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# BUSINESS CORRESPONDENT MODEL AND ITS CONTRIBUTION IN PROMOTING FINANCIAL INCLUSION IN INDIA

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## ABSTRACT

*For the development of a country to happen, development should flow to all sections of the society and not just in a certain section. Financial Inclusion is considered to be a surefire strategy to ensure inclusive growth for which lot of efforts has been made starting from nationalisation of banks to the very recent PMJDY. An attempt is made in the present study to comprehend the progress of financial inclusion so far in the country in terms of availability of financial services and the usage of the same. The Spearman's correlation coefficient test is run to test the correlation between the variables to check the accessibility and availability of financial services. The focus of the paper is more on studying the progress of financial inclusion in rural geographical location. Further, an attempt is made through this paper to assess the role of Business Correspondent Model in promoting financial inclusion. It is being concluded that while there is significant progress with reference to the availability and usage of the financial services, there is still more to be achieved.*

## KEYWORDS

inclusive growth, business correspondent model, PMJDY, financial inclusion.

## 1. INTRODUCTION

In spite of India's GDP growth rate being about 9%, poverty is still highly omnipresent in our country. The problem is more acute in rural areas where about 70% of India's 1.2 billion populations live. Also it has been observed that about 21.9% of the population lives below the poverty line and about 42% of the households not having any access to the formal banking services.

When a huge section of the population is being deprived of the basic banking services persistently. It would result in social exclusion which would have various long term repercussions not only economically but also socially. Also in the absence of formal source of either the deposit and credit product, the deprived would be compelled to depend on the informal source like the local moneylender wherein he would be faced with several problems.

Growth in true sense would not be possible given the major chunk of the population would not access the banking services. Given this background, financial inclusion is one undisputable strategy which ensures not only the development at the micro level but also at the macro level by ensuring inclusive growth. From Nationalisation of Banks in 1960s to the very recent PMJDY, there are various initiatives taken up by the government to promote financial inclusion. In this study, an attempt is made to know about the progress of the initiatives measured in terms of financial access and usage. Further, the role of Business Correspondents towards promoting financial inclusion is too being studied.

## 2. LITERATURE REVIEW

Most of the published articles are the studies which try to explore the reasons behind financial exclusion. There are some studies which aim to know the extent of financial inclusion or exclusion in different parts of the country and world. Information has also been gathered from the speeches of the policy makers at various conferences and meets.

A study conducted in the year 2006 by S Mahendra Dev suggests that financial inclusion is pivotal in improving the living conditions of the poor. Another study by Rajlakshmi Kamath in the year 2007 suggests that financial inclusion should go beyond the provision of a basic banking account and that it has to progress towards credit delivery, insurance etc., The report on financial inclusion by Dr. Rangarajan, in the year 2008 observes that even with impressive banking outreach over the past few years, still there is widespread financial exclusion and that the poorer section of the society is still not able to access suitable financial services from the organized financial system. It also observed that there is an essential need to modify the credit and financial services delivery system to achieve greater inclusion.

A study conducted by Mandira Sarma et al in the year 2008 suggests that financial exclusion is a reflection of social exclusion and that the countries having low GDP, low per capita income and higher levels of income inequalities etc., seem to be less financially inclusive. Further a study by Ravichandran K in the year 2009 suggests that financial inclusion should be a strategy towards inclusive growth and that it should be supported by technology, financial education, society and banking system. A study in the year 2011 by Rajesh Sharma et al concluded that growth in GDP alone is not sufficient to bring the poor out of poverty but there should be high and sustainable growth and that the benefit has to reach all and that would be not be possible unless there is 100% financial inclusion.

A study by the World Bank Research Group in the year 2008 suggests that the lack of access to finance is a critical factor which is responsible for persistent income inequality as well as the slower growth. The study conducted by Anuj and Himanshu in the year 2008 opines that the to set the momentum towards financial inclusion, the regulatory authorities of the country have taken initiatives like third party Business correspondent to realize the dream of attaining 100% financial inclusion by the year 2015. A study conducted by Microsave India in the year 2008 suggests that the BC model has the potential to deliver a range of financial services to millions of unbanked and underbanked in India as it can address many impediments faced by customers while banking.

Financial inclusion is viewed as a precondition for inclusive development and that the success of the newly introduced BC model of propelling financial inclusion needs to be seen after a few years of implementation says a study conducted by Basant Kumar & Brajaraj Mohanty in the year 2011. Also the same study opines that India being a leading country with respect to financial inclusion delivery has adopted the model of business correspondent which is in the transition state and



only time will tell about its success rate. The focus of the countries has been shifting towards business correspondent model for reaching out to unbanked population says a study conducted by Suresh Chandra Bihari in the year 2011.

All the above reviews discuss the importance of financial inclusion towards promoting inclusive growth. While there are not many studies made towards the business correspondent model, serves as the research gap.

**3. NEED FOR THE STUDY**

A lot of initiatives have been introduced from time to time to increase the banking penetration and thereby bring about financial inclusion. Given this background, it becomes necessary to measure the progress in financial inclusion as a result of the recent initiatives introduced. This study tries to analyze the status of financial inclusion in terms of proportion of population accessing financial services, number of credit and deposit accounts, amount being deposited or credited according to different geographical locations and so on.

**4. STATEMENT OF THE PROBLEM**

Having taken lot of initiatives to propel financial inclusion, there is a need to know the progress made so far. It becomes important to check the financial access which is measured in terms of number of ATMs, Bank branches and so on. In this context a study of this nature would explore the progress made so far in terms of attaining financial inclusion.

**5. OBJECTIVES OF THE STUDY**

1. To know the present availability, accessibility and usage of the banking services in the country.
2. To assess the role of Business Correspondent in expanding the banking outreach.
3. To know about the progress of Pradhan Mantri Jan Dhan Yojana and to assess the role that the BCs could play in speeding up financial inclusion.

**6. HYPOTHESIS**

1. H0: There is no significant growth in the availability of banking services in terms of branches across the rural and urban locations  
H1: There is a significant growth in the availability of banking services in terms of branches across the rural and urban locations.
2. H0: There is no significant growth in terms of availability of ATMs across the rural and urban locations.  
H1: There is a significant growth in terms of availability of ATMs across the rural and urban locations.
3. H0: There is no significant growth in the usage of banking services in terms of credit accounts over the last five years  
H1: There is a significant growth in the usage of banking services in terms of credit accounts over the last five years
4. H0: There is no significant growth in terms of credit outstanding over the last four years in the rural areas.  
H1: There is a significant growth in terms of credit outstanding over the last four years in the rural areas.
5. H0: There is no significant growth in the usage of banking services in terms of deposit accounts penetration across rural and urban locations  
H1: There is a significant growth in the usage of banking services in terms of deposit accounts penetration across rural and urban locations
6. H0: There is no significant growth in terms of deposit mobilization over the last four years in rural areas.  
H1: There is a significant growth in terms of deposit mobilization over the last four years in rural areas.

**7. RESEARCH METHODOLOGY AND DATA ANALYSIS TECHNIQUE**

The study is descriptive in nature. Secondary data is used for the analysis and the hypotheses are being tested to supplement the first objective. As the data is monotonic in nature, Spearman’s correlation coefficient (Rho) test is run to assess the relationship between the variables. The Stata Statistical Software is used for the same.

**8. RESULTS AND DISCUSSIONS**

**8.1: DIMENSIONS OF FINANCIAL INCLUSION**

There is no universally acceptable metric to measure financial inclusion. However, the financial inclusion measurement has been mainly approached by measuring usage and access to the formal financial services (eg. Honohan (2007), Sarma (2008,2012), Chakravarthy and Pal (2010) and Amidzic et al., (2014).

The high level of availability of formal banking services like the number of bank branches, number of ATMs, high usage level of banking services does not necessarily imply that the system is highly inclusive. Rather it would be reflected through various other parameters like, GDP Per Capita, Human Capital, Legal framework, development status of the individuals and such other factors. However, in the given scope, the financial inclusion status is measured in terms of availability and usage angles.

The following are the three dimensions using which one can measure the extent of financial inclusion:

1. The access to financial services
2. The Usage of financial services
3. The quality of the products and the service delivery.

*The access to financial services is measured using the following parameters:*

1. The total number of households availing the banking services
2. The accessibility measured in terms of number of scheduled commercial bank branches in different population sections.
3. The accessibility measured in terms of ATMs in different population groups

*The usage of the financial services is measured as follows:*

1. The total of Deposit accounts according to different population groups
2. The total amount mobilised in the saving deposit accounts according to different population groups
3. The total number of credit accounts according to different population groups
4. The outstanding credit amount as per the different population groups.

**8.1.1: THE ACCESS TO FINANCIAL SERVICES**

**8.1.1 Accessibility measured in terms of total Number of households availing the banking services:**

TABLE NO. 1: TABLE SHOWING THE NUMBER OF HOUSEHOLDS AVAILING BANKING SERVICES: SOURCE: NSSO SURVEY 2011

Type	Census 2001			Census 2011			CAGR (Growth in households availing banking services) %
	Total Number of Households	Number of households availing banking services	Percent	Total Number of households	Number of households availing banking services	Percent	
Rural	13,82,71,559	4,16,39,949	30.1	16,78,26,730	9,13,69,805	54.4	8.18
Urban	5,36,92,376	2,65,90,693	49.5	7,88,65,937	5,34,44,983	67.8	7.23
Total	19,19,63,935	6,82,30,642	35.5	24,66,92,667	14,48,14,788	58.7	7.82

Over the period of 10 years the number of households availing the banking services has grown at the rate of 7.82%. The rural and urban households availing the banking services have grown at a rate of 8.18% and 7.23% respectively over the last 10 years. 67.8% of the urban households are availing banking services while about 45.6% of the rural households are still not availing banking services. Unless the banks, RBI, the technology providers and other stakeholders take a keen interest in promoting financial inclusion the dream of 100% inclusive growth couldn't be realised.

**8.1.2: Accessibility measured in terms of growth in the Number of SCB branches over the period of last five years:**

**TABLE 2: TABLE SHOWING THE GROWTH IN THE TOTAL SCBS ACROSS THE COUNTRY. SOURCE: RBI | ANNUAL REPORT, 2015**

	Rural	YoY growth %	semi Urban	YoY growth %	Urban	YoY growth %	Metropolitan	YoY growth %
2010	32,320		20,601		17,964		16,075	
2011	33,367	3.24	22,725	10.31	18,997	5.75	17,028	5.93
2012	35,936	7.70	25,818	13.61	20,225	6.46	18,826	10.56
2013	39233	9.17	28529	10.50	21618	6.89	19899	5.70
2014	44653	13.81	31663	10.99	23386	8.18	21263	6.85
2015	48,557	8.74	33,766	6.64	23,036	-1.50	20,498	-3.60
CAGR	8.48%		10.39%		5.1%		5%	

The following hypothesis was tested to test the growth in the availability of banking services in terms of bank branches.

H0: There is no significant growth in the availability of banking services in terms of branches across the rural and urban locations

H1: There is a significant growth in the availability of banking services in terms of branches across the rural and urban locations.

The Spearman's Correlation Coefficient Test was run to assess if there is any significant relationship between the nature of growth in the availability of banking services across the rural and urban locations. It was found that there is a strong positive correlation between the growth in the availability of banking services across the rural and urban locations and is statistically significant,  $r_s=0.9429$ ,  $p=0.0048$

Thus the alternate hypothesis is accepted and one can conclude that there is a significant improvement in the availability in the banking services in terms of branches in both the rural and urban locations.

**8.1.3 Accessibility measured in terms of growth in the number of ATMs over the last five years period:**

**TABLE 3: TABLE SHOWING THE NUMBER OF ATMS IN THE COUNTRY, SOURCE: RBI ANNUAL REPORT, 2015**

YEAR	RURAL	% OF RURAL ATMS	SEMI URBAN	% OF SEMI URBAN ATMS	URBAN	% OF TOTAL URBAN ATMS	METRO	% OF METRO ATMS	TOTAL
2013	11,564	10.14	27,710	24.30	36,111	31.67	38,629	33.88	114,014
2014	23,334	14.58	43,200	26.99	47,641	29.77	45,880	28.67	160,055
2015	31,652	17.46	48,201	26.59	51,115	28.20	50,284	27.74	181,252
CAGR %	65.44		31.89		18.57		14.09		

The following hypothesis was tested to assess if there is any significant growth of banking services in terms of availability of ATMs across the rural and urban locations.

H0: There is no significant growth in terms of availability of ATMs across the rural and urban locations.

H1: There is a significant growth in terms of availability of ATMs across the rural and urban locations.

The Spearman's Correlation Coefficient Test was run to assess if there is any significant growth in the availability of banking services in terms of ATMS across the rural and urban locations. It was found that there is a strong positive correlation between the nature of growth in the availability of banking services in terms of ATMS across the rural and urban locations and is statistically significant,  $r_s=1$ ,  $p=0.0048$ .

Thus the alternate hypothesis is accepted and one can conclude that there is a significant growth in the availability of banking services in terms of ATMs.

**8.2 The usage of the financial services is measured as follows:**

1. The total of Deposit accounts according to different population groups
2. The total amount mobilised in the saving deposit accounts according to different population groups
3. The total number of credit accounts according to different population groups
4. The outstanding credit amount as per the different population groups.

**8.2.1 To measure the usage of the financial services in terms of Growth in the number of credit accounts and the advances over the past few years**

**TABLE 4: TABLE SHOWING THE GROWTH IN THE NUMBER OF CREDIT ACCOUNTS OVER DIFFERENT REGIONS**

	RURAL	SEMI-URBAN	URBAN	METRO	ALL-INDIA TOTAL
2010	3,61,92,714	2,68,75,601	1,60,19,694	3,95,59,873	11,86,47,882
2011	3,91,29,655	2,86,72,791	1,65,22,322	3,63,99,327	12,07,24,095
2012	4,11,15,982	3,10,47,873	1,74,42,503	4,12,74,939	13,08,81,297
2013	4,40,35,167	3,44,37,372	1,81,90,031	3,16,23,721	12,82,86,291
2014	4,78,96,289	3,82,89,872	1,98,00,527	3,27,64,194	13,87,50,882
CAGR	7.26%	9.25%	5.44%	-4.6%	3.99%

Source: Basic Statistical Returns, RBI

H0: There is no significant growth in the usage of banking services in terms of credit accounts over the last five years

H1: There is a significant growth in the usage of banking services in terms of credit accounts over the last five years

The Spearman's Correlation Coefficient Test was run to assess if there is any significant growth in usage of the banking services in terms of credit accounts across the rural and urban locations. It was found that there is a strong positive correlation between the growth in the accessibility of banking services in terms of credit accounts across the rural and urban locations and is statistically significant,  $r_s=1$ ,  $p=0.0000001$ .

Thus the alternate hypothesis is accepted and it can be concluded that there is a significant relationship between the nature of growth of usage of banking services in terms of credit accounts across both the regions.

**8.2.2: The outstanding credit according to population group**

**TABLE 5: TABLE SHOWING THE OUTSTANDING CREDIT ACCORDING TO DIFFERENT POPULATION GROUP**

Population Group	outstanding credit 2010	% of total	outstanding credit 2011	% of total	outstanding credit 2012	% of total	outstanding credit 2013	% of total	outstanding credit 2014	% of total
RURAL	249276,96	7.5	2958145.4	7.3	3805176.5	7.9	4561908.1	8.3	5246133.8	8.4
SEMI-URBAN	319972,87	9.6	3815727.5	9.4	4598608.1	9.6	5560680.1	10.1	6640959.4	10.6
URBAN	558531,01	16.7	6838830.9	16.8	7815121.5	16.3	9079525.3	16.4	10053428.4	16
METRO	2217388,48	66.3	27143766.1	66.6	31813763.0	66.2	36051056.8	65.2	40880302.6	65.1
ALL-INDIA	3345169,32		40756470.0		48032669.1		55253170.3		62820824.3	

H0: There is no significant growth in terms of credit outstanding over the last four years in the rural areas.

H1: There is a significant growth in terms of credit outstanding over the last four years in the rural areas.

The Spearman's Correlation Coefficient Test was run to assess if there is any significant growth in usage of the banking services in terms of credit outstanding across the rural location over the last four years. It was found that there is a strong positive correlation between the growth in the usage of banking services in terms of credit outstanding across the rural location over the last four years and is statistically significant,  $r_s=1$ ,  $p=0.0000001$ .

Thus the alternate hypothesis is accepted and it can be concluded that there is a significant relationship growth of usage of banking services in terms of credit outstanding in the rural areas over the last four years.

**8.3 Growth in the deposit accounts in different regions over the last few years**

**8.3.1 Number of Deposit Accounts and their growth rate**

**TABLE 6: TABLE SHOWING THE GROWTH IN THE NUMBER OF DEPOSIT ACCOUNTS OVER DIFFERENT REGIONS**

	RURAL	SEMI-URBAN	URBAN	METRO	ALL-INDIA TOTAL
2010	22,41,54,850	18,94,57,206	15,23,22,831	16,89,34,254	73,48,69,141
2011	25,02,53,643	21,20,43,091	16,80,36,910	17,97,95,709	81,01,29,353
2012	28,30,71,790	23,99,51,065	18,06,26,261	19,95,51,141	90,32,00,257
2013	33,53,47,106	28,39,89,969	20,30,90,638	22,26,76,882	1,04,51,04,595
2014	40,66,24,148	34,05,22,129	23,15,21,152	24,80,42,742	1,22,67,10,171
CAGR %	16.05	15.79	11.03	10.08	13.67

Source: Basic Statistical Returns, RBI

H0: There is no significant growth in the usage of banking services in terms of deposit accounts penetration across rural and urban locations

H1: There is a significant growth in the usage of banking services in terms of deposit accounts penetration across rural and urban locations

The Spearman's Correlation Coefficient Test was run to assess if there is any significant growth in usage of the banking services in terms of deposit accounts across the rural and urban locations. It was found that there is a strong positive correlation between the nature of growth in the accessibility of banking services in terms of deposit accounts across the rural and urban locations and is statistically significant,  $r_s=1$ ,  $p=0.00000001$ .

