inferior located colonies of weaker

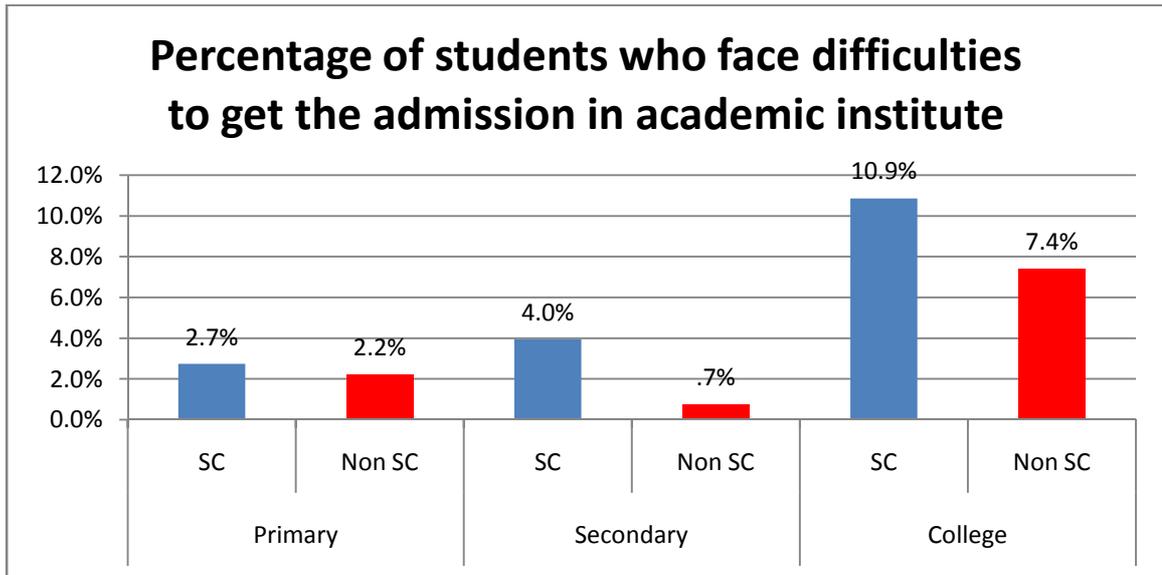
(G) Poor Scenario of education and Lots of Hurdles to get the education from surrounding in the colonies of weaker (SCs')

(H) Disclosure of caste to get the various benefits of positive discrimination

(I) Difficult to perform better in career under hurdles full and discriminatory environment

**I. Empirical evidences: Differences Between SCs' and Non SCs' Students in academic Institutes:** What is happening in academic institutes and what are the differences between the students of SCs and Non SCs' are discussed below.

**A. Differences face to get admission in Academic institute:** Students from SCs' and Non SCs are not equally welcome to the academic institute in the state the following graph-1 shows the Percentage of students who face difficulties to get the admission in academic institute

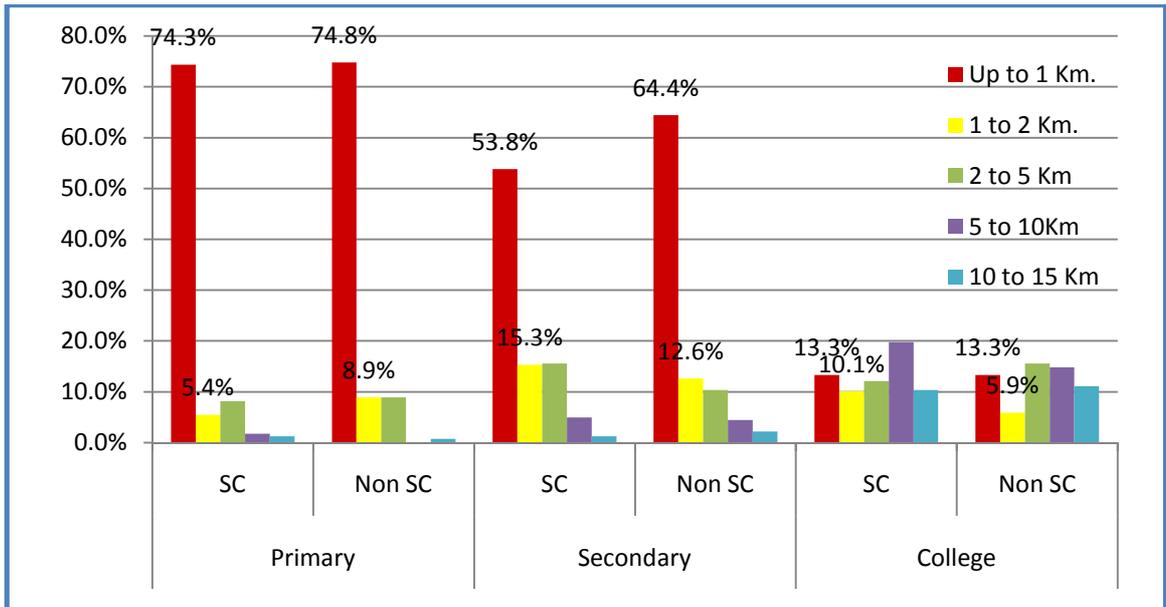


Graph 1 Percentage of students who face difficulties to get the admission in academic institute by caste

the results show that majority of the students from the different groups denial as they did not face any difficulty to get the admission for both the caste SC as well as Non SCs, but there is some minor case also reported those are also mentioned with their appropriate reasons. Especially college students' groups show that a large number of students face the difficulties to get the admission in academic institute. The students of SCs are higher percentage who faces difficulties to get the admission in the academic institute than the Non SCs' .

#### **B. Distance of academic institute:**

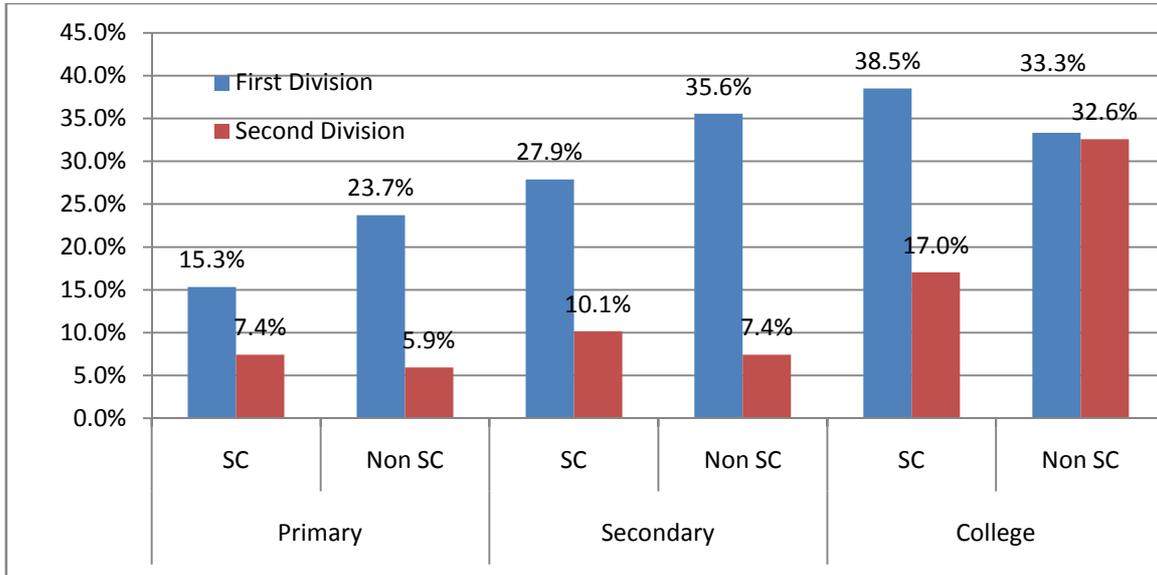
We saw that SCs face more problems to get the admission, after that they cannot get the admission in their nearby institute. The distance of academic institute also indicates that students among the Non-SC' are in advantageous condition than that of the SCs for all the level of education from the beginning of upper primary to college students.



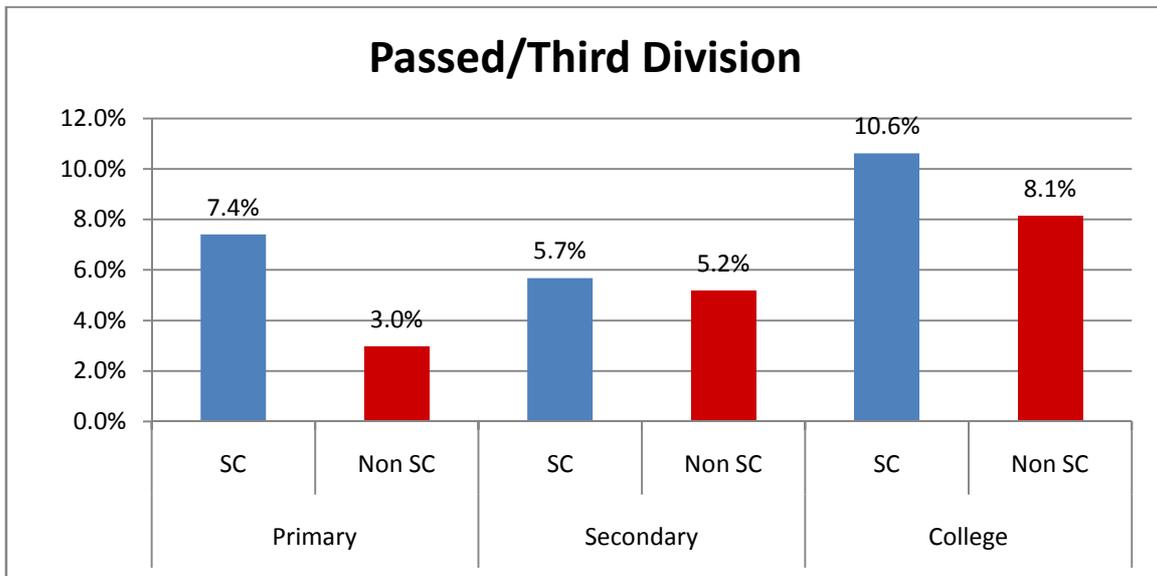
Graph 2 Students with distance for their house/Hostel to academic institute by caste

### C. Academic performance of the students:

To investigate the academic performance of the students we discussed the results of last annual examinations by caste for different level of the students. We found that SCs students are consistently poor performed than the Non-SC students. According to results of last annual examination, in case of the top performance ranks of A+, A or 'first division' are consistently lower performed by SCs students than that of the Non SCs (except data for college students' group). The graph-3 also shows that second division given comparatively higher to SCs' students than the Non SCs (except data for college students).

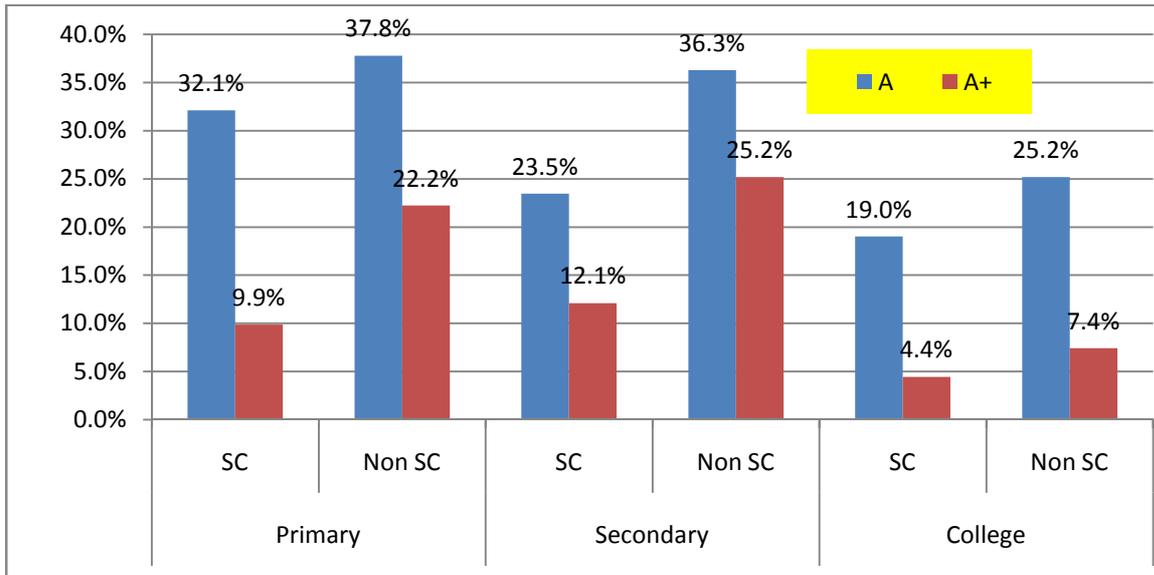


Graph 3 Academic performances of the students by caste (Division System)



Graph 4 Percentage of students who performed under Passed/ Third division by caste

The Graph-4 shows that (for all the groups of students) considerably higher percentages of students within the SCs' are performed as Passed/third division than that of the Non SCs. The situation of student's performance in grade situation is discussed below.

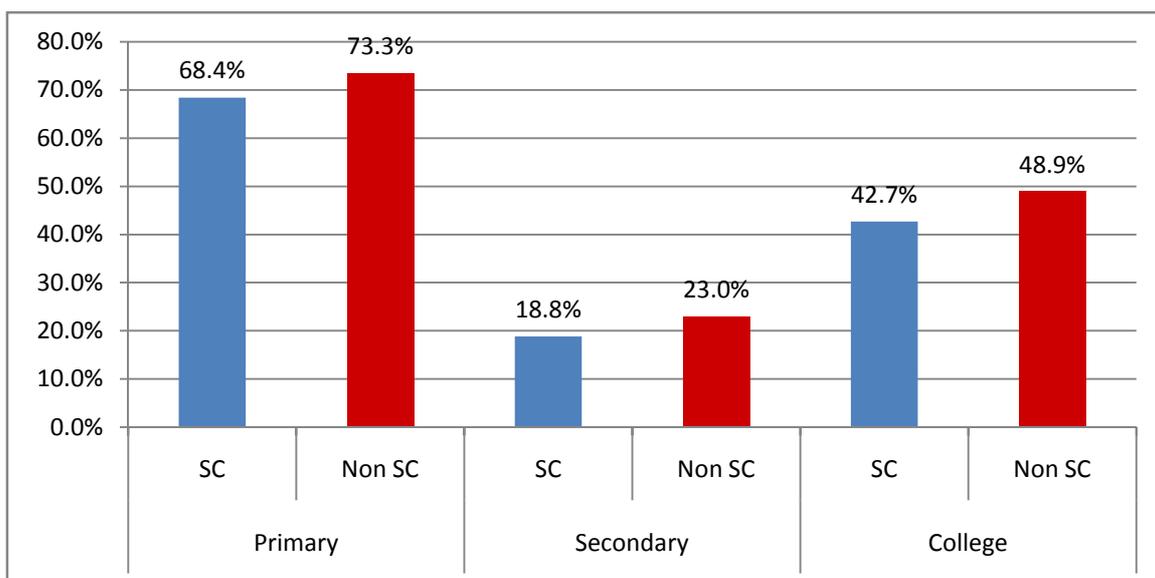


Graph 5 Academic performances of the students by caste (Grad System)

The situation discussed under the students' performance in division system in more or less similar for grade system. A+ grade and A grade (which shows the better performances) higher percentage of students performed within Non SCs' than SCs in all the students' groups without any exceptions. Student's sports attainment for different caste, at various level of education which can be measured by sports participation and various sports performances of students as follows.