Thus the alternate hypothesis is accepted and it can be concluded that there is a significant growth in accessibility of banking services in terms of deposit accounts across both the regions.

**TABLE 7: SHOWING THE PERCENTAGE OF TOTAL DEPOSITS IN DIFFERENT POPULATION GROUPS**

POPULATION GROUP	Total Deposits in Rs. In 2010	%	Total Deposits in Rs. In 2011	%	Total Deposits in Rs in 2012	%	Total Deposits in Rs in 2013	%	Total Deposits in Rs in 2014	%
RURAL	4203377	9.2	4932655	9.2	5731859	9.4	6698887	9.6	7871511	9.9
SEMI-URBAN	6140472	13.5	7168312	13.3	8425447	13.9	9791935	14.0	11410772	14.3
URBAN	9449922	20.7	11105133	20.6	12725921	20.9	14970129	21.3	17140100	21.5
METRO	25816519	56.6	30689413	56.9	33899207	55.8	38665252	55.1	43134829	54.2
ALL-INDIA	45610291		53895513		60782433		70126204		79557212	

The following hypothesis was tested to know if there is any significant growth in terms of deposit mobilization over the last few years particularly in rural areas.

H0: There is no significant growth in terms of deposit mobilization over the last four years in rural areas.

H1: There is a significant growth in terms of deposit mobilization over the last four years in rural areas

The Spearman's Correlation Coefficient Test was run to assess if there is any significant growth in usage of the banking services in terms of deposit mobilized across the rural locations over the last four years. It was found that there is a growth in the deposits mobilized over the last four years in the rural areas and is found to be statistically significant,  $r_s=1$ ,  $p=0.00000001$ .

Thus the alternate hypothesis is accepted and it can thus be concluded that there is a significant relationship between the growth in usage of banking services in terms of deposits mobilized in rural area over the last four years.

**8.4: Business Correspondent Model and its contribution to deepen financial access**

In the year 2006, a set of guidelines were issued by RBI that allowed the banks to employ two intermediaries, Business Correspondents and Business Facilitators to expand their outreach. Since the inception of the model, there has been a certain progress in terms of opening of accounts in the rural hinterland.

To access the role of Business Correspondents in deepening financial inclusion, the following studies are being made.

1. To know the banking expansion that has occurred through BCs across different regions.
2. To analyse the contribution of BCs in terms of opening BSBDAs and the number of ICT accounts opened through BCs.
3. To analyse the information about the savings that is being mobilised in the accounts thus opened by BCs.

**8.4.1: Banking Expansion through the BCs:**

**8.1: Banking expansion through different channels**

**TABLE 8: TABLE SHOWING THE BANK OUTREACH THROUGH DIFFERENT MODES OVER THE PAST FEW YEARS SOURCE: RBI, ANNUAL REPORT**

	Bank Expansion through branches	YoY growth %	Bank Expansion through BCs –Rural	YoY growth %	Urban Locations through BCs	YoY growth %
2010	33,378	--	34,316	--	447	--
2011	34,811	4.2	81,397	137.2	3,771	743.6
2012	37,471	7.6	141,728	74.1	5,891	56.2
2013	40,837	9	227,617	60.6	27,143	360.8
2014	46,126	13	343,954	51.1	60,730	123.1
2015	49,571	7.5	504,142	46.6	96,847	59.5
CAGR	8.23		71.16		193.19	

With the mention of Financial Inclusion in the 11<sup>th</sup> five-year plan in 2011, financial inclusion became a policy matter for all concerned. Also with the introduction of BC model, there was a significant change in the inclusive growth landscape. Where there was a very minimal expansion through bank branches, there is a very impressive banking expansion through BC model in both rural as well as urban areas. While the growth in the bank branches has been 8.23% over the last five years, the banking outreach through BC model in the rural areas has increased by 71%.

8.4.2: BSBDA through BCs and ICT Accounts through BCs

TABLE 9: TABLE SHOWING THE NUMBER AND THE AMOUNT MOBILIZED THROUGH BC MODEL AND THE BC MODEL LED ICT ACCOUNTS

Basic saving bank deposit Account - BCs							
	2010	2011	2012	2013	2014	2015	CAGR
No. In Millions	13.27	31.63	57.3	81.27	116.9	187.8	69.89
Amount in billions	10.69	18.23	10.54	18.22	39	74.6	47.49
ICT Accounts – BCs							
No. In millions	26.52	84.16	155.87	254.46	328.6	477	78.23
Amt. In billions	6.92	58	97.09	233.88	524.4	859.8	162.34

Since 2010 to 2015, there is a growth in the number of accounts opened by BCs. One of the major reasons for financial exclusion is the lack of bank branches in the rural areas because of high operational cost. The BC model led financial inclusion is a system which delivers the banking services at the doorstep of the villagers without them having to step out of their villages. This model relies heavily on technology interventions which are bringing down the cost significantly. This is evident from the number of ICT based accounts opened by BCs. Because of the efforts of the stakeholders there is an year on year increase in the number of ICT accounts and also the deposits mobilized in these accounts.

8.4.3: The progress of Pradhan Mantri Jan Dhan Yojana

Sustainable economic development is at the crux of PMJDY. In a country like ours while there are about 6,00,000+ unbanked villages, the primary vision of the government was to ensure that these villages be brought under the ambit of formal banking services. Where it is practically impossible to ensure availability of banking services to all these villages with the help of physical branches of banks, Business Correspondent model has provided the solutions for this mammoth task. A BC being a link between the customer of the last mile and the bank plays a vital role in bringing these two entities together. That's how significant is the role of BC in the entire process.

As on 31<sup>st</sup> March 2014, there was about 1,15,082 bank branches and 1,60,055 ATMs across the country. However, of this, only 38.2% of the bank branches and 14.58% of the ATMs were in rural areas. Also of the 16.78 crore rural households, only about 54.46% of the households were availing banking services (Census 2011 data). By identifying the divide in the banking outreach in rural areas, various initiatives have been taken, the important ones being the National Rural financial inclusion plan and the BC led banking under PMJDY. Of 6,00,000 villages about 5,53,713 villages are having bank penetration either through physical branches or through BCs. However, of these 5,53,713 villages which are covered now, 5,04,142 villages are covered through Branchless mode, i.e., BC mode (PMJDY Brochure, 2015).

One of the latest initiatives to promote financial inclusion is the launch of Pradhan Mantri Jan Dhan Yojana launched by our honorable Prime Minister, Sri. Narendra Modi on 28<sup>th</sup> August, 2014.

The prime objective of PMJDY is to ensure access to need based financial services like basic savings bank account, credit, insurance, insurance, remittances etc to the needy section of the society. It also aims to bring about comprehensive financial inclusion to all sections of the society with at least one basic savings account, credit facility, insurance, pension etc.,

Since the launch of PMJDY in August 2014, following are some of the milestones achieved under PMJDY:

1. About 17.74 crore accounts opened and more than Rs. 22,000 crores mobilized through the same and about 41.82% of such opened accounts are seeded through Aadhar.
2. More than 1.26lakh Business Correspondents deployed to ensure universal banking access
3. 131,012 mega camps were organized for imparting financial literacy
4. 10lakh+ accounts have qualified for overdraft facilities and about 164,962 account holders have availed this facility.
5. 847 claims of Life cover of Rs. 30000 and 389 accidental insurance claims of Rs. 1 lakh has been successfully paid out
6. There is a considerable fall in the zero balance accounts and it has fallen from 76% to 45.74% which is a very good sign. The accounts which otherwise were dormant are functional.
7. Taking financial inclusion to the next level, 8.17 crore beneficiaries have enrolled for Pradhan Mantri Suraksha Bima Yojana, 2.76 crore for PM Jeevan Jyothi Bima Yojana and about 6.83 lakh for Atal Pension Yojana.

TABLE 10: TABLE SHOWING THE NUMBER OF ACCOUNTS OPENED UNDER PMJDY AS ON 21<sup>ST</sup> JANUARY 2015

	Rural	Urban	No of Accounts	No of Rupay Debit Cards	Balance in accounts (Amount in lakhs)	No of accounts with zero balance
Public Sector Bank	53300249	45147276	98447525	91232024	817463	65541407
RRBs	18489448	3297833	21787281	14967614	159948	15935405
Private Banks	3226397	2012086	5238483	4593161	72551	2996917
<b>Total</b>	<b>75016094</b>	<b>50457195</b>	<b>125473289</b>	<b>110792799</b>	<b>1049962</b>	<b>84473729</b>

Source: PMJDY

8. FINDINGS

The following are the major findings of the study

1. The rural and urban households availing the banking services have grown at a rate of 8.18% and 7.23% respectively over the last 10 years.
2. There is a significant improvement in the availability of the banking services in terms of branches in both the rural and urban locations.
3. There is a significant growth in the availability of banking services through the ATMs.
4. There is a significant relationship between the nature of growth of usage of banking services in terms of credit accounts across both the urban and rural regions.
5. There is a significant growth in the usage of banking services in terms of credit outstanding in the rural areas over the last four years.
6. There is a significant growth in the accessibility of banking services in terms of deposit accounts across both the regions.
7. There is a significant growth in usage of banking services in terms of deposits mobilized in rural area over the last four years.
8. Where there was a very minimal expansion through bank branches, there is a very impressive banking expansion through BC model in both rural as well as urban areas. While the growth in the bank branches has been 8.23% over the last five years, the banking outreach through BC model in the rural areas has increased by 71%.
9. Of 6,00,000 villages about 5,53,713 villages are having bank penetration either through physical branches or through BCs. However, of these 5,53,713 villages which are covered now, 5,04,142 villages are covered through Branchless mode, i.e., BC mode

9. SUGGESTIONS/RECOMMENDATIONS

It is observed that the Business correspondents can play a very pivotal role in increasing the awareness of the advantages by way of engaging them in spreading financial literacy initiatives. By proper training and orientation given to the BCs, they can assume a very important role in further deepening the financial access at the hinterland. Thus there is a need that the BC model be given more importance which no doubts improves the financial deepening and thereby ensure financial inclusion in true sense.

There is a considerable improvement in the usage of financial services in terms of amount deposited and the outstanding credit in the rural geography. Also upon analysing the progress made in the PMJDY it can be concluded that post PMJDY there has been a considerable growth in the level of inclusiveness in terms of number of accounts, and added to it the growth in the amount deposited in the savings account as well as the outstanding credit across the different geographical regions.

There is a need that the focus also needs to be shifted from the mere provision of accounts to the next level of inclusion which is the utility. For the attainment of this objective, the BCs could be employed who would play an instrumental role in promoting financial education with proper orientation.

## 10. CONCLUSION

Financial Inclusion has been considered very important to ensure the overall economic development of the country. Since the initiation of the financial inclusion initiatives and the robust push given through the PMJDY, the progress in the financial inclusiveness has been phenomenal. Given the impediments of the existing financial infra structure of the country, the progress made in terms of financial access is quite impressive. It is evident that there is a considerable progress in both the rural and urban households availing the banking services and banking outreach has grown at a rate of 8.18% and 7.23% respectively over the last 10 years in the rural and urban areas respectively. Also the Spearman's correlation tests that are run have also proved that there is a considerable progress in the financial access in terms of number of bank branches and the number of ATMs across the country.

It has been observed that the BC model has been very instrumental towards increasing the banking outreach in terms of number of accounts opened. It has been observed that there is a considerable growth in the usage of the financial services in terms of the number of savings deposits accounts and the credit accounts opened with special reference to rural areas. Rural geography is specifically focused upon as the financial usage was the least as per the observations made.

## 11. LIMITATIONS

The major limitation of the study is that the study is limited by the information which is available in the reliable websites. The study has been derived from the publicly available information only.

## 12. SCOPE FOR FURTHER RESEARCH

The research could be further probed upon by focussing more on the role of BCs and by studying the issues and challenges that they face while delivering the services. It has been prima facie observed that inspite of the potential of the model, it has not taken off as desired because of some inherent problems with respect to operations. A study could be conducted to know about the issues and challenges that are crippling the model.

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## A STUDY ON PERFORMANCE OF INDIAN MUTUAL FUND SCHEMES INVESTING IN OVERSEAS SECURITIES AND INVESTOR AWARENESS OF SUCH SCHEMES

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### ABSTRACT

*This paper categorizes mutual fund schemes on the basis of their investment portfolio and focus on comparing the returns on Overseas Mutual Fund Schemes in comparison to similar portfolio schemes and return on them generated in India, US and China. This paper also includes primary study to understand investment preferences of individuals and reasons for Overseas Mutual Fund schemes not gaining popularity in India.*

### KEYWORDS

mutual fund, overseas, hybrid, portfolio.

### 1. INTRODUCTION

A Mutual Fund can be termed to be a financially intermediary that pools funds of investors who have same general investment objectives. It then on behalf of such investors invests funds into different types of financial securities. Such pooled funds provide investors with proportional ownership of diversified portfolio which the Mutual fund owns and manages. Mutual funds are managed by professional fund manager who invests the money on behalf of the investors by buying / selling stocks, bonds etc.

There are many reasons that encourage investors to invest through Mutual Funds. Some broad reasons are as follows:

An informed investor needs to do research before investing. However, many retail investors find it cumbersome and time consuming. Mutual fund scheme provides opportunity of investing and the fund takes the responsibility of investing in stocks and shares after due analysis and research. The investor also does not need not bother about researching hundreds of stocks as same is done professionally by fund management team on continuous basis

Mutual funds also offer diversification. An investor's money is invested by the mutual fund in a variety of shares, bonds and other securities thus diversifying the investor's portfolio across different companies and sectors. This diversification helps in reducing the overall risk of the portfolio. It is also less expensive to invest in a mutual fund since the minimum investment amount in mutual fund units is fairly low.

Mutual Fund investment reduces overall risk for retail investor who is intending to invest in securities market. Mutual funds also provide investors with flexibility and variety in terms of investment options in financial securities. This is possible on account of varied schemes of Mutual Funds. Certain Mutual Fund investment schemes also provide tax benefit. For example, tax advantage is available in India when investors invest in ELSS (Equity linked Saving Schemes)

On account of above stated factors Mutual Funds have become popular investment vehicles worldwide.

### 2. OPENING OF INVESTMENT WINDOW FOR INDIAN MUTUAL FUNDS MARKETS INTENDING TO INVEST OVERSEAS

During the budget speech for the Financial Year 2007-08, the Finance Minister of India had announced that the mutual fund houses in India would be permitted to invest in overseas securities. Accordingly, the Securities and Exchange Board of India (SEBI), the Regulator for the Capital market and Mutual Funds, issued a circular in this regard (dated September 26, 2007) with the captioned subject "Overseas Investments by Mutual Funds".

As per provisions Overseas Investments by Mutual Funds were permitted. The Aggregate ceiling limit for Mutual Funds registered with SEBI for investment abroad was decided at USD 5 billion per annum. Through the guidelines Mutual Funds registered with SEBI were permitted to invest in following instruments;

- ADR's/GDR's issued by Indian or Foreign companies
- Equity of Overseas companies listed on recognized stock exchanges overseas.
- Initial and follow on public offerings for listings at recognized Stock Exchanges Overseas.
- Foreign debt securities in countries with fully convertible currencies, short term and long term debt instruments with rating not below investment grade by accredited/ registered credit rating agencies.
- Money Market instruments rated not below investment grade
- Repos in the form of investment where the counterparty is not rated below the investment grade (Such Repo transactions should not involve borrowing of funds by Mutual Funds)
- Government securities where countries are not below investment grade
- Derivatives traded on recognized stock exchanges overseas for hedging and portfolio balancing with underlying as securities
- Short term deposits with banks overseas where the issuer is rated not below investment grade
- Units/ securities issued by Overseas Mutual Funds or Unit Trusts registered with overseas regulators investing in (a) aforesaid securities (b) Real Estate Investment Trusts (REIT's) listed in recognized stock exchanges (c) unlisted overseas securities (not exceeding 10% of their net assets
- Overall ceiling limit for investment in overseas ETF's that invest in Securities was fixed at USD 1 billion

It was further specified in the guidelines that Mutual Funds shall appoint a Dedicated Fund Manager for making the overseas investments. SEBI also advised boards of Asset Management Companies and Trustees to exercise due diligence in making the investment decision.

SEBI vide its follow on circular dated 8<sup>th</sup> April 2008 enhanced the aggregate overseas investment limit to USD 7 billion.

Post issue of enabling circulars several mutual funds have launched various schemes providing for investments in overseas securities / overseas ETFs.

### 3. RANKING OF MUTUAL FUNDS SCHEMES AS PER ASSET UNDER MANAGEMENT

Mutual Funds schemes investing abroad have least Asset under Management. This indicates that in spite of existing market and plethora of schemes under this category they are not being preferred by Investors.

**TABLE 1: RANKING OF MUTUAL FUND SCHEMES AS PER AUM [As On June 30, 2015]**

Types of Schemes	AUM (Rs. Cr)	Rank in Order of AUM
Debt Oriented	530341.83	1
Equity Oriented	372313.1	2
Liquid/Money Market	206978.7	3
Balanced	32259.47	4
Gilt	15192.75	5
ETF	13838.56	6
Fund of Funds investing Overseas	2369.48	7
Grand Total	1173293.88	

Source: AMFI

This paper is an attempt to understand Performance of Indian Mutual Fund Schemes Investing in Overseas Securities and Investor Awareness of Such Schemes.

#### 4. ADVANTAGES AND DISADVANTAGES OF INVESTING OVERSEAS SECURITIES THROUGH MUTUAL FUNDS

The biggest advantage of investing in overseas funds is that an investor can spread money among several markets. This leads to both diversification as well as hedging risk by spreading investment across mix of securities and markets. Individual economies may be subjected to economic cycles. By investing investment across several economies the returns tend to be smoother. Overseas investment options also provide opportunity to invest in select markets / regions (if so desired). For example, investment in China, Brazil, South America etc. In nutshell following are the advantages of investing in overseas securities.

- Overseas mutual fund schemes help in investing in overseas equity with little exposure to country specific risks including that of country specific business cycles.
- Such funds provide opportunity to invest in securities worldwide through expert intervention (read mutual funds)
- Investing in Global Funds diversifies the risk of investors
- Investing in Global funds also provides hedging for country risk
- Such investments also allow investor to invest in some specific desired global markets / regions.

#### DIS-ADVANTAGES OF INVESTING IN OVERSEAS MUTUAL FUNDS

- Currency Risk: Downside of investment in overseas securities is currency risk. As overseas investment funds invest abroad in foreign securities such an investment is done in foreign currency. Thus rupee returns emanating from such investments may be impacted on account of changes in Rupee value in comparison to other currencies.
- Tax Implications: Overseas investment can also complicate tax impact. Capital gain from the funds investing in overseas market are treated same way as long term capital gains from debt funds. However, if the holding period is less than a year then profit is added to the investor income for the year and taxed according to his/her tax bracket.
- Information Risk: Investment in overseas markets is far more complex than investing in domestic markets on account of limited understanding of these markets. Investor on account of same sometimes fails to guess economic and political changes in such overseas markets.

#### 5. OVERSEAS INVESTMENT BY MUTUAL FUNDS – TYPES OF FUNDS

There are broadly four types of overseas funds that are providing overseas investment opportunity to investors. These types are:

1. Direct fund investment in overseas markets
2. Fund of Funds that invest in several other mutual funds to achieve international exposure
3. Funds that use feeder route. A feeder fund is an investment fund which does almost all of its investments through a master fund via a master-feeder relationship. It is a situation similar to a fund of funds, except that the master fund performs all the investments.
4. Hybrid funds – Hybrid global funds invest sixty to seventy percent of their corpus in domestic companies and the balance in overseas market.

Almost all overseas funds scheme available in India are investing in Equity and are proving two options to their investors; (i) Growth (ii) Dividend.

**Growth Scheme** does not provide short term returns to the investor. Payments under fund investment in form of Dividend, interest, gains, bonus are not received by the fund investors. Returns accrue only on selling the units. Gain here is the difference in value of purchase and sale of unit at its NAV (Net Asset Value).

**Dividend Scheme** on the other hand provides returns to the investors at periodic intervals. However, intervals may not be certain and the dividend amount is not fixed. NAV of dividend schemes is lower than growth schemes as the earnings are not reinvested in the Dividend scheme while they are reinvested in case of Growth scheme thereby providing advantage of compounding to its investors. As per AMFI data less than 10% of Indian Households invest in Mutual Funds. Again from the investment data on investment in various mutual fund schemes highlights that corporate and retail participation in overseas investments through mutual funds is very low (table 1). It is clear that such an investment option requires greater visibility in terms the return advantage associated with such funds. In this chapter an attempt is being made to highlight the returns that select mutual fund schemes are generating for their investors over the years.

#### 6. ANALYSIS OF MUTUAL FUND SCHEMES INVESTING ABROAD

For the purpose of this study top 20 (twenty) best performing mutual fund schemes have been selected and analysed in greater detail for evaluating returns earned by the scheme. For analysis purpose the study has used secondary data available on these schemes. The data sources are Value Research online, Morning Star, and Money Control etc.

Following table carries details of the funds that have given best average annualized returns (%) over preceding three-year period. The data table given below highlights top twenty schemes that have given best 3 year return in comparison to CNX Nifty. This category of funds includes all types of Overseas Portfolio Mutual Funds that is;

- I. Direct fund investing in overseas markets
- II. Fund of Funds that are investing in several other mutual funds to achieve international exposure
- III. Funds that use feeder route.
- IV. Hybrid funds – Hybrid global funds invest sixty to seventy percent of their corpus in domestic companies and the balance in overseas market.

TABLE 2: TWENTY (20) BEST OVERSEAS FUNDS ON BASIS OF AVERAGE ANNUALIZED RETURNS [%]

Rank	Scheme	AUM	Return Year 1	Return Year 2	Return Year 3	Average Annualized Returns
1	TATA growing Economies Infrastructure Fund Plan B (G)	52.68	48.6	26.8	16.4	30.6
2	Mirae India China Consumption Fund (G)	32.71	23.9	30.8	25.2	26.6
3	ICICI Prudential Indo Asia Equity – Retail Plan (G)	148.38	18	33.1	25.6	25.56
4	ICICI Indo Asia Equity – Institutional Plan	N.A.	18	33.1	25.6	25.56
5	MotilalOswal Most Shares NASDAQ 100 ETF	70.70	21.6	26.2	25.5	24.43
6	Franklin India Feeder - Franklin US Opportunities Fund	680.45	20.9	20.4	25.2	22.16
7	L&T Indo Asia Fund (G)	259.82	17	23.4	19.3	19.9
8	TATA Indo Global Infrastructure Fund	67.09	47.7	17.0	15.0	17.83
9	Birla Sun Life International Equity – Plan B (G)	111.79	12.4	21	16.5	16.3
10	ICICI Prudential US Blue-chip Equity (G)	169.01	9.3	15.5	21.4	15.4
11	JP Morgan Greater China Equity Plan	114.18	11.1	15.1	19	15.06
12	DSP Blackrock US Flexible Equity Fund (G)	69.32	11.1	14.3	19.6	15
13	Goldman Sachs Hang Seng Exchange Traded Scheme	7.83	7.6	12.5	15.6	11.9
14	TATA Growing Economies Infrastructure Fund (G)	16.19	21.2	17.2	15.1	11
15	Mirae China Advantage Fund	18.75	5.4	13.5	13.1	10.66
16	Birla Sunlife International Equity – Plan A (G)	62.28	6.6	8.5	13.7	9.6
17	Deutsche Invest – Top Euroland (G)	33.84	5.2	7.1	13.3	8.53
18	Birla Sun Life Commodity Equity – GAP- Retail Plan (G)	10.70	6	9.6	7.4	7.66
19	Birla Sun Life Global Real Estate - Retail Plan (G)	23.85	3.6	7.2	9.1	6.63
20	DSP Blackrock World – World Agriculture (G)	32.47	2.2	5.6	9.1	5.6
	Return Sensex		5.7	18.6	17.2	13.83
	Return Nifty		7.5	19.8	17.2	14.83

It can be thus seen that all categories of overseas investment mutual funds are present in India. Varied formats in which they are operating are;

- As Direct Investment Fund
- As Fund of Funds
- As Feeder Fund
- As Hybrid Fund

Observation: It can be seen that most of the funds that have given good returns over market indices are the ones that are investing in either Emerging Market Companies from markets like China, South Africa, South Korea, India, Taiwan etc or the funds that have invested top performing US Companies.

**7. COMPARISON - RETURNS OF INDIAN OVERSEAS MUTUAL FUNDS SCHEMES WITH THAT OF SIMILAR SCHEMES IN INDIA, USA AND CHINA**

For facilitating logical comparison of Mutual Fund Schemes across markets following considerations have been made:

1. For the purpose of comparison only Equity Funds are being considered as Overseas Mutual Funds from India predominantly have Equity Portfolio.
2. Comparison is being made between three markets only. They are India, USA and China.
3. Reason for selection of USA is that has highly sophisticated and well developed mutual fund market in world.
4. China is second country for the comparison of global returns as it is second largest economy after USA. It is also an Emerging Market that has attracted/enjoyed maximum global investment attention in recent years
5. For USA Large blend Mutual Fund portfolios are considered as in US market Equity Mutual Fund Portfolios are further divided into Large Cap, Mid Cap, and Small Cap etc. Large blend portfolios were selected for comparison as Large-blend portfolios are fairly representative of the overall U.S. stock market in size, growth rates, and price. Stocks in the top 70% of the capitalization of the U.S. equity market are defined as large-cap. The blend style is assigned to portfolios where neither growth nor value characteristics predominate. These portfolios tend to invest across the spectrum of U.S. industries, and owing to their broad exposure, the portfolios' returns are often similar to those of the S&P 500 Index.
6. For Indian domestic versus Overseas market comparison again the Large Cap Equity funds are considered for comparison as Equity portfolio of most of Overseas Schemes consists of Large Cap well-known stocks.
7. Near term return (One Year) is being considered for comparison as longer the period possibly more will be the impact of internal economic/country related/market factors on returns of a portfolio. Hence for comparison time frame of one year only is being considered.
8. Funds having more or less same portfolio from same Fund House are not being considered again to reduce replication effect of portfolio similarity on returns.
9. Along with above stated consideration only ten best performing Equity Mutual Fund Schemes are being considered.

**TABLE 3: RETURNS OF INDIAN OVERSEAS MUTUAL FUNDS SCHEMES WITH THAT OF OTHER MAJOR GLOBAL MARKETS**

Large Cap Equity Mutual Funds – (India) Domestic Schemes	India			USA		China	
	Annualized Return	Best Performing Overseas (Equity) Mutual Funds	Annualized Return- One Year	Best Performing Equity (Large Blend) Mutual Funds	Annualized Return- One Year	Best Performing Equity Mutual Funds	Annualized Return- One Year
Escorts Leading Sectors – Direct	33.6	Tata Growing Economies Infrastructure Fund – Direct	49.6%	Golden Large Cap Core Fund	12%	Neuberger Berman Greater China Equity	16.24%
Escorts Growth Plan	27.8	Tata Indo Global Infrastructure Fund - Direct	48.6	Wells Fargo Advantage Large Cap Core	11.50%	Matthews China Dividend Investor	13.96%
SBI Blue Chip Fund	27.2	Mirae India China Consumption Fund - Direct	25.8%	Large Cap Core Fund JP Morgan Tax Aware Equity Fund	10.03%	AllianzGI China Equity	6.83%
Franklin India Opportunities Fund	26.6	Franklin Feeder – US Opportunities Fund – Direct Plan	23.6%	Glenmede Large Cap Core Portfolio	9.69%	RS China Y	6.40%
JM Multi Strategy Fund	25.8	Motilal MOST Shares NASDAQ 100 ETF	22.2%	Prime Cap Odyssey Stock Funds	9.31%	Columbia Greater China I	5.84%
Birla Sun Life Top 100	25.7	ICICI Prudential Equity Savings Fund – Series 1 – Direct Plan	20%	Vanguard Structured Large Cap Equity Fund	9.06%	Invesco Greater China R5	5.34%
Birla Sun life Frontline Equity	25.6	ICICI Prudential Indo Asia Equity Direct Plan	19.2	Wilmington Large-cap Strategy Fund	8.61%	Clough China I	3.89%
Kotak Opportunities Fund	25.1	L&T Indo Asia Equity Fund- Retail Plan	18.6	Columbia Large Cap Enhanced Core Fund	8.50%	Matthews China Small Companies	3.60%
Reliance Focused Large Cap Fund – Retail Plan	24.7	Birla Sun life International Equity fund – Plan B - Direct	13.7	Vanguard Growth and Income Fund	8.05%	Fidelity Advisor China Regio I	3.55%
IDBI Top 100 Equity	24.3	Kotak US Equity Fund - Direct	12.2	SEI Institutional Investment Large Cap Fund	7.49%	Voya Hang Seng Index Part I	2.61%

Source: (1) <http://money.usnews.com/funds/mutual-funds/rankings/large-blend?page=2>

(2) <http://www.moneycontrol.com/mutual-funds/performance-tracker/returns/international-global-commodities.html>

(3) [http://news.morningstar.com/fund-category-returns/china-region/\\$FOCA\\$CH.aspx](http://news.morningstar.com/fund-category-returns/china-region/$FOCA$CH.aspx)

**OBSERVATIONS**

1. Above table clearly highlights that annualized returns being generated by Overseas Indian Mutual Funds are better than the other two markets (USA and China) under comparison (period of comparison 1 Year) Reason for this could be that among well performing Overseas Indian Mutual Funds many funds are Hybrid funds. To quote some names; Tata Growing Economies Infrastructure Fund – Direct, Tata Indo Global Infrastructure Fund – Direct, Mirae, India China Consumption Fund, ICICI Prudential Indo Asia Equity Direct Plan, L&T Indo Asia Equity Fund- Retail Plan.
2. Such funds are investing both in Indian as well as Global Markets. Indian Stock market has witnessed Bull Run in last one year and this has inflated the returns of Equity Mutual Funds including that of Hybrid Overseas Indian Mutual Funds.
3. However, at the same time in the list are also pure Global portfolio funds (Direct and Feeder Funds). To quote names of these; Franklin Feeder – US Opportunities Fund – Direct Plan, Motilal MOST Shares NASDAQ 100 ETF, Kotak US Equity Fund - Direct
4. Above table also highlights that returns generated by Equity Mutual Funds in India are better than that of being generated by Indian Mutual Funds investing in Overseas Securities. This can be a reason for lower corporate and retail interest in Indian Mutual Funds investing abroad.



**8. ANALYSIS OF INVESTOR PREFERENCES**

A Primary Survey was conducted to understand the Investment preferences of Retail investors. Survey format was random survey. Only financially literate individuals were considered as part of the population. Survey exercise was conducted using both online as well as offline process. Most of the responses were collected online. Responses were received from various parts of the country however maximum respondents were from Mumbai. Total number of responses received was 242 (two hundred and forty two). Following are the main observations;

- I. 65.5% of the Survey respondents were Males (156 Respondents) and remaining (34.5%) were females

Following are the details in the terms of Table and Graph:

**TABLE 4: GENDER DETAILS OF SURVEY RESPONDENTS**

Are you male or female?		
Answer Options	Response Percent	Response Count
Male	65.5%	156
Female	34.5%	82
<b>answered question</b>		<b>238</b>
<b>skipped question</b>		<b>4</b>

- II. Out of 242 respondents 63.7% were aged between 21-29 years (151 respondents). 20.3% respondents were in the age bracket 30-39. 9.7% of the respondents were in the age bracket 40-49. 5.5% respondents were in the age bracket 50-59 and only 0.8% of the respondents (2 respondents) were 60 or above.

**TABLE 5: DETAILS OF AGE DETAILS OF SURVEY RESPONDENTS**

What is your age?		
Answer Options	Response Percent	Response Count
21-29	63.7%	151
30-39	20.3%	48
40-49	9.7%	23
50-59	5.5%	13
60 or older	0.8%	2
<b>answered question</b>		<b>237</b>
<b>skipped question</b>		<b>5</b>

- III. Majority (61.4%) of the respondents were Employed (Full time) in Service. 27.7% of the respondents were either not employed or were studying. 8.5% were Self Employed. 2.1% were working part time and 0.4% were retired.

Following are the details of the responses:

**TABLE 6: EMPLOYMENT STATUS OF SURVEY RESPONDENTS**

Which of the following categories best describes your employment status?		
Answer Options	Response Percent	Response Count
Employed, working full-time - Service	61.4%	145
Employed, working part-time	2.1%	5
Self Employed/Business	8.5%	20
Not employed/Studying	27.5%	65
Retired	0.4%	1
<b>answered question</b>		<b>236</b>
<b>skipped question</b>		<b>6</b>

- IV. Maximum respondents were from such households with total income of 5,00,000 to 10,00,000 (27.8%). 24.8 % respondents were having household income between 2,50,000 to 5,00,000. 24.4% respondents were from household were earning 10,00, 000 or more. 12.8% were such respondents that were earning INR 2,50,000 or less. 10.3% respondents preferred not sharing their household income details

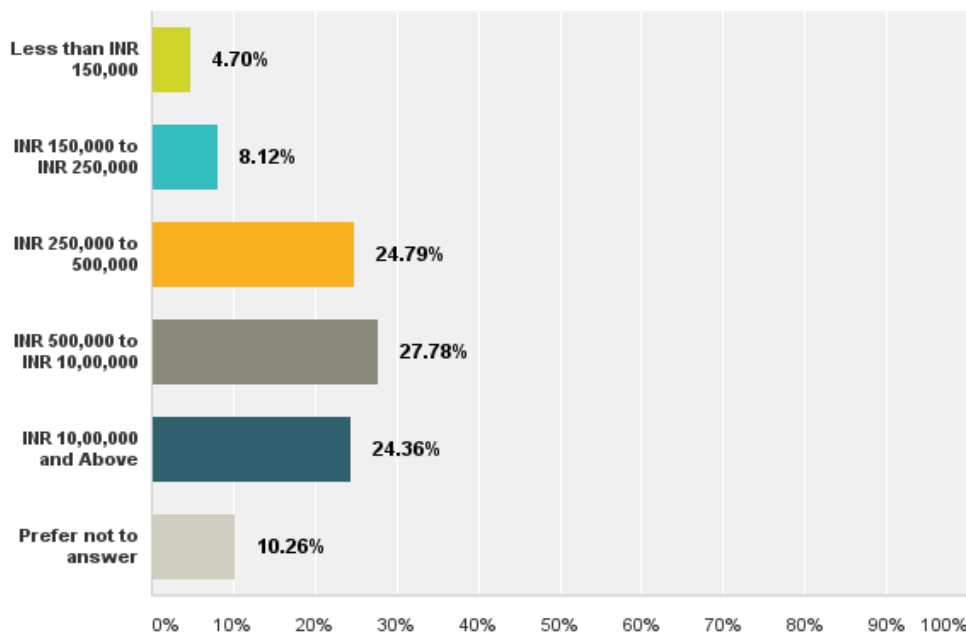
**TABLE 7: INCOME DETAILS OF THE SURVEY RESPONDENTS**

How much total combined money did all members of your HOUSEHOLD earned last year?		
Answer Options	Response Percent	Response Count
Less than INR 150,000	4.7%	11
INR 150,000 to INR 250,000	8.1%	19
INR 250,000 to 500,000	24.8%	58
INR 500,000 to INR 10,00,000	27.8%	65
INR 10,00,000 and Above	24.4%	57
Prefer not to answer	10.3%	24
<b>answered question</b>		<b>234</b>
<b>skipped question</b>		<b>8</b>

FIGURE 1: INCOME DETAILS OF THE SURVEY RESPONDENTS

### Q5 How much total combined money did all members of your HOUSEHOLD earned last year?

Answered: 234 Skipped: 8



V. 79.2% of the respondents were holding Post Graduate Degree or Professional Qualifications and only 20.8% were graduates or less. Following are the details of the Survey Response:

TABLE 8: EDUCATIONAL DETAILS OF SURVEY RESPONDENTS

What is your Educational Background?		
Answer Options	Response Percent	Response Count
Bachelor degree	20.8%	49
Post Graduate degree	59.7%	141
Professional Qualification/Degree	19.5%	46
<b>answered question</b>		<b>236</b>
<b>skipped question</b>		<b>6</b>