#### D. Differences in Sports participation by caste:

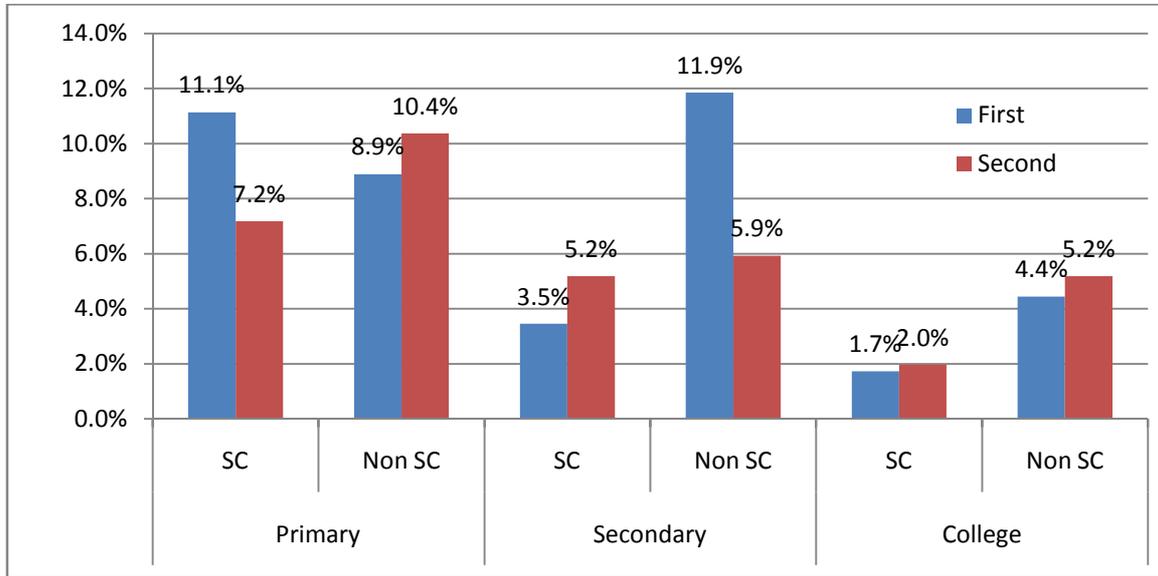
In this study, we found that students' participation among the SCs students are comparatively lower or equivalent than that of the Non SCs in different survey groups, but the special assignments or duties given by the sports authority like captancy, leaderships etc. are found lower in SCs' students than that of the Non-SC. Which are described in graph-6 and 7.



Graph 6 Students participation in sports by caste

Graph-6 shows that SCs students are little bit lower participation in sports activities, but this is not concern area, as the differences are not much larger, but the concern is about the differences which we found in the multiple dimensions in this regards as follows.

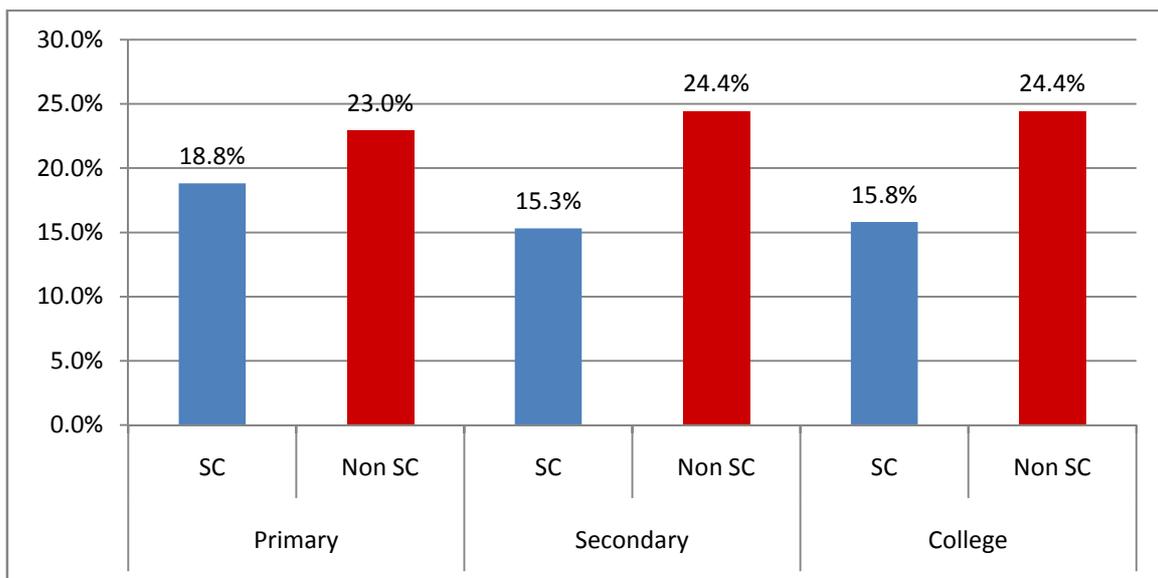
**E. Position secure in sports events by students in different caste**



Graph 7 Percentage of students who secured position in sports events by caste

Graph-7shows that SCs secured first and second position comparatively lower than the Non SCs except the group of primary students. Like first and second position secured lower by SCs, the following graph-8 shows the alarming facts in this regards.

**F. Special duties or sports assignment given to students by caste**



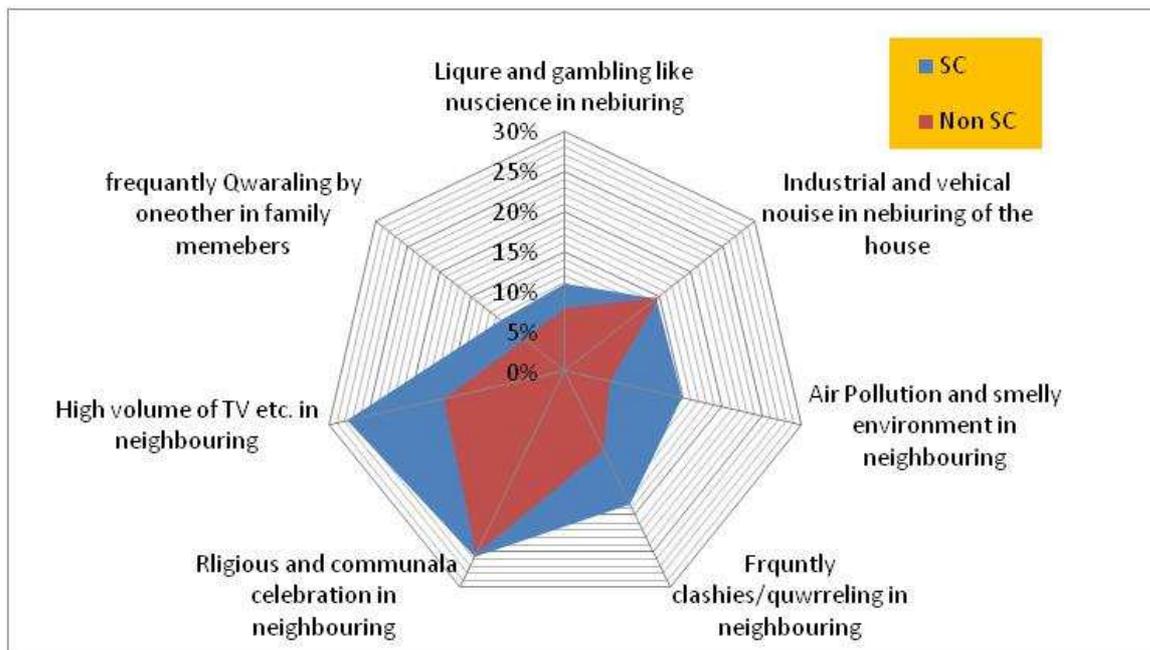
Graph 8 Percentage of students who had given special duties/sports assignments (Like captaincy) in sports events by caste

The SCs students are given considerably lower special duties in sports events than the Non SCs. The data described in graph-8 shows that all the students groups give the same picture that SCs given considerably lower special duties in sports events than the Non SCs. How SCs students differ from Non SCs in family back ground and surrounding localities is discussed below.

**II. Differences of their family backgrounds and surrounding localities:** The argument is that the SCs students are living in segregated localities with poor environment of education and they have to face some hurdless in their education. The following segment deals with seven hurdless indicators (as per graph-9). We asked students how many of that hurdless do you have to face.

**a. hurdless indicators face by the various students from neighboring localities)Compilation (Primary+ Secondary+ College):**

To compile the different hurdless indicator, we use simple average value. Each hurdless indicator has measured by how many percentages of students face/ experience that particular hurdle. Graph-9 show the bird eye vision of caste differences in which we can observe that SCs' students are facing much more disturbances from their surrounding environments.

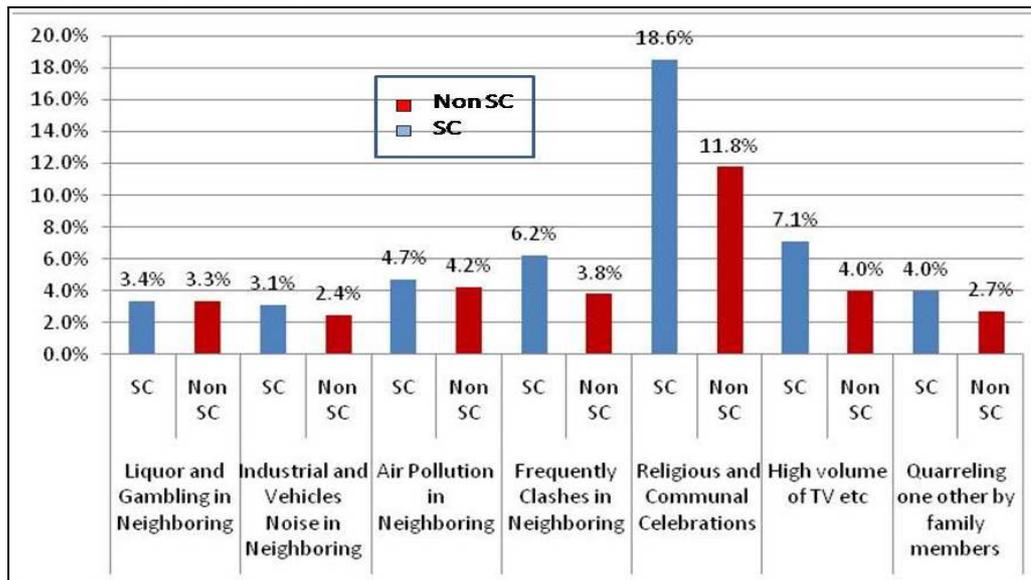


Graph 9Compilation of hurdless indicators face by the various students from neighboring by caste

**Household Survey Analysis:** Graph-10 shows that the opinions of household's head are differ in some extent from the students' responses. But we must mention that the common results which come out from this study is about the hurdless indicator of "Religious and communal celebration". Within SCs' households 19% of household's heads replied that their children are facing disturbances through this factor while 12% of Non SCs' household's head also replied the same. If we compare these responses with students' response we will get the similar picture, hence 26% within SCs' and 25% within Non SCs' students are reported as facing disturbance by this hurdless. Thus, we can conclude that almost one fifth of total students and one fourth of total



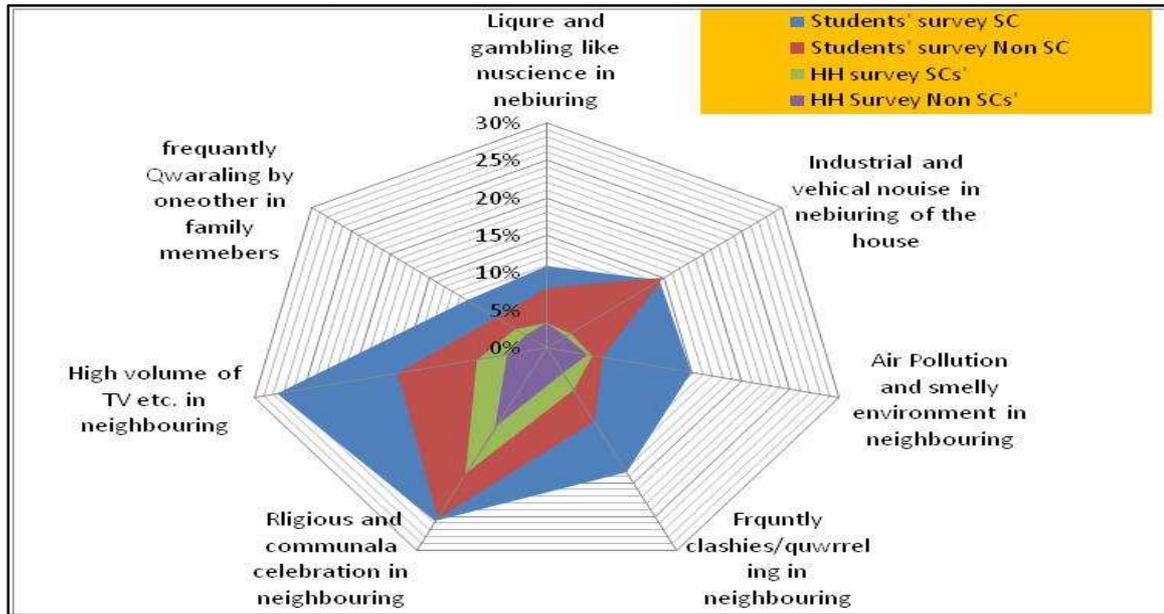
household's head are in a stand that publicly irresponsibly celebration of communal and religious festivals are disturbing students. The major differ is reported between students and household's heads are about hurdles indicator of "High volume of TV etc., electronic equipment in surrounding" for household survey within SCs' 7% and within Non SCs 4% heads believed that their children face disturbance due to this factor whereas these percentage are reported much higher for the students' survey as these are respectively 28% and 15%. The household's heads and the survey of students together come in a common conclusion as "SCs' students are facing much more disturbing in their education from the hurdles located in their neighboring locality than the Non SCs' students".



Graph 10 Opinions of household's heads regarding which hurdles are disturbing their own children from the surrounding or neighboring localities by caste

### Household survey results and Students' survey results to gather in radar graph

Radar (graph-11) depicted the compilation of the two surveys. The students from SCs' are reported as the highest facing disturbances from the hurdles from surrounding localities following by students from Non SCs' group likewise the results from household survey show that the HHs' heads from SCs' are reported lower than the Non SCs' students survey for their children (studying) and finally the households' heads from Non SCs' are the lowest reported as their children face the disturbance from the hurdles from the surrounding localities.



Graph 11 Household survey results and students' survey results to gather in radar graph

In Gujarat state, we have a separate cluster of colonies according to similar caste group, therefore colony synthesis their characteristics. SCs' colonies have not sufficient awareness for education of surrounding students. Sometimes Jealousy would be the factors to disturb the students living in surrounding. Moreover, Non SCs' are combined with hierarchy of 'lower OBC castes' to 'Higher castes of Brahaming, Baniya etc' in this situation, if we omit all those OBCs' castes who are closer to SCs' (in all kind) then we can get the picture where the students of weaker section (SCs' + lower OBCs' caste) are facing lots of hurdles from surrounding localities and the upper caste students are comparatively face very-very lower. The gaps of educational performance which is mention above are also under the influence of this gap of the hurdles from surrounding localities which disturbing students a lot as well as their performance of the education. How this segmentation created differences is discussed below.

**b. Community cluster among SCs and Non SCs or division of residence on caste base:**

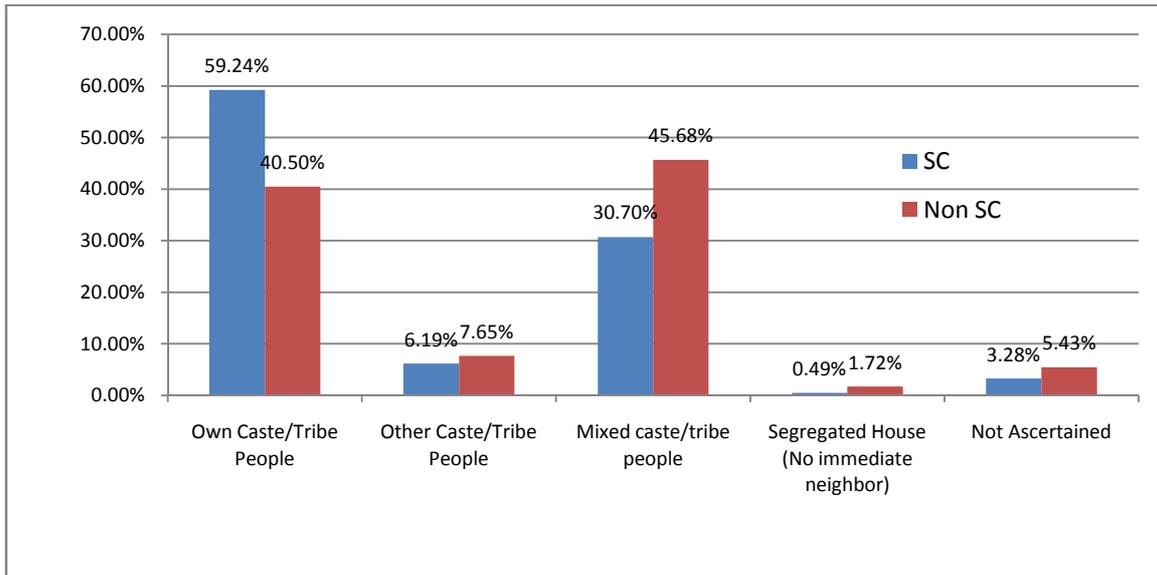
According to data described in table-1 total 59% students from the SC' group replied that they are living with the groups of same caste population, whereas those are considerably lower as 40% among the Non-SC' students, the percentage students who reported their living as mixed communities are 31% among the SC' students whereas those are considerably higher as 46% within the Non-SC' students. Thus, we can see the clear picture of caste based isolation existed within our society