VI. Maximum respondents preferred investing in Real Estate followed by investment in PPF/EPF, Gold, Equity Shares, National Saving Certificates, Mutual Funds and Exchange Traded Fund in that order. Following are tabular and graphical details:

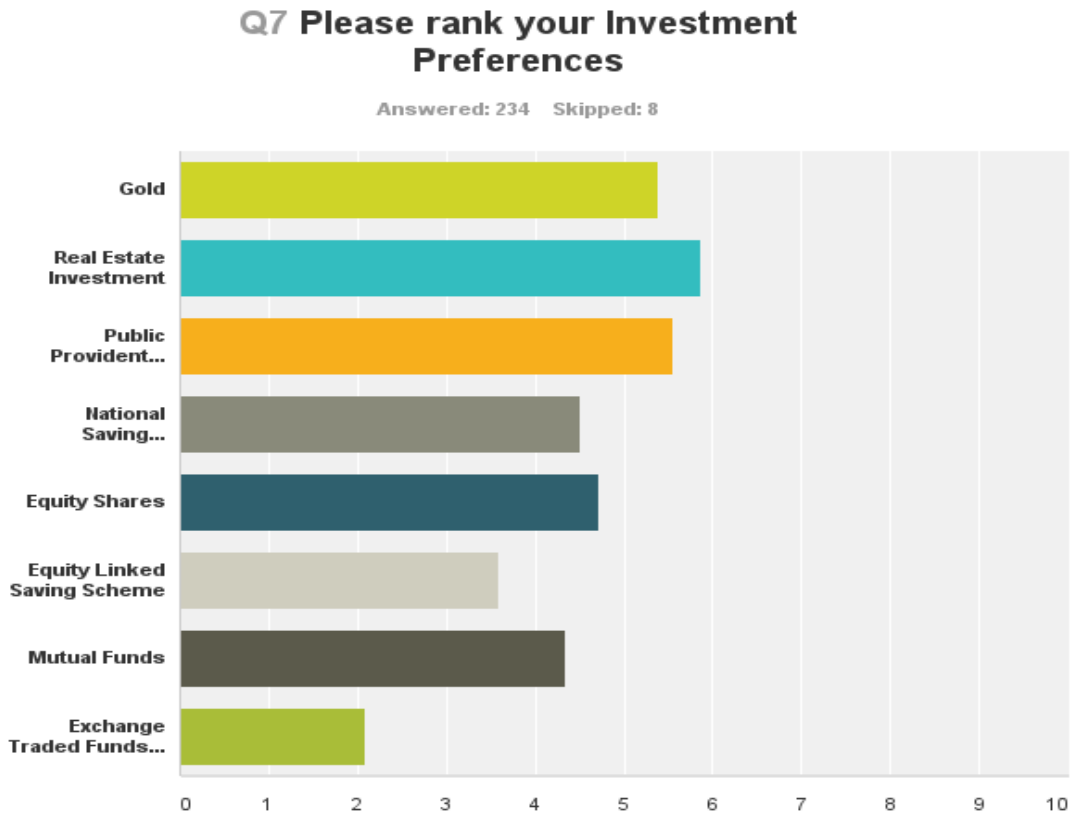
TABLE 9: INVESTMENT PREFERENCES OF SURVEY RESPONDENTS

Investment Type	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Rank 6	Rank 7	Rank 8	Score
Gold	17.52	21.37	16.67	9.83	12.82	9.83	5.98	5.38	5.38
Real Estate	33.33	17.95	13.25	9.40	7.69	5.98	5.98	5.86	5.86
PPF/ EPF	19.23	18.38	20.51	14.10	9.83	8.12	5.56	5.55	5.55
NSC/Govt Bonds	4.31	10.34	17.24	23.71	14.66	12.07	8.62	4.50	4.50
Equity Shares	11.97	10.68	9.40	15.81	26.07	13.25	8.12	4.71	4.71
ELSS	1.71	7.26	6.41	11.97	11.97	32.91	23.08	3.60	3.60
MF	11.11	11.11	13.25	11.54	11.11	8.97	26.92	4.35	4.35
ETF's	0.85	2.99	3.42	3.85	5.98	8.97	15.81	2.08	2.08

TABLE 10: RANKING OF INVESTMENT PREFERENCES OF SURVEY RESPONDENTS

Investment Format	Rank in Order of Investment Preference
Real Estate	1
PPF/ EPF	2
Gold	3
Equity Shares	4
NSC/Government Bonds	5
MF	6
ELSS	7
ETF's	8

FIGURE 2: INVESTMENT PREFERENCES OF SURVEY RESPONDENTS



VII. 52.3% respondents conveyed that they are not aware that they can invest in overseas securities through Mutual Funds investing abroad. 44.7% conveyed that they were aware but have never invested in any such Mutual Fund investment scheme. Only 3% respondents confirmed their investment on Overseas Mutual fund investment schemes.

Following are the Details of the survey:

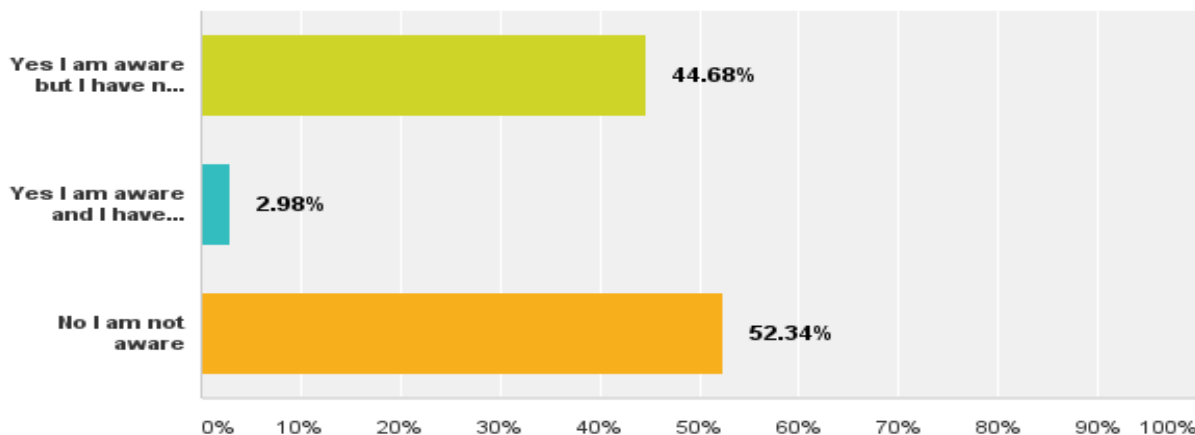
TABLE 12: AWARENESS REGARDING INDIAN MUTUAL FUNDS INVESTING ABROAD

Are you aware that as an individual investor you can invest in Overseas Securities through Indian Mutual Funds that Invest Abroad? Have you invested in Overseas Securities through Indian Mutual Fund?		
Answer Options	Response Percent	Response Count
Yes I am aware but I have not invested in Overseas Securities through Indian Mutual Fund	44.7%	105
Yes I am aware and I have invested in Overseas Securities through Indian Mutual Fund	3.0%	7
No I am not aware	52.3%	123
<b>answered question</b>		<b>235</b>
<b>skipped question</b>		<b>7</b>

FIGURE 3

**Q8 Are you aware that as an individual investor you can invest in Overseas Securities through Indian Mutual Funds that Invest Abroad? Have you invested in Overseas Securities through Indian Mutual Fund?**

Answered: 235 Skipped: 7



VIII. Only 8.1% were aware of the overseas investment limit for individuals investing abroad. Maximum respondents admitted that they were not aware of the investment limit or selected wrong investment limit.

Following are the Details of the survey:

TABLE 13: AWARENESS REGARDING RETAIL INVESTMENT FOR INVESTING ABROAD

What is the individual investment limit prescribed in India for overseas investment made in a financial year?		
Answer Options	Response Percent	Response Count
\$100,000	5.5%	13
\$150,000	1.7%	4
\$200,000	3.8%	9
\$250,000	8.1%	19
Not aware about the Overseas Investment Limit for Individual Investors	80.9%	191
<b>answered question</b>		<b>236</b>
<b>skipped question</b>		<b>6</b>

**Observations**

Maximum respondents preferred investing in Real Estate followed by investment in PPF/EPF, Gold, Equity Shares, National Saving Certificates, Mutual Funds and Exchange Traded Fund in that order.

Awareness regarding Indian Mutual Fund Schemes investing Overseas is low. Only 44% of the financially literate respondents claimed that they were aware of such scheme.

Low awareness regarding Retail opportunities to invest overseas was further proved as only 8.1% of the respondents were aware about the legally permitted investment limit of \$250,000 per annum for the retail investors for the purpose of overseas investment.

From further analysis of data, it emerged that there is no significant difference in investment preference of male and female respondents

Analysis also highlighted that young investors (Age 20-29) were relatively aggrieve investors and preferred investing more in Equity Shares, Mutual Fund, ETF instead of preferring to invest in Gold, PPF etc.

**9. CONCLUSION**

The Mutual Fund Industry in India celebrated its Golden Jubilee in the year 2014 but it can be stated that the mutual fund schemes investing abroad are still in nascent stage.

Even though the savings rate in India is high as a percentage of Gross Domestic Product (GDP) the concept of savings in financial instruments is still developing in India. One of the major reasons for same appears to be low financial literacy. Overseas investments require more literacy about the financial risks across global instruments. Investments in overseas securities through Mutual Fund Schemes, if done carefully can help investors to spread their risks across markets.

More efforts need to be made by Mutual fund companies to enhance awareness regarding Indian Mutual Funds investing in overseas securities. Overseas mutual funds schemes essentially spread the risks across the portfolio of the securities. Investments overseas, if done carefully helps investors to spread their risks across the globe.

In the era of globalisation, the opportunity to invest in overseas instruments needs to be fully and effectively utilized by the Indian Mutual Funds for the benefit of the investors. The outcome of this research may help the Government, Regulator and Asset Management Companies to make appropriate policy change and may help the investors to make more informed decisions.

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## FINANCIAL INCLUSION - OPPORTUNITIES AND CHALLENGES

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## ABSTRACT

*Financial inclusion is an important indicator of how evenly the resources in the economy are allocated and distributed across different sections of the society. The Reserve Bank of India has increased its focus on financial inclusion as policy perspectives over the period so as to bring equitable distribution of wealth and also for bringing inclusive growth. Therefore, over the period banks and financial institutions are expanding its coverage of providing services to the so far unbanked villages and marginalized sections of the society. Even steps are taken up to promote financial inclusion, the progress lags behind its requirements in terms of accessibility, literacy, credit, etc. To say, when we look at the ratio of credit to Gross Domestic Product (GDP), it is around 70 percent of GDP, but in actual scenario there is a wide disparity at regional and district level in terms of access to and use of financial services across the country. It is pertinent to measure the extent of financial inclusion at the ground level and what are the underlying factors that brought a gap and disparity in the access to and use of finance. The present study an attempt to evaluate the progress of financial inclusion plan undertaken as economic policy by the government authorities so as to bring equal financial opportunities to different social group. An analysis of region-wise credit-deposit ratio of the banks is also examined to discover the state of financial inclusion. Wide regional disparities are found in terms of penetration ratio. States and regions with the highest credit-deposit ratio have a penetration ratio of just in par with the state with lowest credit-deposit ratio.*

## KEYWORDS

financial inclusion, credit- deposit ratio, penetration ratio.

## I. INTRODUCTION

The concept of financial inclusion has become one of the most important aspects for inclusive growth and sustainable development. It is recognized as an important instrument for reducing poverty and bringing equitable distribution of nation's wealth. In the recent years, the government and regulatory authorities have expanded the financial inclusion plan as policy perspectives and comprehensive measures were being taken up to improve access to and use of financial services. The banking sector plays a very significant role in promoting financial inclusion. Financial inclusion and the consequent increased penetration of banks to the hitherto unbanked segments, therefore, have strong linkages to economic growth. Financial inclusion, in its formal way starts with having a bank account. But having an account can get its full benefits only when with regular use and access to different forms of services. For example, digitizing payments in the form of payments of wages and government transfers (poverty alleviation programme, youth unemployment schemes, subsidies to farmers, etc.) in monetary form into bank account will increase access to finance among the adults. Moreover, having an account has other benefits like paying utility bills, school fees in an easier way, which is also affordable and more secure.

To put in a nutshell, the concept of financial inclusion refers to the delivery of financial services to all sections including the poor and marginalized group of the society at an affordable price so that easy access and use of finance to all. The Committee on Financial Inclusion headed by **Rangarajan (2008)**, defined financial inclusion as: "The process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low income groups at an affordable cost." In other words, the concept of financial inclusion implies delivery of financial services cost effectively to all sections of society covering all income groups, geographical areas and economic activities.

Financial inclusion not only implies the access to finance, a mere having a bank account does not complete the picture of financial inclusion. But the meaning is to increase use of financial services so as to receive the benefits associated with financial services and to protect them against any economic shocks. Many people, particularly the economically backward and marginalized sections of the society in developing countries are lack in access to formal financial services. Some of the reasons to mention are that these formal financial services charge very high, and hence discourage them in access to such services or there are other limitations like terms and conditions requiring more paperwork, poor legal framework, lack of other infrastructures, geographical factors, market failures, etc. (**Demirguc-Kunt et al., 2015**). Most of these barriers can be swept over through better governance and regulatory framework to protect the interest of the excluded sections of the society. Policy dictates of financial inclusion is the responsibility of the state whereas to crystallize the plans into reality is the responsibility of the financial institutions or banks. However, it is important to build capacity of the institution to implement such a mass based scheme of financial services delivery.

The present study is an attempt to evaluate the progress of financial inclusion plan undertaken as economic policy by the government authorities over the period. The study is based on performance evaluation of financial inclusion surveys carried out at national and international levels, namely CRISIL survey on financial inclusion at the national level covering districts in each state and the World Bank survey on financial inclusion across the globe. Further the credit-deposit ratio is taken as an important indicator of the distribution of financial resources in the economy. Credit-deposit ratio by region, by population and at state level is analyzed in the current study to find out the extent of financial inclusion. These data are based on the Reserve Bank of India reports and publications for the respective periods.

## II. TWO EXCLUSIVE SURVEYS - FINANCIAL INCLUSION

In this section we discuss the achievements and progress of two exclusive financial inclusion surveys undertaken – Global Findex database conducted at the global level by the World Bank group and the CRISIL Inklusix surveyed at grassroots level of India by CRISIL. The Global Findex database was first launched in the financial year 2011 and is a comprehensive database to measure financial inclusion for adults across the world. The first version of the Global Findex database surveyed financial inclusion in terms of having a bank account which can be utilized for storing money and also to receive payments and government transfers. It provides data and information on how adults across the globe save money, borrow money, making payments and also manage their credit risk for 148 economies which

provided more than 60 indicators. In its second survey to financial inclusion updates all the status of the indicators of 2011 whilst adding more information and data on other informal financial services like mobile money and payments, and the number of indicators has increased to more than 100 covering 143 economies across the globe, carried out for the financial year 2014. All the indicators are framed by way of survey method and interviews through nationally representative authorities where adults with the age group of 15 and above (about 150,000) people are randomly enquired in 143 countries during the financial year 2014. As per the 2014 database, great progress in most of the indicators of financial inclusion database is found, particularly in developing and least developed countries. The number of adults having a formal bank account or in another form of financial institutions or with a mobile money provider has increased from 51 percent in 2011 to 62 percent in 2014. In other words, between 2011 and 2014 additional 700 million adults became account holders, dropping the number adults without an account by 20 percent. Despite the increase in number of accounts, the extent of account ownership varies widely across the globe. For example, in high-income OECD countries, 94 percent of adults have an account in 2014 whereas in developing nations, it is only 54 percent, and among the developing regions. And within the developing regions also there is a wide disparity in account penetration which ranges from an extreme of 14 percent in Middle East to 69 percent in East Asia and Pacific. Another variation of account ownership is gender gap which is not narrowing. In 2011, 47 percent of women have account while men have 54 percent. The percentage of women having an account has improved to 58 percent in 2014 but the proportion of men 65 percent is still higher. The gender gap in account penetration is 7 percentage points at global level and 9 percentage points in developing economies.

The Global Findex database 2014 reports that 56 percent of adults saved money or keep aside money in the past twelve months. In high-income OECD economies and East Asia and the Pacific regions, 71 percent saved money, followed by Sub-Saharan Africa 60 percent and 30 to 40 percent in other regions. The survey also asks three particular reasons for saving – savings for old age, for education expenses and to start or expand a business. At the global level, almost 25 percent of the adults saved in the past twelve months for old age, again 25 percent for education expenditures, and 14 percent for business purposes. Another perspective of the 2014 Global Findex database is information on reasons for borrowing of money which comprises of borrowing for health or medical purposes; for education or school related expenditures; or to begin or expand a business. In developing countries 14 percent have borrowed money for health or medical purposes, where 8 percent borrowed for education expenses and again 8 percent to start a business or expand an existing one. However, in high income OECD countries only 5 percent or fewer adults have borrowed money for all the three purposes.

The Global Findex database also inquires information in the area of financial resilience, which is useful for financial regulation and stability. The survey collects information on how people across the globe can come up during any types of emergency fund requirements or any economic shocks to manage credit risks. It is reported that 76 percent of adults across the globe would be able to come up with the saved amount to manage any types of emergency funds, while 22 percent describes that it would not be possible at all to protect any types of economic shocks or emergency needs. However, in developing countries 28 percent of adults are able to come up in through savings as the main source of funds. The relative low percentage of savings habit to formal financial institutions in developing economies indicates policy initiatives by regulatory authorities for formal saving products in order to protect and safeguard during emergency fund requirements. Financial inclusion does not imply not only having a formal account in a bank or any financial institutions, but equally important is whether people use it in the form of deposit, withdrawal and transferring of funds. Across the globe, 15 percent of adults (460 million people) with an account do not make deposits or withdrawal in the past 12 months and hence is considered as a dormant account. A dormant account means having no cash deposits or withdrawals or no electronic fund transfers in the form of deposits or purchases/ paying utility bills/paying school fees, etc. in the past 12 months. The data reports that dormancy rate is high in South Asia of 42 percent and the average percentage of dormancy is less than 20 percent in across all other developing regions. As against these, the dormancy rate in high-income OECD countries is only 5 percent. India is having a high dormancy rate of 43 percent, which accounted 195 million adults out of the total 460 million adults with a dormant account across the globe. This high dormancy rates in India reveals that a large number of bank accounts is newly opened while the account remain dysfunction in the form of deposits, withdrawal, transfer of wages/funds, paying bills/fees for the past 12 months. The high dormancy rate of India may be associated with the recently introduced PMJDY scheme where a large number of accounts were being opened to increase the access and use of financial services which covered various socio-economic groups at different geographical areas. This indicates that India has two-thirds of South Asia's unbanked adults and one-fifth at the global scenario. Not only that, the account penetration in India is very low, only 53 percent and of these only about 15 percent of adults use an account to transfer or make payments. The financial inclusion database of India based on the global findex database is reported in Table 1.