If we consider entire issue on caste base we could have a example of celebration of 'Baba Saheb Ambedkar Jayanti' on 14<sup>th</sup> April, eastern Ahmedabad celebrate this day with greater devotion and enthusiastically, but it can't see in western modern Ahmedabad (Except small SC/ST' cluster within western Ahmedabad city). This situation occurred due to geographically division of residence on caste/ community base.



Student's neighborhood regarding social groups where their parents live.							
Educational group of the Students	Caste of the students	Own Caste People	Other Caste People	Mixed caste people	Segregated House (No immediate neighbor)	Not Ascertained	Total
Primary	SC	<b>264</b>	<b>10</b>	<b>107</b>	<b>1</b>	<b>20</b>	<b>402</b>
		65.70%	2.50%	26.60%	0.20%	5.00%	100.00%
	Non SC	<b>48</b>	<b>11</b>	<b>64</b>	<b>0</b>	<b>12</b>	<b>135</b>
		35.60%	8.10%	47.40%	0.00%	8.90%	100.00%
	Total	<b>312</b>	<b>21</b>	<b>171</b>	<b>1</b>	<b>32</b>	<b>537</b>
		58.10%	3.90%	31.80%	0.20%	6.00%	100.00%
Secondary	SC	<b>238</b>	<b>34</b>	<b>129</b>	<b>1</b>	<b>3</b>	<b>405</b>
		58.80%	8.40%	31.90%	0.20%	0.70%	100.00%
	Non SC	<b>60</b>	<b>15</b>	<b>59</b>	<b>0</b>	<b>1</b>	<b>135</b>
		44.40%	11.10%	43.70%	0.00%	0.70%	100.00%
	Total	<b>298</b>	<b>49</b>	<b>188</b>	<b>1</b>	<b>4</b>	<b>540</b>
		55.20%	9.10%	34.80%	0.20%	0.70%	100.00%
College	SC	<b>216</b>	<b>31</b>	<b>136</b>	<b>4</b>	<b>18</b>	<b>405</b>
		53.30%	7.70%	33.60%	1.00%	4.40%	100.00%
	Non SC	<b>52</b>	<b>5</b>	<b>62</b>	<b>7</b>	<b>9</b>	<b>135</b>
		38.50%	3.70%	45.90%	5.20%	6.70%	100.00%
	Total	<b>268</b>	<b>36</b>	<b>198</b>	<b>11</b>	<b>27</b>	<b>540</b>
		49.60%	6.70%	36.70%	2.00%	5.00%	100.00%
Total	SC	<b>718</b>	<b>75</b>	<b>372</b>	<b>6</b>	<b>41</b>	<b>1212</b>
		59.24%	6.19%	30.70%	0.49%	3.28%	100%
	Non SC	<b>160</b>	<b>31</b>	<b>185</b>	<b>7</b>	<b>22</b>	<b>405</b>
		40.50%	7.65%	45.68%	1.72%	5.43%	100%
	Total	<b>878</b>	<b>106</b>	<b>557</b>	<b>13</b>	<b>63</b>	<b>1617</b>
		54.30%	6.55%	34.44%	0.80%	3.9	100%

Table 1geographically division residential locality of different groups of students by caste



Graph 12geographically division of residence on caste base

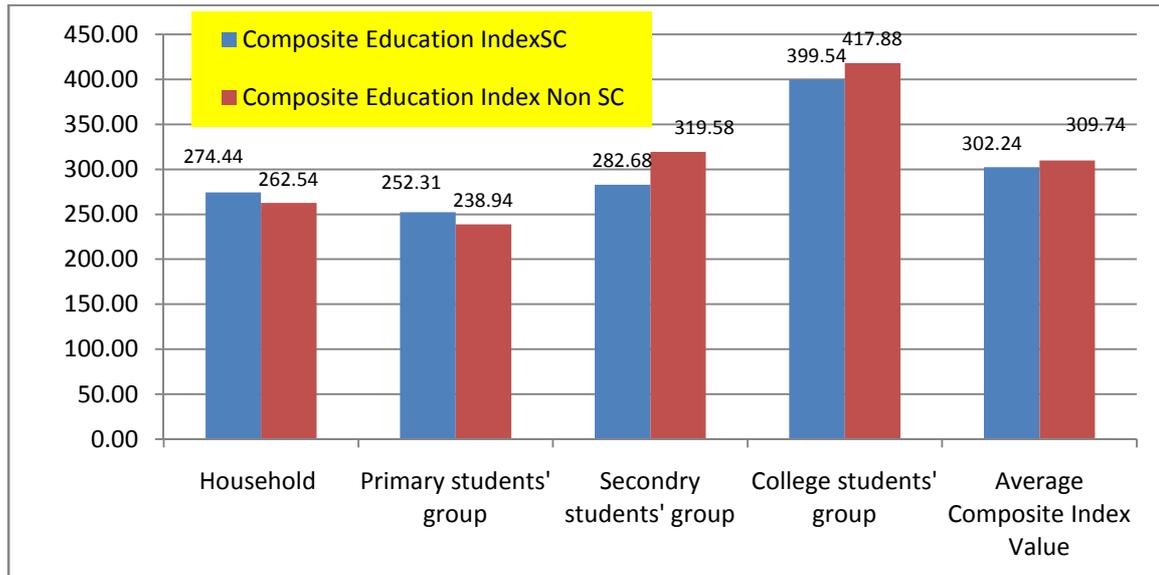
Moreover, these castes based scenario goes worse condition of segregation when we analyze the data of whether any educated persons living in your surrounding or not?

	Are there educated persons living in your neighborhood?			If yes, do you seek guidance for your education from them?			Total
	Yes	No	Do not know/NA	Yes	No	Not Applicable/NA	
SC	273	131	1	223	145	37	405
	67.40%	32.30%	0.20%	55.1%	35.8%	9.1%	100.0%
Non SC	99	32	4	70	58	7	135
	73.30%	23.70%	3.00%	51.9%	43.0%	5.2%	100.0%
Total	372	163	5	293	203	44	540
	68.90%	30.20%	0.90%	54.3%	37.6%	8.1%	100.0%

Table 2Numbers of students whose have educated persons in neighboring localities by caste