As from the report there is an improvement in number of accounts by adults between 2011 and 2014 in India as account penetration increased in India from 35 percent to 53 percent. To say, 175 million adults in India became account holders accounting for one-quarter the 700 million new account holders globally. This growth in the number of additional accounts of 18 percentage points is distributed among different individual groups and detailed data is reported in the table. The use of accounts as a way of payments is low in India, as only 15 percent of adults use an account to make payments or receive any form of funds.

TABLE 1: FINANCIAL INCLUSION DATA OF INDIA BASED ON GLOBAL FINDEX DATABASE

	2011	2014
<i>(1) Account at a formal financial institution (% age +15)</i>		
All Adults	35.2	53.1
Male Adults		
Female Adults	26.5	43.1
Young adults (15-24 age)	27.3	43.2
Adults living in rural areas	33.1	50.1
<i>(2) Access to Financial Institution Account (% age +15)</i>		
Has debit card	8.4	22.1
ATM is the main mode of withdrawal (% with an account)	18.4	22.1
<i>(3) Use of Formal Accounts</i>		
Use of account to receive wages	8.3	4.0
Use of account to receive government transfers	4.0	3.6
Use a financial institution to pay utility bills	-	3.4
<i>(4) Savings in the past year (% age +15)</i>		
Saved at a financial institution	11.6	14.4
Saved using a savings club in the past year	3.2	8.8
<i>(5) Credit (% age +15)</i>		
Borrowed from formal financial institution	7.7	6.4
Borrowed from friends and outside the family	19.7	32.3
Borrowed from private informal lender	6.6	12.6

Source: Global Findex Database, The World Bank

In the Indian context, an extensive survey on financial inclusion was carried out by CRISIL. It introduces CRISIL Inclusix, which measures the extent of financial inclusive comprehensively in the form of an index scaling from 0 (zero) to 100 (one hundred). The index is evaluated by combining three important determinants of financial inclusion - branch penetration (BP), deposit penetration (DP) and credit penetration (CP) into a single standard measurement. CRISIL Inclusix scores is classified into four different categories – high, above average, below average and low. The survey is conducted at national level, regional level, state level and district level covering 652 districts in 35 states and union territories as against the Global Findex database in which survey data of India does not include the north-eastern states.

Table 2 reports the financial inclusion index measured in terms of three aspects of financial inclusion – branches, deposits and credit penetration across the regions. A comparative data of the inclusix index shows betterment in overall financial inclusion from 2009 index at regional and all India average level. The inclusix score for all India has above the average score of 50.1 in 2013. The southern regions score 76, much higher than the national average. The other regions score lower than the all India average score with the north-eastern region having the least score of 39.7. Looking at the individual states/ union territories, Puducherry (89.4) score the highest inclusix score, followed by Kerala (88.9), Tamil Nadu (79.2), Goa (76.1) and Karnataka (74.4) as per 2013 Inclusix data. From the index it is visible that most of the southern regions fall in the top five scoring index of financial inclusion. Manipur (21.6) stood at the bottom, followed by Nagaland (28.9) and Bihar (30.2) in the other extremes.

**TABLE 2: FINANCIAL INCLUSION SCORES BY THREE DIMENSIONS AT REGIONAL LEVEL**

Region	Branch Penetration		Credit Penetration		Deposit Penetration		Inclusix Score	
	2009	2013	2009	2013	2009	2013	2009	2013
Southern Region	49.6	69.7	68.8	88.7	55.1	83.1	54.9	76.0
Western Region	39.4	54.1	26.9	37.3	40.4	60.5	33.9	48.2
Northern Region	36.9	49.0	26.2	32.8	40.7	59.1	33.3	44.0
Eastern Region	27.4	43.1	20.1	35.1	26.5	44.8	24.3	40.2
North-eastern Region	27.7	41.2	17.9	35.8	27.7	45.9	23.8	39.7
India	37.3	52.4	33.5	45.7	39.7	60.3	35.4	50.1

Source: CRISIL Inclusix - June 2013 and June 2015

For each of the three parameters, highest concentration of index is found in the southern region. The branch penetration of average all India improved from below average score of 37.3 in 2009 to the above average score of 52.4 in 2013. The southern region has the highest branch penetration score of 69.7 as in 2013, and the least being in north-eastern region of 41.2. One of the major factors that lead to low branch penetration in north-eastern states is that these regions have poor infrastructural facilities and hence limited in expansion new bank branches. The credit penetration score at the all India average 45.7 in 2013. In the similar pattern the southern region has the highest score in terms of credit penetration too and the least in north-eastern regions. From the survey it is observed that credit penetration is highest in the southern region and large cities. One positive changes of north-eastern region is in credit absorption as the credit penetration score is almost double from 17.9 in 2009 to 35.8 in 2013. Regarding the deposit penetration index, the average all India score which was 39.7 in 2009 improved to 60.3 in 2013. The southern region has the highest deposit penetration score of 83.1 in 2013, and the least score of 44.8 in the eastern region.

South continues to lead with considerably higher score than the all India inclusix score. Southern region is ahead in overall index not because of highest score in only one or two index rather it leads in all three dimensions of financial inclusion. There remains a wide gap between the southern region and the other regions in the distribution of financial inclusion. While western region hovers near the all India score. Although the other regions are far behind the southern region in terms of inclusix score, the extent of financial inclusion in the north-eastern regions is critical and least in access to and use of basic financial services.

From both the surveys it is observed that the financial inclusion plan has extended its geographical coverage as well as qualitative information of different socio-economic group of the society over the period. In India, the extent of financial inclusion programme is expanding and awareness of benefits of having a bank account and its use has gradually increased among as revealed by the information supplied by these two extensive surveys. Since financial literacy and financial education programme is a long-term programme, it will require time to realize benefits and advantages associated with the access to use of finance by different sections of society.

### III. FINANCIAL INCLUSION PLAN

Over the period the Reserve Bank of India is taking up various steps to expand the coverage of access to and use of financial services to a large portion of households, particularly in rural areas that remain excluded from the formal banking system. The percentage of rural population that do not have formal bank account and lack of access to financial services is about 40 percent, which increases to more than three-fifths in eastern and north-eastern regions of the country. The RBI has been initiating in its endeavor towards universal financial inclusion over the last few years as the role of financial inclusion is significant for inclusive growth and sustainable development. Reserve Bank of India has over the period taken up several policy initiatives to bring forward the hitherto neglected population from the formal banking system so as to increase access to and use of financial services. Since nationalization of banks, priority sector lending, target of rural branches expansion of 40 percent and within that 18 percent for agriculture, lay down of regional rural banks (RRBs) and its role in the rural sector, lead bank scheme, self-help group and bank linkage programme, role of microfinance, etc. are major initiatives undertaken by the Reserve Bank of India over the period in order to allocate and distribute resources to empower and make financially strong for all weaker sections of society. To sum up, the basic objective of financial inclusion plan is to expand the scope and coverage of services of formal financial system to include all sections of disadvantaged and low income groups particularly in rural areas. It means delivery of basic banking services and availability of credit to weaker sections of the society at an affordable price so as to benefit and protect from any sort of economic shocks or emergency needs of funds. All these financial services are in the form of saving money, access to credit, insurance against the owned assets, government transfers or subsidies in formal account and other form of transactions. There is a strong relationship between the extent of financial inclusion, poverty and income inequality as better financial resources can minimize the extent of poverty and income inequality. The role of policy authorities, regulators is crucial in initiating plans and programmes so that it can expand the coverage of financial services from a formal banking system to the hitherto excluded masses.

As a part of financial inclusion plan, recently the Government of India launched Pradhan Mantri Jan Dhan Yojana (PMJDY) on August 28, 2014, for expanding formal financial services to the hitherto excluded population. The major features of the scheme include the following: (i) the facility to open a basic saving bank deposit (BSBD) account in any bank branch or BC outlet; (ii) accidental insurance cover (Rs. 0.1 million) and life insurance cover (Rs. 30,000); and (iii) an overdraft (OD) facility after satisfactory operation of the account for six months. With the addition of 4 million small farm sector credits (kisan credit cards-KCCs) and 2 million small non-farms sector credits (general credit cards-GCCs), the total number of such accounts increased to nearly 47 million and 11 million respectively.

Table 3 gives a picture of the financial inclusion plan adopted by the Commercial Banks in India with a view to increase the use and accessibility to finance for the unbanked and poor people that remained excluded from the formal financial system. The coverage of banking outlets in villages has multiplied by more than eight times in 2015 March as against 67694 in 2010. Rural bank branches opened to the extent of 2259 during 2015-16. Moreover, the issue of kisan credit cards from 24 million in 2010 to 47 million in 2016 and from 1 million for general credit cards in 2010 to 11 million in 2016.



TABLE 3: PROGRESS OF FINANCIAL INCLUSION PLANS, FOR ALL SCHEDULED COMMERCIAL BANKS INCLUDING REGIONAL RURAL BANKS

Variables	Mar-10	Mar-15	Mar-16	Progress April 2015-Mar 2016
Banking Outlets in Villages – Branches	33,378	49,571	51,830	2259
Banking Outlets in Villages – Branchless mode	34,316	504,142	534,447	30305
Banking Outlets in Villages – Total	67,694	553,713	586,307	32594
Urban Locations covered through BCs	447	96,847	102,552	5705
Basic Savings Bank Deposit Account (BSBDA) through branches (No. in millions)	60.2	210	238	28
Basic Savings Bank Deposit Account (BSBDA) through branches (Amount in Rs. billion)	44.3	365	474	109
Basic Savings Bank Deposit Account (BSBDA) through BCs (No. in millions)	13.3	188	231	43
Basic Savings Bank Deposit Account (BSBDA) through BCs (Amount in Rs. billion)	10.7	75	164	89
BSBDA Total (in millions)	73.5	398	469	71
BSBDA Total (Amount in Rs. billion)	55	440	638	198
OD facility availed in Basic Savings Bank Deposit Account (No. in millions)	0.2	8	9	1
OD facility availed in Basic Savings Bank Deposit Account (Amount in Rs. billion)	0.1	20	29	9
KCCs Total (No. in millions)	24.3	43	47	4
KCCs Total (Amount in Rs. billion)	1,240.1	4,382	5,131	749
GCC Total (No. in millions)	1.4	9	11	2
GCC Total (Amount in Rs. billion)	35.1	1,302	1,493	191
ICT A/Cs-BC Total Transactions (No. in millions)	26.5	477.0	826.8	349.8
ICT A/Cs-BC Total Transactions (Amount in Rs. billion)	6.9	859.8	1,686.9	827.1

Source: Annual Report 2015-16, Reserve Bank of India

#### IV. CREDIT ALLOCATION AND DISTRIBUTION

The credit-deposit ratio of commercial banks is a significant indicator of the functioning of its services. It is a measure of utilization of resources by the banking system. A rise in the credit-deposit ratio reflects the higher utilization of the resources of banks. In other words, higher credit-deposit ratio also indicates that the rise in credit was sharper than the deposit expansion. Credit-deposit ratio is a significant indicator of how the funds are efficiently allocated and distributed by banks across different sections of the society. Table 4 depicts a clear picture of credit-deposit ratio of scheduled commercial banks for the period after financial sector reforms, 1994-95, 2000-01, 2005-06, 2010-11 and for the latest data available of 2014-15. During the period 1994-95, the mean credit-deposit ratio at the all India level is 55.6 percent. Looking at the regional levels, it is only the western region and southern region that have a credit-deposit ratio above the national average ratio of 63.2 percent and 69.4 percent respectively. For the other regions, the credit-deposit ratios were below the national average, with the north-eastern region being the least. At the individual state level, six out of the thirty-two states and union territories scored above the national average. This shows under-utilization of banking resources or lack of lending activities in majority of the states in India during 1994-95. The credit-deposit ratio remains more or less same in 2000-01 with a per cent of 56.7. Consequently, during the period 2005-06, the credit-deposit ratio increased to 72.4 cent at the national average. Not so much changes are visible in the distribution of the ratio at state and regional levels. For the period 2010-11 and 2014-15, there is an upward trend in the ratio 75.6 per cent in 2010-11 and 77.1 per cent in 2014-15. At the individual state level, there are significant improvement in the credit-deposit ratio during these periods except for north-eastern regions and some states in eastern region.

TABLE 4: REGION/STATE-WISE CREDIT-DEPOSIT RATIO (SANCTIONED) OF SCHEDULED COMMERCIAL BANKS

Region/State-wise	1994-95	2000-01	2005-06	2010-11	2014-15
<b>Northern Region</b>	<b>48.6</b>	<b>54.7</b>	<b>64.6</b>	<b>82.5</b>	<b>88.5</b>
Haryana	45.5	41.0	57.4	71.7	75.8
Himachal Pradesh	26.0	21.3	41.0	41.6	35.3
Jammu & Kashmir	28.6	34.5	47.2	38.1	42.2
Punjab	41.4	41.1	56.8	77.8	75.1
Rajasthan	47.7	46.6	77.3	90.4	86.2
Chandigarh	89.9	99.4	76.8	121.6	105.9
Delhi	52.8	66.1	67.4	86.8	102.6
<b>North-Eastern Region</b>	<b>35.6</b>	<b>27.6</b>	<b>40.7</b>	<b>33.8</b>	<b>34.5</b>
Arunachal Pradesh	12.4	14.5	26.5	23.7	26.8
Assam	38.7	32.1	42.6	36.5	36.7
Manipur	58.2	40.1	50.1	34.8	34.0
Meghalaya	17.0	17.1	48.1	24.4	25.9
Mizoram	16.5	24.1	51.2	46.0	37.8
Nagaland	37.8	12.4	22.3	26.1	32.8
Tripura	47.5	21.7	32.8	32.2	33.7
<b>Eastern Region</b>	<b>47.1</b>	<b>36.7</b>	<b>49.2</b>	<b>51.4</b>	<b>45.6</b>
Bihar	32.5	20.7	30.3	29.5	33.6
Jharkhand	--	28.0	31.2	34.4	29.6
Odisha	54.5	40.2	66.0	52.5	41.9
Sikkim	24.0	14.4	45.3	37.9	25.6
West Bengal	53.9	44.5	56.3	63.7	57.8
Andaman & Nicobar Islands	17.0	16.3	29.0	38.1	40.1
<b>Central Region</b>	<b>39.0</b>	<b>32.7</b>	<b>44.2</b>	<b>46.7</b>	<b>48.3</b>
Chhattisgarh	--	38.5	45.5	52.3	61.6
Madhya Pradesh	49.6	47.6	60.5	55.6	54.8
Uttar Pradesh	35.1	28.3	41.0	44.0	45.4
Uttarakhand	--	21.7	25.8	35.4	34.5
<b>Western Region</b>	<b>63.2</b>	<b>75.5</b>	<b>92.0</b>	<b>79.5</b>	<b>87.1</b>
Goa	24.7	26.1	23.2	29.1	26.7
Gujarat	46.6	48.5	55.6	66.2	72.7
Maharashtra	69.5	86.4	102.2	83.0	92.0
Dadra & Nagar Haveli	16.3	14.3	49.3	34.8	35.3
Daman & Diu	16.7	13.3	11.4	21.3	24.3
<b>Southern Region</b>	<b>69.4</b>	<b>66.6</b>	<b>84.4</b>	<b>94.5</b>	<b>89.9</b>
Andhra Pradesh	73.0	64.5	81.3	109.7	105.3
Karnataka	65.8	61.0	75.9	72.7	67.7
Kerala	44.8	43.3	61.4	73.1	64.6
Tamil Nadu	86.6	90.6	110.5	115.1	119.0
Lakshadweep	7.7	10.4	11.5	8.7	9.1
Puducherry	43.3	33.5	45.0	62.7	71.5
Telangana	-	-	-	-	101.6
<b>All India</b>	<b>55.6</b>	<b>56.7</b>	<b>72.4</b>	<b>75.6</b>	<b>77.1</b>

Source: Report on Trend and Progress of Banking in India, RBI, various issues

TABLE 5: POPULATION GROUP-WISE CREDIT-DEPOSIT RATIO OF SCHEDULED COMMERCIAL BANKS ACCORDING TO PLACE OF SANCTION

Population Group	1996-97	2000-01	2005-06	2010-11	2014-15*
Rural	44.1	39.0	55.8	60.0	60.0
Semi-urban	38.1	33.2	50.1	53.2	57.2
Urban	44.4	43.0	57.0	61.6	56.1
Metropolitan	76.1	80.9	87.5	88.4	92.6
All India	56.8	56.7	72.4	75.6	76.0

Source: Report on Trend and Progress of Banking in India, RBI, various issues

Note: \*Credit data for 2014-15 is based on excluding credit extended for Food procurement

Another perspective of measuring distribution of banking services is population group-wise distribution of credit-deposit ratio. In table 5 the credit-deposit ratio by different population group is given. The distribution of credit across different group of population dictates the credit absorption and capacity utilization of banking resources in different groups of population. The credit-deposit ratio is the highest in metropolitan areas for each of the sample years taken. There is an upward movement of the credit deposit ratio over the period in each population group. The credit-deposit ratio in rural areas has improved at a faster rate from 44 percent in 1996-97 to 60 percent (higher than urban and semi-urban percentages) in 2014-15. The concentration of credit is in the metropolitan areas. The credit-deposit ratio in metropolitan areas is 93 percent in 2014-15, as against the 76 percent of average all India.