**c. Differences of family education and surrounding academic environment:**

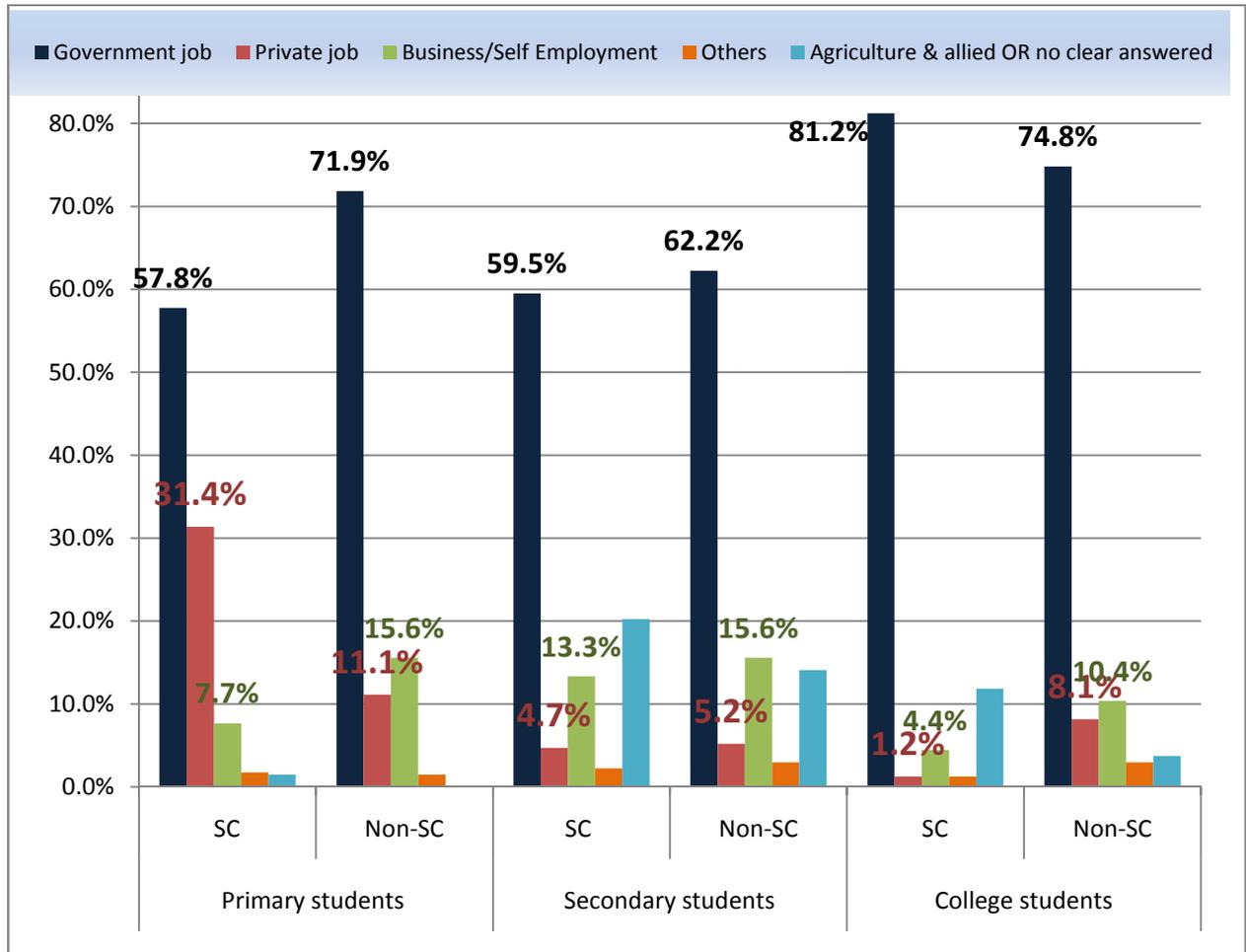
**Composite Education (Overall Educational Status):** This analysis can consider quality as well as quantity of education which can provide comparative analysis regarding spending time to get the education? In other words, who are more educated group whether they are SCs' or Non SCs'? The method of calculation of index<sup>15</sup> is using weighted average and can consider all the family members' education (See: Report On "Educational Status of Scheduled Castes: Achievements and Challenges" (For Gujarat State: Vol. I) Submitted to: Indian Council for Social Sciences Research, New Delhi.



Graph 13 Composite Education or Overall Educational Status by caste

We can observe that the composite index value has little bit difference for SCs' and Non SCs' for all the surveyed groups. Graph-1 also calculate 'Average educational composite Index Value' which shows that there is no any considerable difference in this regards between these two groups of SCs' and Non SCs'. With the help of above observation, we can say that the education spread (in general) is almost equal in SCs' and Non SCs', in other words over all education spread has no any different between SCs' and Non SCs' groups. If we study the 'Composite Educational Index' for different surveyed groups wise, we can see the general tendency of 'students' with higher education' are reported with higher 'composite educational index' that means the students came with higher educational background are higher probable to get the higher education in their life.

- III. Differences of motives/ goal to get the education:** In this segment, we discussed the question of "Education for what?" And what are the differences between SCs and Non SCs' students in this regards as follows.
- i. Aim to get the education (Goal/ plan to do in future):**



Graph 14 Aim of students to be after completion of education by caste

Graph-14 shows that SCs students from college are more interested in government Job than Non SCs' vice versa the private jobs are more preferred in Non SCs group than SCs'. We consider college students as mature to address this question more realistically. The next analysis is counterpart of the same questions.

**ii. House hold analysis for Aim to their children's education:**

	government job	private job	self-business	other	no answered	
SC Household	854	33	41	7	191	1126
	75.8%	2.9%	3.6%	.6%	17.0%	100.0%
Non-SC/ST Household	307	15	27	2	99	450
	68.2%	3.3%	6.0%	.4%	22.0%	100.0%
Total	1161	48	68	9	290	1576
	73.7%	3.0%	4.3%	.6%	18.4%	100.0%

Table 3 motives to educate children by caste

Table-3 shows the same picture that SCs are preferred government job more than Non SCs and they also preferred private job less than the Non SCs. This scenario should be applied in present economic situation of shrinking government with widening public

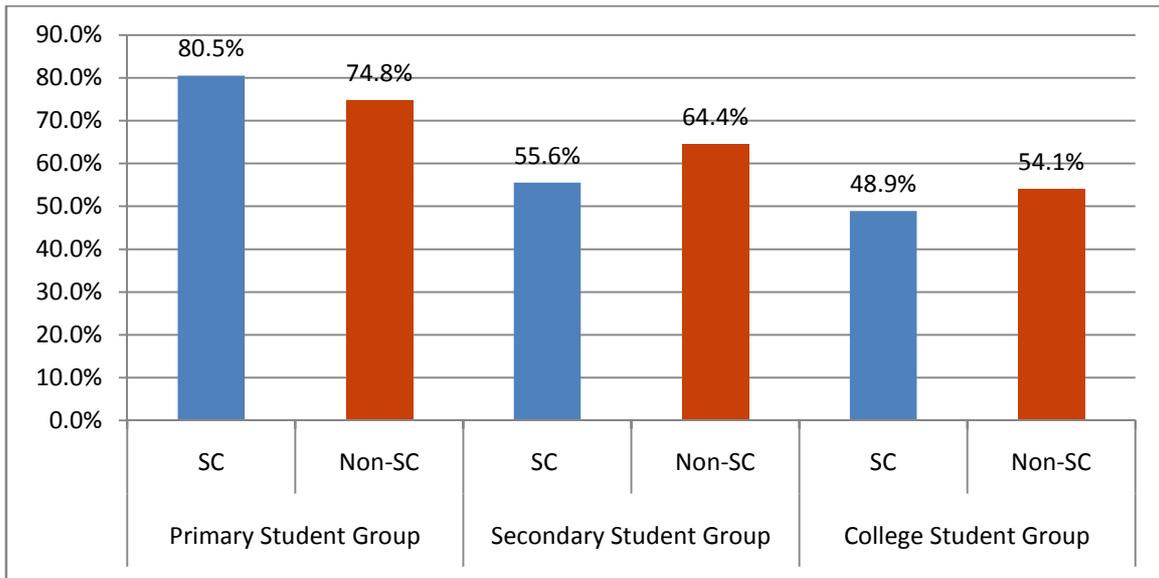


sector. If we think together both the facts, we realize that SCs will loss in upcoming future.

**IV. Self-finance education scenario and differences of SCs’ and Non SCs’ students:**

As we already mention that state shrinking his role and private sector widening his role. The self-finance education is example of this changing economy. What would be the differences between SCs and Non SCs in this regards? The following analysis would be helpful to answer the question.

**i. Students response towards readiness for self-finance education in future:**



Graph 15 readiness to self finance education in future by caste

Graph-15 shows that as the students get the maturity level (above primary education) they replied low to get the readiness of self finance education. We can say that almost more than half of the students are not ready to get the self-finance in future and most of them are reasoned due to inability of that education. The same questioned is responded by heads of the households as per data presented in table-4.