## V. CONCLUSION AND RECOMMENDATIONS

Financial inclusion is one of the important requisites for growth inclusion. Apart from the other distribution policies, financial inclusion plan provides a roadmap for optimal development of financial sector and is an effective strategy to cover the gaps in delivery of financial services. In India there have been a couple of surveys identifying the scope of financial inclusion and constraints underlying this strategy. This paper is based on the credit-deposit ratio by states and population groups in order to find out the attainment in financial inclusion in the latest year. Credit-deposit ratio indicates the utilization of financial resources and also capacity absorption potential in a region. The industrially advanced states in western and southern regions indicate the high credit-deposit ratio as against the national average. The states with low per capita state domestic product reported very low credit-deposit ratio, suggesting the constraints in credit absorption in the area. By population group, the credit-deposit ratio is the highest in metropolitan followed by urban areas that is consistent with the established theory of economic development. That is, the high concentration of commercial and industrial activities in metropolitan and urban areas explained this trend of credit-

deposit ratio. Semi-urban and rural areas showed the low credit-deposit ratios because of poor infrastructure. However, these areas indicate an improvement in credit-deposit ratio in recent years that is a good sign for financial inclusion plan. But there are challenges in execution of this financial inclusion plan because of the several constraints such as lack of financial infrastructure, inaccessible geographical areas, poor availability of bankable economic activities, financial illiteracy, technology gap between urban and rural and shortage of skills. In order to crystallize the financial inclusion, plan these constraints has to be minimized if not possible to eliminate entirely. The task is difficult but not impossible. The scope of financial inclusion plan is bright but challenges are too many to deal with.

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#### ABSTRACT

*Over the last few years there was awareness created by the Indian government in using Light Emitting Diode (LED) lamps and solar cookers and heaters. Majority of consumers were aware that there are definite advantages of using power saving electrical products. However, these consumers are reluctant to use LED lamps and solar heaters and cookers due to higher prices. Indian government had given a boost to consumption of LED lamps by distributing these LED lamps very nominal prices. The major advantage of these electrical products is that they save power and power shortage will be curtailed. The major challenge for power saving manufacturers' is in reducing the prices down and making them available at present prices of conventional electrical products. Make in India campaign can boost the foreign direct investment and also create employment to Indian work force. The cost of power savings electrical products can substantially come down due to economics of scale and there are big opportunities in boosting the consumption of power saving devices. There will also opportunity for power saving devices manufacturers' in boosting exports. In order to understand whether consumers will shift to electrical products after make in India takes off in full swing, a market survey was carried out in Pune city. The survey results indicate that majority consumers are willing to shift to power savings electrical if they are available at even about 10% higher prices than other present non power saving products subject to conditions that these products are tested for quality.*

#### KEYWORDS

make in India, light emitting diodes (LED) lamps, solar cookers and heaters.

#### INTRODUCTION

In 2014, was launched by the Mr. Narendra Modi, Prime Minister of India. There are challenges and opportunities for foreign players in setting up manufacturing units in India. If the Indian government and state government allow a free and competitive environment, foreign players will be attracted to start their operations due to availability of lower cost manpower and economics of scale. The renewable power saving devices will make life of consumers comfortable. "Make in India" campaign can boost foreign direct investment and also create employment to the Indian work force. The cost of these renewable energy products will substantially come down due economics of scale and boost in consumption. It will also boost exports. In order to understand whether consumers will shift to power saving products after "Make in India" takes off in full swing, a market survey was carried out in Pune city and the results are highlighted.

#### LITERATURE REVIEW

1. Indian Prime Minister, Mr. Narendra Modi attempted to Make India a manufacturing power by declaring "Make in India campaign open to foreign investors. However, there are challenges such as 1. India lacks funds in building factories. Banks are unable to give loan due to non-performing assets going up and banks have failed to recover. 2. With automation used by many new ventures, there will requirement of a few skilled work forces and this will lead to strong labor unrest. 3. You cannot forget the unions. They will resolve to strikes. 4. Report from Ernst& Young said in 2012, India lags far behind other nations in imparting skills training to its workers 5. The research and development spending is very less (Madhavan H, Times Feb 2016)
2. We need to admit that India, form technology point of view is lagging the western world as far as manufacturing is concerned. Experts say that we are still a decade behind advanced countries when it comes to usage of technology and modern manufacturing techniques. Usage of low cost technology often poses problems in terms of product quality, reliability, consistency and performance (Raj, A 2016 [www.makeinindia.com](http://www.makeinindia.com))
3. Renewable sources like wind, solar photovoltaic, solar thermal and bio-energy sources like municipal solid and liquid waste, industrial waste, bagasse and tapioca (bio-methanation) and small hydro plants have potential to develop in future. The clean energy technology action plan for Maharashtra, prepared by Pune- based World Institute of Sustainable Energy (Wise), has estimated that Maharashtra State has a potential to generate 57,000 MW to 2, 13,000 MW of renewable energy. Wise recommended that Maharashtra make optimum use of its land and water resources to achieve low carbon and sustainable energy for future development.<sup>3</sup>

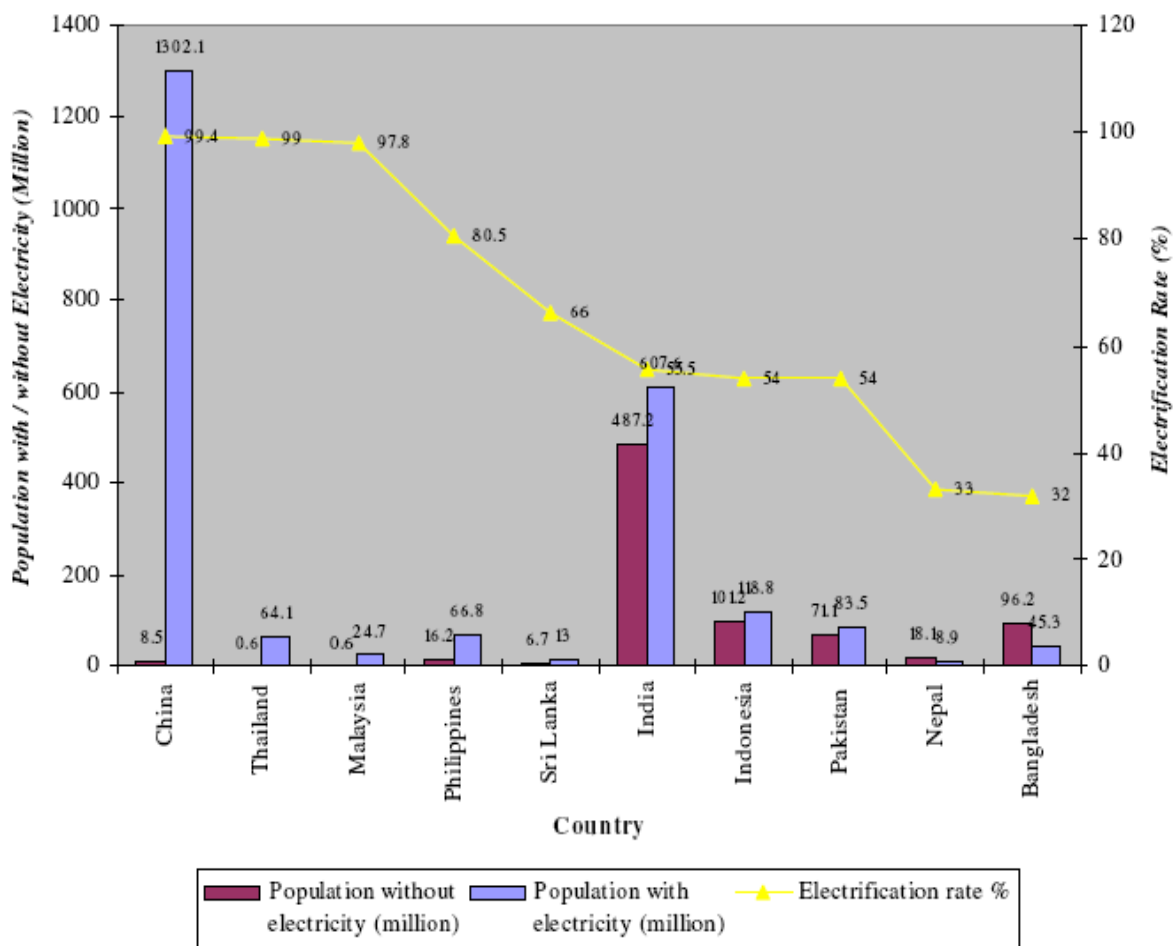
#### CHALLENGES FACED IN PROMOTING POWER SAVING DEVICES WITH REGARD TO FOREIGN PLAYERS IN MAKE IN INDIA ARE AS FOLLOWS

1. **Ease of doing business:** A number of permissions are required for starting a new business; this causes unnecessary delay. It also requires permission from central, state and local authorities. Due to corruption at different stages, files do not move and finally projects are either delayed or become economically unviable due to the delay. With the present Government, there is strong focus on reducing the tumbling blocks and want to overcome red tape. With the new systems with emphasis on online transactions the top level corruption has reduced. However, the lower level corruption is a major concern and the present government wants to reduce this aspect by going digital. The Indian government is already working with all states and is getting favorable response.
2. **Land acquisition bill:** Due to opposition from other parties, the central government had to postpone the land bill. There will be a loss in interest in FDI if land is not available for setting up manufacturing units.
3. **GST Bill: It is passed** but implantation problems GST need to be resolved as quickly as possible. According to industrialist Adi Godrej, GST will boost the Gross Domestic Product (GDP) by about one percent and goods and services will become cheaper. Overall it is a win-win situation for all players and it will pick up the demand subject to implementing it as quickly as possible. The targeted date of April 2017 must be met for smooth implementation of GST.
4. **Higher interest rates:** Rate cut of 125 basis points was announced by the RBI in the past one year. However, consumer demand has not picked up as banks did not passed on this rate cut fully. Even if banks pass on this cut the present bank rates are much higher than the developed economy. The new RBI Governor D. Urjit Patel has to review this matter and ensure that bank lending rates are reduced.
5. **New concept:** LED lamps and solar panels is a relatively new concept. Any use of products and services with a new concept takes a lot of time in consumer acceptance. The prices of these are very high compared to present bulbs and other products. The consumer's do not foresee long run benefits and reluctant to shift to renewable energy products. All the stakeholders like power saving devices companies and the state/central government need to be spent in educating consumers about their uses and benefits.
6. **Patience and perseverance:** The consumers are unable to see immediate benefits by using power saving devices as the benefits are not immediate but it can lead to a better environment.<sup>9</sup>
7. **Rural demand In India:** About 65 to 70 percent consumers live in rural area where they do not have access to electricity.

Based on the data from World Energy Outlook, International Energy Agency, 487.2 million people in India have no access to electricity The population with access to electricity in India as in 2007 was estimated to be 55.5% which compared to the other countries such as China (99.4%), Thailand (64.1%), Philippines (66.8%) and Pakistan (83.5%), was much lower.

The following Fig. 1 shows extent of electrification and population with or without electricity.

FIG. 1: EXTENT OF ELECTRIFICATION AND POPULATION WITH OR WITHOUT ELECTRICITY



**Opportunities in promoting power saving products with regard to foreign players in Make in India are as follows:**

1. India is an attractive market among the developing economies.
2. With the 7<sup>th</sup> pay commission passed there will be higher disposable income with the central employees. The special promotion programmes to central employees can be arranged by the producers so that these consumers will shift to Led lamps and solar panels.
3. India has the advantage of demographic dividend. It is expected that by 2030 India will have about 65 percent population below 25 to 30 years. This will boost the economy as the domestic consumption will go up.
4. The domestic market is large. India being next to China in terms of population. With a population about 125 crores, it is a very large market.
5. Higher productivity and low wages
6. India has high productivity and low wage structure
7. Frequent supply interruptions and poor power quality has driven many industries to develop captive generation plant having combined capacity of about 25,000 MW

Table 1 shows electricity consumption by consumer category

**TABLE 1: ELECTRICITY CONSUMPTION BY CONSUMER CATEGORY**

Consumer Category	Consumption (Gigawatt-hours)	Percentage
Domestic	89,736	25
Commercial	28,201	8
Industrial	124,573	35
Traction	9,210	3
Agriculture	87,089	24
Others	22,128	6
Total	360,937	100

There is good opportunity to tap these consumers who are put in to hardship due to non-availability of uninterrupted power supply.

8. Power saving devices like, solar photovoltaic, solar thermal and LED lights has a huge future potential. The action plan for Maharashtra, prepared by Pune-based World Institute of Sustainable Energy (Wise), has estimated that Maharashtra State has a potential to generate 57,000 MW to 2, 13,000 MW of renewable energy. Wise has recommended that Maharashtra make optimum use of its land and water resources to achieve low carbon and sustainable energy for future development.<sup>3</sup>

**GOVERNMENT EFFORTS IN CREATING AWARENESS ON POWER SAVING DEVICES**

1. Government had distributed about 1 Crore LED Lamps at nominal prices. LED Lamps are energy efficient and save about 80 percent power. the electricity distributes company consumers will have win -win situation as these LED Lamps last about 5 times long run and can withstand better voltage fluctuations.
2. There Indian government has been active in promoting solar projects.

**STATEMENT OF THE PROBLEM**

1. Make in India is a good initiative but success of the campaign will depend on how quickly the Indian government and states government resolve issues like ease of doing business, making land available by passing land acquisition bill as early as possible and lowering of interest rates. Will the Indian government act fast?
2. The solar energy and LED lighting are expensive and consumers are reluctant to shift. Can to these products be made affordable to common consumers after Make in India campaign?

**RESEARCH GAPS**

Ongoing through we find that there is hardly any literature available on this topic. With this research paper, the research gaps can be understood.

**MANAGERIAL IMPLICATIONS**

1. If there is a delay in executing, Make in India campaign then foreigners will be compelled to move to other attractive South Asian countries like Taiwan or Malaysia. Having made initial investments in these countries it will be very difficult to make further investments in India
2. The manufacturing companies who will participate in Make India campaign a should be able produce in very large quantities to ensure that consumer make First Energy savings Products
3. In order to the consumers to go for repeat purchase the manufacturing companies who will participate in Make India campaign they should ensure that these products are quality products at affordable prices.
4. To boost exports international quality standard to be maintained.

**OBJECTIVES**

1. To study challenges and opportunities in manufacturing and marketing energy efficient power saving devices by foreign players in India.
2. To examine the "Make in India" campaign and its impact on consumption of energy efficient power saving devices in India.
3. To get suggestions from consumers to increase awareness on energy efficient power saving products.

**RESEARCH METHODOLOGY**

**Research Design:** Descriptive type.

**Scope of the study:** Respondents in Pune city.

**Duration of the study:** January – August, 2016.

**Type of Universe:** Approximately 50 Lacs.

**Sample Design:** A purposive sampling design.

**Sample Size:** 270 domestic respondents and 30 industrial consumers.

**Research Instrument:** Questionnaire.

**Method of Data Collection:** Both primary and secondary data collected.

**LIMITATIONS IN IMPLEMENTING MAKE IN INDIA CAMPAIGN**

3. Poor efforts by the government, social activists in creating awareness and customer education.
4. Distribution companies are inefficient and are unable to provide uninterrupted 24by 7 powers.
5. No special incentives are given by the government for using power saving products.
6. There is a delay in implementing land acquisition bill, due to no political opposition.

**Demographic Profile (for domestic consumers)**

Family Size 2 to 5 members. Gender 135 male and 135 female consumers Ages 18 to 70 years.

**MARKET SURVEY RESULTS**

A. Table 2 shows the consumers' response to use power saving products

**TABLE 2: CONSUMERS' RESPONSE TO USE POWER SAVING PRODUCTS**

Count of Gender	Column Labels		%	
Row Labels	Female	Male	Female	Male
Cannot Say	10	15	7.5	11.1
No	75	80	55.5	60
Yes	50	40	37	28.9
<b>Grand Total</b>	135	135	135	135

Referring to Table 2 key findings are –

1. Majority of respondents are not using power saving products.
2. The female consumer's response usage of power saving devices are higher than male consumer's response.

B. The respondents comments of domestic consumers on the following statements is shown in Table 3:

**TABLE 3: STATEMENTS TO GET CONSUMERS' RESPONSE TO THE IMPACT OF MAKE IN INDIA ON CONSUMPTION**

Statements to get consumers response to the impact of Make in India on consumption	Response		
	Yes	No	Cannot Say
<b>Make in India will boost</b>			
1. Use of energy efficient LED if costs are reduced and quality is better	240	20	10
2. Use of solar heater and solar cookers if costs are reduced and quality is better	235	35	0
3. Use of products and brands of companies which are star rated	195	55	20
4. Shifting to new premises only if they are provided with energy efficient lighting system.	200	25	45

Referring to Table 3S, key findings are

1. Use of LED lamps, solar products, will go up after Make in India due to affordability and subject to maintaining quality.
2. Use of solar heater and solar cookers will go up, if costs are reduced and quality is better
3. Use of products and brands of companies which are star rated will go up
4. When respondents were asked about shifting to new premises only if they are provided with energy efficient lighting system after Make India, they stated that they are willing do so

C. The following Table 4 shows electricity utility companies' efforts in promoting power saving devices 'for domestic consumers':

**TABLE 4: ELECTRICITY UTILITY COMPANIES' EFFORTS IN PROMOTING POWER SAVING DEVICES FOR DOMESTIC CONSUMERS'**

Electricity utility companies' efforts in promoting power saving devices	Count	Percentage
a. Adequate	44	16.3
b. Inadequate	226	83.7
Total	270	100

Findings

1. Majority (83.7%) think that electricity utility companies' efforts in promoting power saving devices are inadequate.
2. A small number of customers (16.3%) think that electricity utility companies' efforts in promoting power saving devices are adequate.

The following Table 5 shows electricity utility companies' efforts in promoting power saving devices 'for industrial consumers':

**TABLE 5: POWER UTILITY COMPANY EFFORTS IN PROMOTING POWER SAVING DEVICES FOR INDUSTRIAL CONSUMERS'**

Option	Number	Percentage
a. Adequate	0	0
b. Inadequate	30	100
Total	30	100

Data analysis and its interpretation

1. 100% customers think that efforts of MSEDCL in promoting power saving devices are not adequate enough,
2. Customers are certain that are efforts electricity distribution companies in promoting power saving devices are inadequate as evident from customers' response.

D. The following table 6 shows electricity distribution companies, NGOS and the Government efforts in consumer education on proper usage of electricity and reducing wastage for domestic consumers':

**TABLE 6: ELECTRICITY DISTRIBUTION COMPANIES, NGOS AND GOVERNMENT EFFORTS IN CONSUMER EDUCATION ON PROPER USE OF ELECTRICITY AND REDUCING WASTE 'FOR DOMESTIC CONSUMERS'**

Electricity distribution companies, NGOs and government efforts in consumer education on proper usage of electricity and reducing wastage	Count	Percentage (%)
a. Adequate	36	13.3
b. Inadequate	234	86.7
Total	270	100

Findings

1. A small percentage (13.3%) of customers think that the efforts of electricity distribution companies, NGOs and the government in consumer education on proper use of electricity and reducing wastage are adequate.
2. A major percentage (86.7%) of customers think that electricity distribution companies, NGOs and the government efforts in consumer education on proper usage of electricity and reducing wastage are inadequate.

The following table 7 shows electricity distribution companies, NGOS and the Government efforts in consumer education on proper usage of electricity and reducing wastage (for industrial consumers)

**TABLE 7: POWER DISTRIBUTION COMPANY'S EFFORTS ON INDUSTRIAL CONSUMER EDUCATION ON PROPER USAGE OF ELECTRICITY AND REDUCING WASTAGE**

Option	Number	Percentage
A. Adequate	0	0
B. Inadequate	30	100
Total	30	100

Data analysis and its interpretation

1. No respondent thinks that efforts of power distribution company in consumer education on proper usage of electricity and reducing wastage are adequate enough,
2. 100% customers think that efforts of power distribution company in educating consumers on proper usage of electricity and reducing wastage are not adequate enough,

The following table 8 shows consumers' response to monitoring of the efforts of power utilities at impacting the environment (for domestic consumers)

**TABLE 8: CONSUMERS' RESPONSE TO MONITORING OF THE EFFORTS OF POWER UTILITIES AT IMPACTING THE ENVIRONMENT (FOR DOMESTIC CONSUMERS)**

Response	Number	Percentage (%)
Yes.	142	53
No.	10	03
Can't say	118	44
Total	270	100

Findings

1. Majority (53%) of the customers are of the opinion that efforts of power utilities at impacting the environment need to be monitored.
2. 44% respondents "cannot say" in this matter.
3. Surprisingly, 3 % of the customers are of the opinion that efforts of power utilities at impacting the environment should not be monitored.

The customer responses to monitoring of the efforts of power utilities at impacting the environment (for industrial consumers) is shown in table 9

**TABLE 9: MONITORING OF THE EFFORTS OF POWER UTILITIES AT IMPACTING THE ENVIRONMENT (FOR INDUSTRIAL CONSUMERS)**

Response	Number	Percentage
a. Yes	28	93.4
b. No	0	0
c. Can't say	2	6.6
Total	30	100

Data analysis and its interpretation-

1. 93.4% customers feel that efforts of power utilities impacting environment to be monitored.
2. No customer feels that efforts of power utilities impacting environment should not be monitored,
3. 6.6 % of customers can't say anything in this matte

Domestic consumers' willingness to pay 5% to 10% higher prices for energy efficient LED lamps, solar heaters and solar cookers is shown in table 10:

**TABLE 10: DOMESTIC CONSUMERS 'WILLINGNESS TO PAY 5% TO 10% HIGHER PRICES FOR ENERGY EFFICIENT LED LAMPS, SOLAR HEATERS AND SOLAR COOKERS**

	Consumers' willingness to pay 5% to 10% higher prices for energy efficient LED lamps, solar heaters and solar cookers.	Response
1.	Consumers' willingness to pay 5% to 10% higher prices for energy efficient LED Lamps, solar heaters and solar cookers.	191Nos.
2.	Not willing to pay higher price.	79 Nos.
Total		270 Nos.

**Findings**

- 191 domestic respondents are willing to pay 5% higher to pay 5% to 10% higher prices for energy efficient LED lamps, solar heaters and solar cookers.
- 79 domestic customers are not willing to pay 5% to 10% higher prices for energy efficient LED lamps, solar heaters and solar cookers.

Specific comments from domestic consumers who are not willing to pay higher prices are

- The present LED and solar systems are not reliable and quality of products is not known.
- We expect utility companies to offer incentives for using these products.

Specific comments from industrial customers who are not willing to pay 5% higher power tariff even if power distribution Company offers value for money are-

- It is the duty of power utilities company to provide power saving devices. Why pay more?
- No one can guarantee about services of power Utilities Company.
- The power utilities company must improve their operations first and improvements should be visibly seen by consumers first.
- Domestic consumers should not be charged more but the power utilities company can charge more to government offices.
- The present power tariff is quite high. The power utilities company should not pass on their inefficiencies to consumer and must reduce distribution losses.

**HYPOTHESIS TESTING**

To test consumers are willing to pay 5% to 10% higher prices for energy efficient LED Lamps, solar heaters and solar cookers. (After "Make in India" campaign takes off and subject to conditions that these products are at available at affordable prices and tested for quality.) 'Z' test was used for testing the difference between two means, after verification of normality of assumption.

**NULL HYPOTHESIS**

H<sub>0</sub>: Consumers' are willing to pay 5% to 10% higher prices for energy efficient LED lamps, solar heaters and solar cookers.

**ALTERNATE HYPOTHESIS**

H<sub>1</sub>: Consumers' are not willing to pay 5% to 10% higher prices for energy efficient LED lamps, solar heaters and solar cookers

Sample size n= 270 Nos.

Table value of 'Z' for one tail test at 5% level of significance is 1.64.

If calculated value of 'Z' > 1.64, accept the hypothesis and accept H<sub>1</sub>, otherwise reject H<sub>0</sub>.

**Hypothesis testing details are (domestic consumers) is shown in the following Table 10:**

**TABLE 10: HYPOTHESIS TESTING (DOMESTIC CONSUMERS)**

Criterion	Importance			Satisfaction			'Z'Value
	Mean	S.D	C.V	Mean	S.D	C.V.	
Consumers' are willing to pay 5% to 10% higher prices for energy efficient LED lamps, solar heaters and solar cookers.	4.76	0.67	14.24	3.23	1.22	37.82	18.06

Where S.D. is Standard Deviation and C.V. is Coefficient of Variance.

It can be observed that

'Z' value for this criterion is more than the table value. We, therefore, accept null hypothesis and reject alternate hypothesis.

**Hypothesis testing details for industrial consumers are shown in the following table 11**

Sample size n= 30 numbers

**TABLE 11: HYPOTHESIS TESTING FOR INDUSTRIAL CONSUMERS**

Criterion	Importance			Satisfaction			'Z'Value
	Mean	S.D.	C.V.	Mean	S.D.	C.V.	
Consumers' are willing to pay 5% to 10% higher prices for energy efficient LED lamps, solar heaters and solar cookers	3.73	0.52	13.95	2.73	0.78	28.71	17.52

It can be observed that 'Z' value for this criterion is more than the table value. We, therefore, accept null hypothesis and reject alternate hypothesis. Hence, it can be concluded that in general, after the "Make in India" campaign takes off, consumers "are willing to pay 5% to 10% higher prices for energy efficient LED lamps, solar heaters and solar cookers subject to conditions that these products are at available at affordable prices and tested for quality

**LIMITATION OF THE STUDY**

Consumers were reluctant to express frank opinion on this topic.

**SCOPE FOR FURTHER STUDY**

A detailed study on this research topic can be carried out in India to ensure comfortable living of Indian populations with the reduction in carbon footprints

**CONCLUSION**

With Make In India will give big boost to consumption of power saving devices. It will be a shot in the arm for all companies as the survey results indicate that majority consumers are willing to shift to green products even 5 to 10% higher prices than other non-power saving products subject to conditions that these products are at available at affordable prices and tested for quality. Apart from generating employment, it will also boost exports. Collective efforts are required by government, social activists and consumers in creating awareness and extensive usage of green marketing products to conserve energy, protection of nature. The biggest challenge is how the prices can be made affordable for mass usage by consumers. If the renewable energy products are made affordable like mobile phones, then one can ensure that sustainable growth can be achieved and can also reduce carbon foot prints.

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## STUDY TO UNDERSTAND LINKAGE BETWEEN STORE IMAGE AND STORE LOYALTY FOR APPAREL RETAILERS IN INDIA

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### ABSTRACT

*Organized retail is an upcoming sector which has shown considerable growth in recent years and it is expected for much faster growth in the near future. Favorable store image is essential for attracting and retaining customers and plays an important role in deciding the success of a store. It would therefore be of great interest to understand the linkage between store image and the store loyalty that it commands. The data source was a survey among customers of the Indian apparel retailers. The respondents were asked to fill up the survey immediately after they had finished their shopping, so that the store related recall is better. A total of 315 customers responded to all the questions in the questionnaire. For the purpose of the study four attributes of store image, namely store ambience, discounts and incentives, advertisement and promotion, and merchandise and assortment, have been selected. A regression analysis was conducted to understand the relationship between various attributes of store image and store loyalty. The study revealed that Store ambience significantly impacted store loyalty as compared to the other factors. Thus, retailers should pay more attention to the store ambience in terms of cleanliness, visual merchandising, aesthetics, music, store employees behavior, to make it attractive for the consumers to make repeated purchases.*

### KEYWORDS

store image, store loyalty, retail.

### INTRODUCTION

Retailers in general have been more focused towards transactions and the operations side rather than building good relationships and thereby enhance loyalty. Over a period of time, the focus is shifting towards customer satisfaction and loyalty<sup>1</sup>. Retailers have realized that customer loyalty has a lot of advantage over the bottom line of the company, as customers will buy frequently, will prefer to come to the same retailer again and again and will be tolerant to small price increases<sup>2</sup>. It is less expensive to retain an existing customer than to acquire a new customer. The author<sup>3</sup> argues that "a customer who is loyal to a certain retail establishment will give this store his or her priority visit in any shopping event". Customer loyalty can be increased by consciously implementing a retail marketing strategy based on an understanding of the many attributes that influence shoppers' intention to buy<sup>4</sup>. Store image enables a retailer to attract and retain customers, thus enhancing the loyalty towards the store<sup>5</sup>.

During the past years both marketing academics and practitioners have been fascinated by the linkage between store image and store loyalty. However, the main focus of these studies has been on products (brands) rather than on services or other attributes that come along the way of making a purchase. In the current competitive environment with fast market entry of new concepts and store formats<sup>6</sup>, the challenge of enhancing store loyalty presents the research challenge of a more thorough understanding of this important type of consumer behavior. There is some evidence that store image may be positively related to store loyalty<sup>7</sup>. Having mentioned this, the relationship between store image and store loyalty remains unclear. Store image refers to "the importance that has been given to the thoughts and feelings that consumers form associated with stores, and that these overall impressions strongly influence their shopping and patronage behaviors"<sup>8</sup>. The purpose of this paper is to understand the impact of store image on the store loyalty in apparel retailers. The context is Indian apparel retailers belonging to the city Pune in Maharashtra state in India. This industry is characterized by severe competition among the various chains. In this paper, we consider a multi-attribute model those results in store image. Image is expressed as a function of the salient attributes of a particular store that are evaluated and weighted against each other. "Store image has been defined as the complex of a consumer's perceptions of a store on different (salient) attributes"<sup>9</sup>. Another author<sup>10</sup> defines store image as, "it is an overall impression of a store as perceived by consumers". One of the commonly accepted formal definitions<sup>11</sup> of retail store image is "an individual's cognitions and emotions that are inferred from perceptions or memory inputs that are attached to a particular store and which represent what that store signifies to an individual". The set of attributes of store image, have been distinguished as per different authors, like an author<sup>12</sup>, has defined nine different elements, after combining models from 19 studies, as per his study on the store image literature. These nine elements are- institutional and post- transaction satisfaction, physical facilities, clientele, comfort, promotion, store atmosphere, merchandise and service. Similarly, another author<sup>13</sup> suggested the following characteristics: price, assortment, location, friendly personnel, quality of the merchandise, parking facilities and atmosphere.

Store image is supposed to be composed of the different elements of the retail marketing mix<sup>14</sup>. These elements are: price, personal selling and sales incentive programs, advertising, location, store atmosphere, merchandise and customer service. Hence, based on the various characteristics of the retail mix, a customer might relate to a particular store based on a particular attribute that is of importance to him/her. The merchandise of a retailer is a very important part of the retail mix element. A retailer has to ensure that he offers those products/services to his customers that they expect or would be interested to buy on impulse. However, other nonfunctional elements like store ambience, friendliness of the employees and others are also important expectations that needs to be met for a customer to become store loyal<sup>15</sup>.

### THE CONCEPTUAL MODEL AND HYPOTHESES

#### STORE IMAGE

The present scenario of increased competition with continuous market entry of new store concepts and formats<sup>16</sup> forces marketers to look at strategies, which could enhance the loyalty of the store by positively impacting the store image of the store. Store loyalty and store image are related and are two very important factors that determine the success or failure of the store. The main objective of this study is to find out whether there is a positive relation between the store image and store loyalty. Figure 1 presents the study's hypothesized relationships and the conceptual model. Store image "refers to the way in which a store is perceived by shoppers, and defined in shoppers' minds"<sup>17</sup>. "It can also be described as the perception that a person possesses while shopping at a particular store"<sup>18</sup>. "It is a valuable intangible asset, that is difficult to imitate, and which may help to achieve sustained superior financial performance"<sup>19</sup>. Customers evaluate and select specific retail store for shopping on the basis of the image they project and therefore it is important for retailers to craft the correct store image, which can enable the store to attract customers who will purchase products and services. There are many attributes that decide the store image that the customer carries which differs considerably with each customer segment. This study aims to ascertain the important parameters or attributes that are specifically relevant in the Indian scenario which can enable the firm to build positive image and thus increase the share of wallet of the consumers. Store manager have a direct control over the store attributes and thus this study would be relevant for marketing researcher as well as store managers and departmental heads. Hence store image is a major factor affecting store loyalty. Store image can be considered as something which caters to the layout, advertising, proper sales and promotions, discounts, quality of services, quality of products, location of the store segment of people in that particular area. Store aura and surroundings are one of the major factors that create positive impact on the customers. The identity of a store can be transferred in the minds of the consumer which is really helpful

in any decision making process with the help of a store image. This unique identity ensures that the store is completely equipped to compete with other retailers and creates more satisfaction and loyalty.

Various researchers have discussed various aspects of store image in their studies, such as the store service, merchandise quality, merchandise layout, the store atmosphere, convenience and product assortment<sup>(20,21,22)</sup>. Another researcher<sup>23</sup> selected the store image dimensions such as the prices of the products, quality and variety of the products sold, the service provided by the sales personnel and physical facilities of the store. Table 1 summarizes past studies of store image dimensions with reference to a retail store.

TABLE I: DIMENSIONS OF STORE IMAGE CLASSIFIED BY DIFFERENT STUDIES

Year	Store image dimensions
1977	Service, Physical facilities, convenience, promotion, Merchandise, store atmosphere <sup>24</sup>
2000	Pricing policy, promotion, store atmosphere, store clientele, Store location, service, merchandise and layout <sup>25</sup>
2002	Merchandise, assortment, store atmosphere, service quality and advertisement and promotion <sup>26</sup>
1993	Merchandise, product variety, store attractiveness, product quality, convenience, prices and discounts and customer service <sup>27</sup>
2005	Prices and discounts, one stop shopping possibility, advertisement and promotions, checkout line, convenience <sup>28</sup>
2001	High quality, latest fashions, good service, good bargains and discounts, merchandise and assortment, convenient location, low/high prices and nice atmosphere <sup>29</sup>
1998	cleanliness, pleasant atmosphere, Safe environment, sufficient and safe parking, discounts, specialty retail mix, quality merchandise, spacious walkways, convenient location <sup>30</sup>

For the purpose of the study, four attributes of store image were selected, namely store ambience, discounts and incentives, advertisement and promotion, merchandise and assortment, which appear to be employed consistently by customers to develop their overall impression of a retail store.