**ii. Household analysis for readiness to educate their children through self-finance institute:**

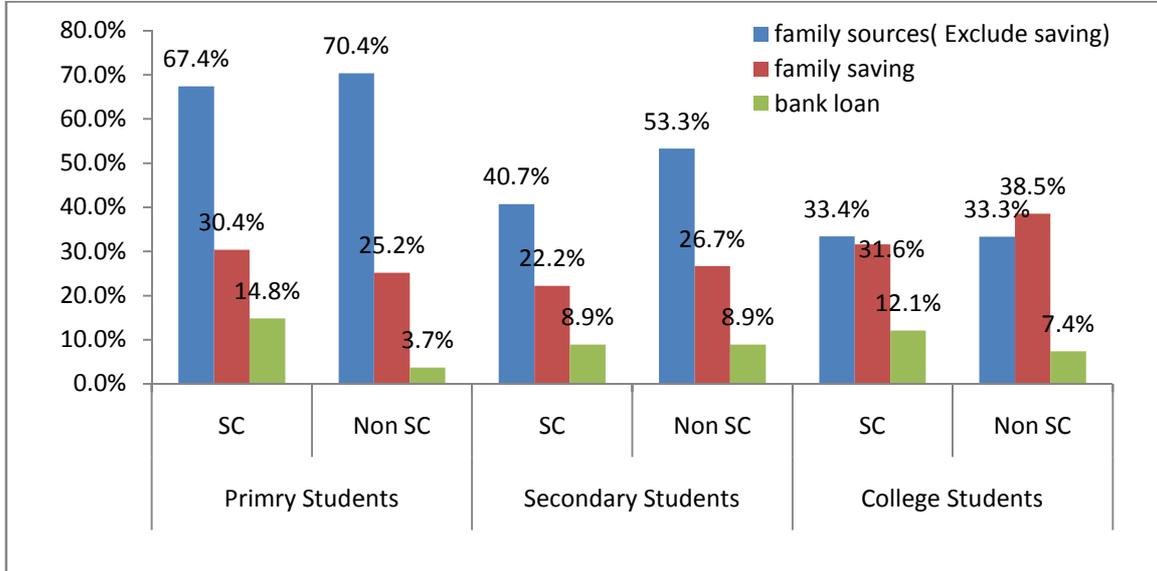
	yes	no	No clear answer	
SC Household	559	562	5	1126
	49.6%	49.9%	.4%	100.0%
Non-SC/	237	181	32	450
	52.7%	40.2%	7.1%	100.0%
Total	796	743	37	1576
	50.5%	47.1%	2.3%	100.0%

Table 4 Household analysis for readiness to educate their children through self finance institute by caste

Table-4 and Graph-15 shows almost same results. In both the analysis we can see that SCs’ are lesser ready to get the self-finance education than the Non SCs. The next

segment is deals with the plan of different source to finance the self-finance academic institute in case they have to get that in future.

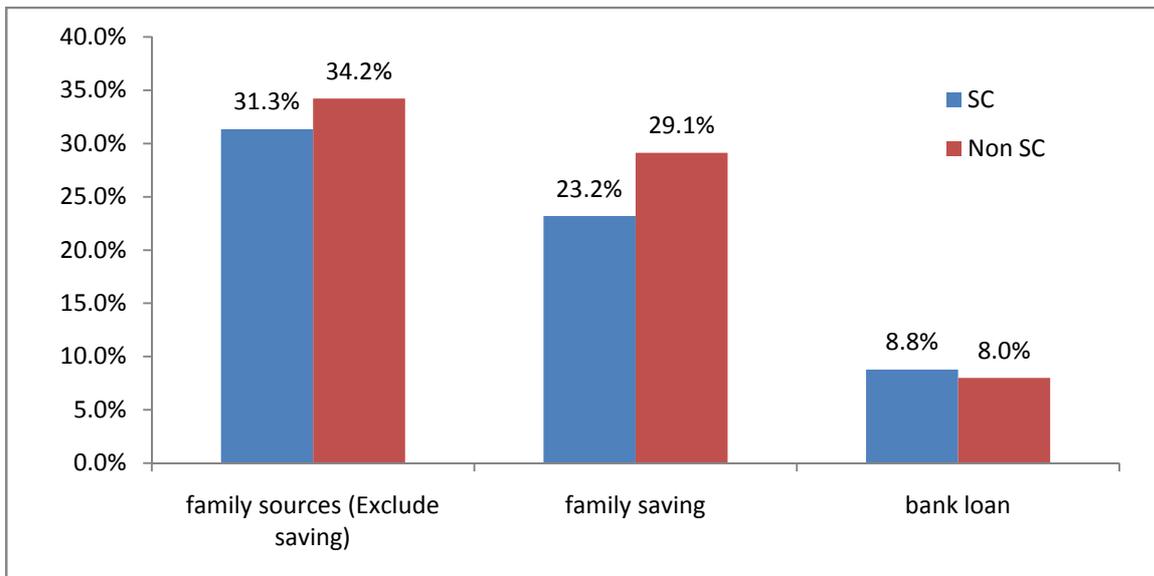
**iii. Source plane for self-finance education responses of students by caste**



Graph 16 Source plane for self-finance education responses of students by caste

The situation depicted in graph-16 shows that most of the student have plan to provide finance from family sources including mortgaging of real estates, borrowing from relatives and disinvestments etc.

**iv. Source plane for self-finance education- results from HH survey:**



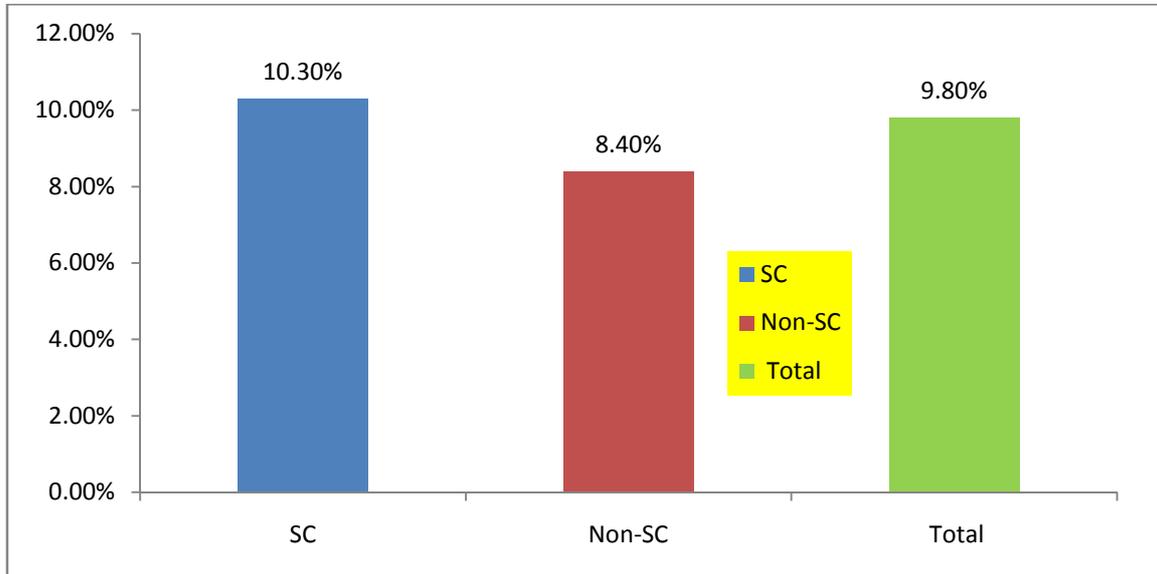
Graph 17 Source plane for self-finance education responses of household's head by caste

The ideal plan of family saving reported considerably from SC than Non SCs in both the survey of students as well as household.



#### V. Differences of Loan/ credits by households(In debt)

This should be mention that around 8% of Non SCs and 10% of SCs households reported as they are already in debt situation so that we can assume what would be the scenario for self-finance education in the Gujarat and what will the situation of SCs in upcoming future.



Graph 18 Numbers of house hold which borrowed loan/credit/under debt by caste

#### Conclusion:

Major conclusion come out from this research paper are as follows

Among these various groups of the students' higher percentage of SCs students face difficulties to get the admission than the Non-SC's distance of academic institute and means of transportation also indicate that students among the Non SC' are in advantageous condition than that of the SCs for all the level of education.

The situation discussed under the students' performance in division system (First and Second) and grade system (A+ grade and A grade) which shows the better performances of Non SCs than SCs. higher percentage of students performed these better grade and division within Non SCs' than SCs in all the students' groups without any exceptions. Thus, we found that SCs students are consistently academically poor performed than the Non-SC students.

We show that SCs secured first and second position comparatively lower than the Non SCs in sports events. The SCs students are given considerably lower special duties in sports events than the Non SCs. We also found that the special assignments in sports activities are also significantly given lower to SCs' than Non SCs'.

The household's heads and the survey of students together come in a common conclusion as "SCs' students are facing much more disturbing in their education from the hurdles located in their neighboring locality than the Non SCs' students. Geographically segregation process which is developing very faster during in present time divide in a compartment like residential condition which should be taken seriously in perspective of social harmony.



Segregated residential areas synthesis both factors which would be harmful and supportive for academic environment. We show that the SCs students face much more hurdles from their surrounding localities than Non SCs'.

We have not found any major difference between SCs' and Non SCs' index values in regards of Average Educational Composite Index Value' which shows that there is no any considerable difference in these regards between these two groups of SCs' and Non SCs'. With the help of above observation we can say that the education spread (in general) is almost equal in SCs' and Non SCs', but the differences lies in the higher employable education and lower employable education which part is not discussed in this paper.

Self-finance academic environment is harmful for both the groups of student but the comparatively we can say that will proved more harm full to SCs' because we saw they have lower capacity to save and get credit. Moreover, we also found that higher percentage of household within the SCs' had already in debt situation than the Non SCs'.

**Ruin the lower caste identity/ way toward the Annihilations of caste:**

**Role of caste identity and Policies Implications to ruin it:** Policies Implications come out from this paper are as follows:

- a. According to study we found some case mentioned some problem to get the admission in academic institute, according to their problems we can suggest that there should have some policy insure the hurdles free admission process irrespective of their caste. The neighboring academic institute should provide priority, we are suggesting such type of policy like "Neighboring school policy" in America. The IPSHD (Integrated Plan for Social Harmony and Development) is recommended as the ultimate suitable option to solve this problem.
- b. We found that SCs students are consistently academically poor performed than the Non-SC students. We also found that the special assignment in sports activities are also significantly given lower so that we suggest to insurance more and more transparency in all this performance evaluation. These situations may have some caste based discrimination. Use of more and more technology of assessment would be helpful to eliminate such discrimination. IPSHD (Integrated Plan for Social Harmony and Development) is design in such a way to combat this problem of discrimination (probable) toward any differ groups in general. IPSHD can create the situation of personal identity free situation, and without identifying any prejudice group no one can make discrimination to others.
- c. SCs' students are facing much more disturbing in their education than the Non SCs' students from the hurdles, which are located in their neighboring locality. Geographically segregation process which is developing very faster during in present time divide in a compartment like residential condition which should be taken seriously in perspective of social harmony. We recommended the policy of reservation not only for weaker section but for particular of SCs/STs and others at micro level of town planning which can insure the removal of segregation of SCs.
- d. Self finance academic environment is harmful for economically weaker students from both the groups of students but the comparatively we can say it will more harm full to SCs' because we saw they have lower capacity to save and get credit. Moreover, we also found that higher percentage of household within the SCs' had already in debt situation than the Non SCs', so that we recommended Contributory Educational Fund A/C (CEF) which is one of the major components of IPSHD that is described below.

### Integrated Plan for Social Harmony and Development (IPSHD):

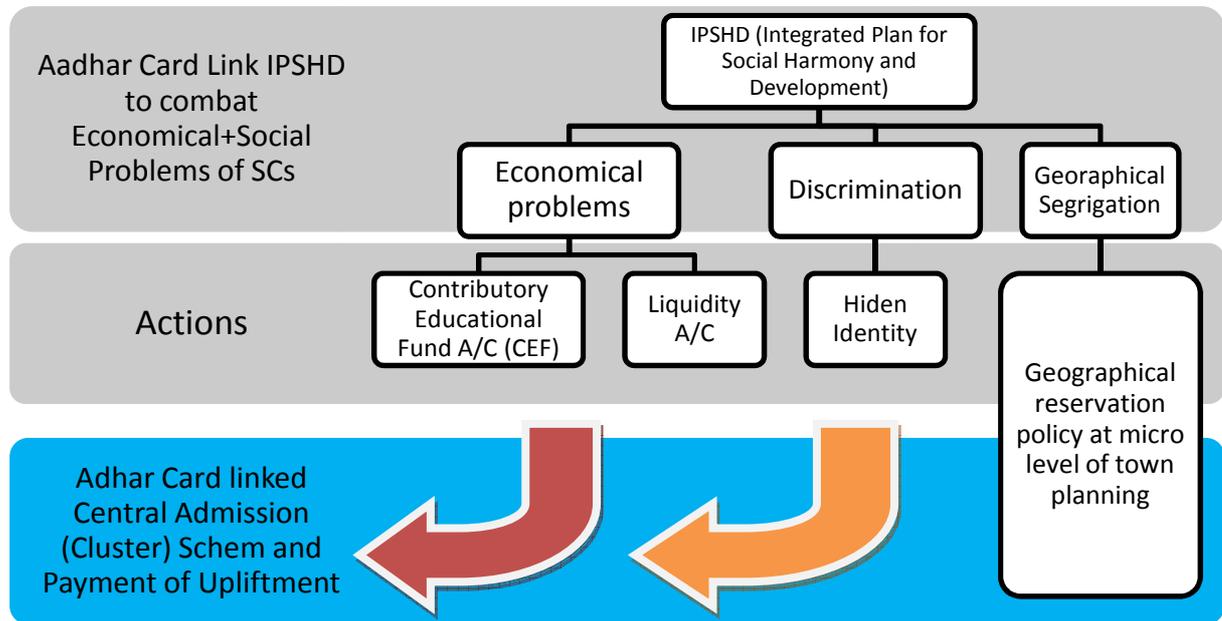


Figure 1 Layout of proposed IPSHD

1. IPSHD will have three component as depicted in figure-2 first to combat economics problems second to combat discrimination and third is will fight to synthesis the anti-academic environment which arise to segregation of weaker or community clustering.
2. Economic problems will address by Contributory Educational Fund A/C (CEF). The major features of CEF are as follows
  - 2.1 It will start at the birth of the child and will be operated by the parents for 17 years.
  - 2.2 The CEF will have lock in period of up to 11 years' age of child.
  - 2.3 CEF will fully link by "Aadhar Card" or "Unique Identity" .
  - 2.4 It should be attractive for all the students and mandatory for SC/ST and BPL category.
  - 2.5 All the financial supports and educational payments to Institutes will be apply to this CEF A/C. and it should be mandatory.
  - 2.6 Government authority will accreditation and will provide the grade to each and every academic institute.
  - 2.7 Withdrawal amount will be depending on the status (Grade) of educational institute in which student would be getting admission.
3. Liquidity A/C will be the part (linked) of CEF. It will be an ordinary bank A/C will carry all the ongoing transfer of fellowships or scholarships. The withdrawal able amount will transfer to this account and students can get it cash.
4. IPSHD will propose to combat the discrimination. Students ' identity as SC/ST/Minority etc. will provide the platform for hatred and discrimination. The IPSHD can provide the method to hide the identity of students in following way.
  - 4.1 The caste of category will not be disclosed for entire educational process.
  - 4.2 CEF is linked with *aadhar* card that carry all the details of students.



- 4.3 Students will mention majorly CEF A/C no and last results performance in the application form to get the admission in any academic institute.
- 4.4 Union government will provide online software with data base of all the citizens.
- 4.5 Academic institute have to submit all the applicants' CEF account no to that software which will produce the final admission list with maintain all the reservation quota without disclosure of any identity of the students.
- 4.6 Any students can also operate all these online admission process. It is mandatory for all academic institutes to declare the applicants' list with CEF.
- 4.7 Academic institute could not be asking for student' s category in any case.
5. Geographical reservation policy at micro level of town planning will abolish all those anti academic elements which arise due to synthesis the character of community base cluster.
6. To make this finance we recommended "Educational Inequality Tax" (EIT) on those academic institutes which are consider as primer institute and only those students whose parents are paying more than one lakh of income tax.
7. "Educational Inequality Tax" (EIT) will we collect by academic institute at the time of payments of admission fees of students.