#### DISCOUNTS AND INCENTIVES

Discounts and incentives programs offered by retail stores have a positive impact on the store loyalty that the customer displays. The better the discounts, the more is the attraction of customers towards that particular store. Loyalty programs and other value added service, if designed and implemented well, can enable the business gain competitive edge and can hence profitability. Thus,

**H1: Discounts and incentives programs will have a positive effect on store loyalty**

#### ADVERTISEMENT AND PROMOTIONS

Advertisements and promotions have a positive impact on store loyalty. Advertisement and promotions familiarizes the customer about the store. Repeated ads will enhance the customers recall and will induce the customer to pay a visit to the store. Frequent promotions to promote new apparel collection will motivate the shoppers to check the collection and make impulse purchases. Thus,

**H2: Advertisements and promotions about the store has a positive impact of store loyalty**

Merchandise and assortment is yet another antecedent in the formation of store loyalty. It determines what and how much Merchandise should be carried in a merchandise category. Decisions like whether the top-line, moderately priced or inexpensive items should be carried and to which customer segment the products have to be targeted. These decisions along with the width and depth of the assortment play an important role in deciding whether the right customer segment gets pulled towards the store to buy apparels on a regular basis. Thus,

**H3: Merchandise and assortment has a positive impact on store loyalty**

Store Ambience forms the primary impression of the store and influence consumers' perceptions towards a store, and that also impacts forcefully on a stores' image and consumers' expectations of the retailer's offerings in terms of whether the store keeps expensive luxury brands, value for money merchandise or trendy and little expensive stuff. Store atmosphere and ambience can be divided into four sub elements; general interior, store layout, exterior variables and interior display. Retailers who pay attention to all these four factors can influence the customer's decision to visit a store. Thus,

**H4: Store ambience of the store has a positive impact on store loyalty**

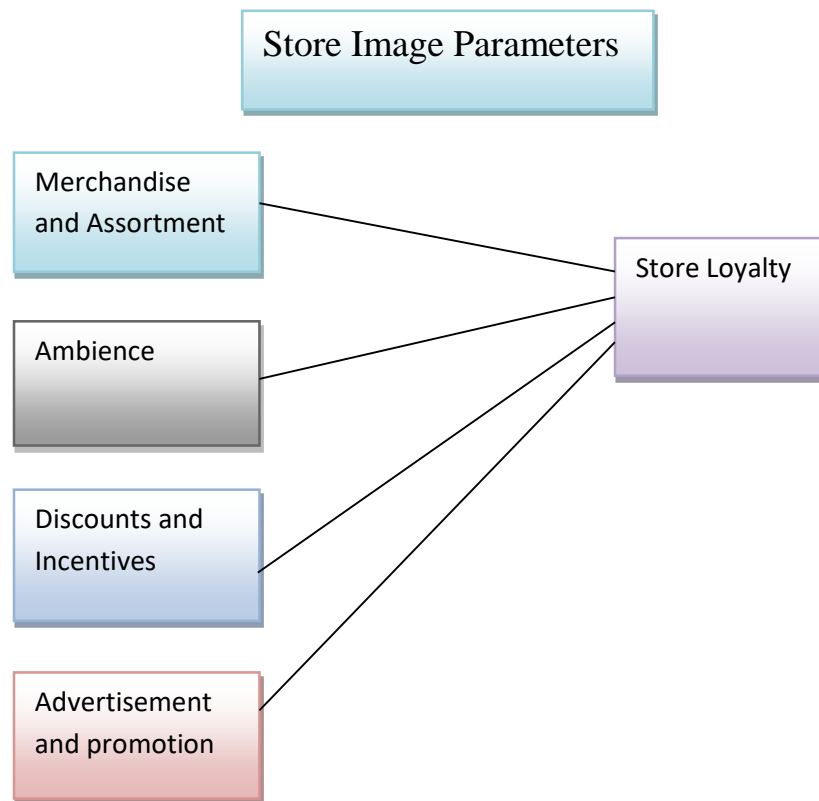
#### STORE LOYALTY

Store loyalty represents the "likelihood that consumers will plan or willing to purchase products from a particular store<sup>31</sup>". Loyalty<sup>32</sup> has been defined as, "customer who feel so strongly that you can meet his or her relevant needs that your competition is virtually excluded from the consideration set". Some authors state that it can be measured focusing on consumers intentions to continue shopping<sup>(33,34)</sup> and others suggest that it can be understood as the frequency of store visits or relative volume spent by consumers<sup>35</sup>.

Store loyalty is consumer's willingness to make a purchase repeatedly in same store or supermarket and recommend it to others. In the process of selling and buying, it is not only the product that matters; it is the system along with the surroundings that plays a role in the purchase of the item. Being in the good books of a customer, results in the customer loyalty for that particular store. Customer loyalty can be measured in terms of whether a customer shops at a particular store exclusively and spends larger share of total expenditure at a particular store. Whether larger proportion of total shop visits, happen at a particular store. Percentage of visits, to a particular store, given the average shopping trips in a specific time period.

Usually store loyalty varies according to the type of items purchased. For example, customer displays more loyalty for electronics compared to apparels, more loyalty for apparels compared to groceries etc. If a store is able to maintain variety and bring out seasonal collections of apparels on a regular basis, store loyalty could be a possibility. Hence, store commitment forms an important component of store loyalty. Store commitment is a necessary condition for store loyalty. A customer who doesn't have commitment towards a store but visits a store repeatedly is spuriously loyal to the store. The repeat visits could be result of inertia and therefore may not remain a long term loyalty. Based on the extant literature review, a conceptual model of the study was framed as depicted in Figure 1.

FIGURE I: CONCEPTUAL MODEL OF STORE IMAGE IMPACTING STORE LOYALTY



## RESEARCH METHODOLOGY

A questionnaire based empirical study was conducted to understand the impact of store image parameters on store loyalty. The questionnaire was pre-tested by 40 people who shop at some of the apparel retailers on a regular basis. The questionnaire was divided into two parts: the first part consists of a brief profile of the respondents and the second part consists of factors related to the role of store image parameters on store loyalty. During the final survey, the respondents were given a five-point Likert scale ranging from 1 "strongly disagree", to 5 "strongly agree". A pretest of the questionnaire was conducted after which pilot testing was conducted to establish the reliability of the instrument.

Data for the study were collected from 315 customers, who came to shop at the apparel retail store. The Cronbach's alpha for all the constructs is greater than 0.6 and is depicted in Table II establishing the reliability of the constructs for further analysis<sup>36</sup>.

## EXPLORATORY FACTOR ANALYSIS (EFA)

Factor analysis is a method used for data reduction. It does this by seeking underlying latent variables that are reflected in the manifest variables. The study used 16 dimensions of store image and store loyalty from the literature. Principle Factor with Varimax Rotation was used to demonstrate the factor structure. Bartlett Test of Sphericity was administered to ascertain the presence of correlations among the variables. The observed significance level for the Bartlett Test of Sphericity is 0.000 and therefore it can be concluded that the strength of the relationship among the variables is strong and factor analysis can be administered. The second test is the Kaiser–Meyer–Olkin Measure of Sampling Adequacy (KMO). The value of KMO statistic above 0.80 is meritorious and below 0.50 is unacceptable<sup>36</sup>. The value of KMO for the current study is 0.687, which is a higher than the threshold of 0.6 and therefore depicts that there is adequate sampling adequacy<sup>36</sup>. Eigen value of all the five factors was greater than 1. The lowest factor loading was .594, which is above the 0.50 threshold value<sup>36</sup>. The factors were interpretable and could be grouped into logical factors based on literature review and past studies. The total variance explained by the five factors is 65.94%. After getting the factor matrix, an attempt was made to give some name to the factor loadings as shown in Table II.

TABLE II: FACTOR LOADING, CRONBACH'S ALPHA AND SCALE COMPOSITE REALIABILITY (SCR)

Component	Items	Factor Loading	Cronbach's alpha	SCR	AVE
Merchandise and Assortment	MA1: Do you prefer a store that carries new and latest range of products	.723	.779	.833	.556
	MA2: Do you prefer revisiting stores that have high quality products	.678			
	MA3: Do you prefer shopping frequently at a store that offers a wide variety of products at different prices?	.808			
	MA4: Do you prefer shopping frequently at a store that offers products in different sizes?	.769			
Ambience	A2: Do you prefer to shop at stores where there are sufficient checkout counters?	.796	.702	.777	.542
	A3: Do you agree that your shopping is influenced by the store atmosphere and the overall decor of the store?	.800			
Discounts and Incentives	A4: Do you prefer shopping at a store where it is easy to find the items you want?	.594			
	DI1: Do you agree that exclusive Loyalty cards/benefit schemes attract you towards buying from a particular store? (E.g. Green card in case of Pantaloons, First citizen card in case of Shoppers Stop	.802	.666	.836	.719
Advertisement and Promotions	DI2: Do you prefer recommending your friends or family to join a membership program/ discount offers at a store?	.893			
	AP2: Do you agree that having a celebrity brand ambassador endorsing a store, positively affects your buying decisions	.732	.700	.830	.621
	AP3: Do you agree that push notifications on your phones help you make better purchase from stores?	.816			
	AP4: Do you agree that attractive TV/Radio commercials influence your preference for a store?	.814			
Store Loyalty	SL1: Do you think that the location of store in the proximity area affects your preference for that store to build loyalty?	.796	.718	.811	.584
	SL2: Do you agree that Promotion schemes for stores on billboards, flexes, pamphlets etc. attract you to make repeated purchases at a store and build loyalty?	.804			
	SL3: Do you prefer to shop again and again at a store whose employees are friendly and pleasant?	.787			
	SL4: Do you prefer shopping at a store which provides variety at a regular basis thus build loyalty?	.826			

**DATA ANALYSIS**

The data from the empirical study were analyzed using SPSS 21.0. After the pre-testing of the questionnaire with a sample size of 40, the final data collection was conducted. 315 usable filled up questionnaires were taken for further analysis. The validity and reliability had to be established before further analysis could be performed. Construct validity is measured to understand how well the data collected in the research can be translated for research purposes. The constructs of the theoretical framework possess convergent validity because the standardized factor loadings of the items are mostly greater than 0.7 and not less than 0.5. The Scale Composite Reliability (SCR) is found to be greater than 0.7, which shows that the internal consistency of the data is high. All the Average Variance Extracted (AVE) values are greater than 0.50. If the average variance extracted is less than 0.50, then the variance due to measurement error is greater than the variance due to the construct. Discriminant validity refers to the extent to which the operationalization diverges from the operationalization of theoretical dissimilar constructs. The AVE is greater than the squared correlation coefficients between the various constructs and therefore demonstrates discriminant validity. This shows that the factors are independent of each other and the results are valid because these factors do not have a relationship.

Variables derived from the designed questionnaire are declared to be reliable only when they provide stable and reliable responses over a repeated administration of the test. Cronbach's alpha is an effective measure of reliability. It is a measure of internal consistency, that is, how closely related a set of items are as a group. Ideally, the value of Cronbach's Alpha should be greater than 0.7. In our study, the Cronbach's Alpha of all the constructs is higher than 0.7 except Discounts and Schemes, which is at 0.666, very close to 0.7.

The hypotheses were tested using multiple regression analysis. To conduct regression, the assumptions of regression were checked. Normality assumption is checked on the basis of descriptive statistics, namely, Mean, Median, Mode, Skewness and Kurtosis. Histograms and normal probability plots were also examined to understand whether data were normal or not. For checking linearity assumption, scatter plots were obtained and the contours of the scatter plots were examined. This depicted the linearity of the relationship between dependent and independent variables. The error term distribution when plotted depicted a normal curve. To check the homoscedasticity assumption, residual plots were drawn. The residual plot shows that the variance around the straight line is constant. The data does not indicate any deviations beyond limits suggested for fulfilling the assumptions of regression analysis.

After checking the assumptions of regression, the regression equation was run in SPSS. The R square value of the model is .322. This shows that 32.2% of the variance in the dependent variable, Store Loyalty can be explained by the independent variables; Merchandise and assortment, Ambience, Discounts and Incentives, Advertisements and Promotions. The regression output is given in Table III. Store Ambience has the strongest association with store loyalty ( $\beta = .305, p = .000$ ) and therefore retail store managers need to make efforts to provide an ambience to the consumers, which is unique and which brings the customer back to the store again and again. Ambience could mean that the store manager can pay special attention to the lighting in the store, cleanliness, visual merchandising, smell and overall upkeep of the store. Discounts and incentives ( $\beta = .283, p = .000$ ) has the next best association with store loyalty ( $\beta = .283, p = .012$ ). This result is expected as consumers are extremely price conscious. They indulge in impulse buying based on the discounts and offers that are offered by the store. Stores that are able to offer lucrative prices will command more footfalls and thereby significant sales. Results indicate that store managers, who maintain a good amount of variety in terms of their merchandise and assortment, will be able to build store loyalty ( $\beta = .193, p = .012$ ). Today's consumers are looking for variety, freshness of stock and latest designs and therefore the store managers would need to bring in new stock on a continuous basis, liquidating the old ones. This will ensure that the customers visit the store more frequently, spend huge amounts buying merchandise and return to the store at the earliest thus building loyalty. Similarly advertising and promotion ( $\beta = .180, p = .009$ ) also have a positive relationship with store loyalty. Stores which undertake advertisement and promotional activities will ensure that the store is in their top of the mind recall and therefore will lead to enhanced footfalls and sales.

TABLE III: REGRESSION ANALYSIS

Coefficients <sup>a</sup>						
Model	Unstandardized Coefficients		Standardized Coefficients		Sig.	
	B	Std. Error	Beta	t		
1	(Constant)	1.211	.370		3.270	.001
	ma_avg	.161	.064	.193	2.542	.012
	a_avg	.216	.055	.305	3.922	.000
	di_avg	.144	.035	.283	4.098	.000
	ap_avg	.147	.056	.180	2.652	.009

a. Dependent Variable: d\_avg

The regression equation from Table III is as depicted below:

$$d\_avg = 1.211 + 0.161ma\_avg + 0.216a\_avg + 0.144 di\_avg + 0.147ap\_avg$$

The variables in the above mentioned equation are

ma\_avg - Merchandise and Assortment

a\_avg - Store Ambience/Atmosphere

di\_avg - Discounts and Incentives

ap\_avg - Advertisements and Promotions

d\_avg - Store Loyalty

## CONCLUSIONS AND MANAGERIAL IMPLICATIONS

The objective of this study was focused on identifying the linkage between store image and store loyalty. To establish the linkage, Store image was diversified into its various attributes as suggested by various authors. Based on the extensive literature review, four attributes of store image were identified: Advertisement and Promotions, Discounts and Incentives, Store Ambience, Merchandise and Assortment<sup>(12,13,14)</sup>.

According to the study, Store ambience is the most important factor, which significantly impacts Store loyalty. Making the store atmosphere welcoming, attractive and friendly is of prime importance. The face value of the store is what appeals to the customers. Store owners should make an attempt to decorate and provide a visually interesting space. Only elaborate displays are not the answer to decoration. Appropriate lighting, well painted walls, neatly stacked racks, attractive decor, soothing peppy music (as the brand demands) are a few things the stores can look into to increase the probability of a customer revisiting a store. Thus, store managers aiming to enhance Store loyalty should especially focus on Store ambience to improve loyalty as all the respondents have given this attribute more weightage as compared to the other factors.

The next best factor that influences the Store Loyalty is the Discounts and Incentives offered at that store. Customers aim at making a good quality purchase for a reasonable price. Hence, discounts and incentives come into the picture here. According to the study, customers will revisit a store if the store offers regular discounts and other incentives. These incentives could be in the form of membership card and reward points, using which they can avail significant discounts on the items that they purchase. By this, they feel privileged after making a purchase, as they get the same product for a cheaper price. For example, the 51% season end sale by Shoppers Stop is quite popular among customers, as they get heavy discounts on the products. Also, the first citizen membership card scheme has been a success in retaining the customers and facilitating them in revisiting the store. Thus, store managers should regularly offer discounts or other incentives to motivate customer to come again and again in the store thereby increasing footfall as well as sales.

Another factor is merchandise and assortment that significantly impacts store loyalty. A customer visits a store with an intention to make purchases that serve most of his/her needs. In this era, consumers usually face time constraints, and hence demand a variety of products to choose from, also keeping the high quality of the product- so that they do not have to waste much time choosing where to buy from. Hence, higher is the variety and range of products available at a store, higher will be the probability of the customer visiting the store to make the purchase again as the store shall serve as a one stop solution to the consumer. Thus, retailers should pay attention to the merchandise mix that they maintain at their store, so that it becomes an attractive point for the consumers to make repeated purchase from their store.

For example, popular Retail Clothing Firms like Pantaloons, Lifestyle etc. maintain clothes in various sizes, ranging from extra small, small, medium, large, extra large and so on, so as to serve to a large consumer base. Not only this, they also maintain clothes for different age groups- newly born, kids, teenagers, adults etc. Hence, these stores are one stop solution when consumers are looking at making a purchase.

The last factor that significantly impacts the Store Loyalty is the Advertisement and Promotions carried out by the store. Advertisements and Promotions consist of a huge variety of promotion tools, which aim at generating recall and a preferred response from the consumer. Sales promotion encourages the consumers to think and evaluate brand and purchase opportunities. All the various attributes like Discounts and Incentives offered by a store can be communicated through various advertisements. Hence, different types of promotion tools and promotion strategies are utilized by the marketers so that they can know consumer first choice on a repeated basis, Hence, the more a customer is aware of the merchandise, the discounts etc. offered by a store through its promotions and advertisements, more is the likelihood of him/her making a repeated purchase at a store.

## DISCUSSION AND FUTURE SCOPE

Maintaining and nurturing good store image is extremely important for retailers to thrive in the current era, where consumers are bombarded with choices in the form of multiple retail outlets from where they can shop. Retail store loyalty is reducing as consumers would like to explore new options and would not hesitate to shop at your competitor's store. Retailers are trying hard to get a big share of the market by enhancing the customer experience and image of the store with the aid of wider assortment, leveraging technology and focusing on innovation. The competition gets tougher with the expansion of retail channels such as online retail.

The current research proposes that store image may play a critical role in influencing the customer-retailer relationship and thus the loyalty within the context of apparel departmental stores in India. It is important to make a wise investment, considering limited resources and thin margins, in key store image dimensions. In doing so, this study identifies four store image dimensions pertinent to department store operations: Advertisement and Promotions, Discounts and Incentives, Store Ambience, and Merchandise and Assortment which, have a positive relationship with store loyalty. The findings of the current research reveal that, in a department store setting, store managers can improve customer loyalty. In other words, ensuring good quality merchandise and wider assortment can pull the customer to the store on a regular basis. Keeping customers informed through advertisement and promotions would enable the retailer to keep their customers informed of products/services available at the store. Additionally, maintaining good store ambience and offering regular discounts and incentives to the customer can pull the customer to the store on a regular basis thus enhancing the share of wallet of the purchases made by the consumer. Related to this, examinations of regression coefficients show that store ambience has a stronger influence on customer loyalty than other dimensions of store image do. The results of this study can therefore be utilized by retail stores that are working towards increasing and retaining footfall.

Some limitations of this study must be noted. Caution is necessary in understanding the results, since the sample collection from people who entered apparel stores limits the generalizability of the findings to other retail setup. Taking this study forward, future research can test the model in different retail setup such as multi-channel stores. Individual characteristics (e.g. gender, relationship duration, age) may have a moderating effect on how a customer responds to the impact of store image on store loyalty. Additional research addressing these, consumer related aspects would make further contributions to an understanding of the dynamics of the factors that lead to store loyalty. Open-ended questions may also be added to get qualitative data, which sometimes is rich in information and can provide deeper insight on the factors that influence the customers, while revisiting a store for a better generalization and utilization.

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**“MAKE IN INDIA” IN THE DEFENCE SECTOR: ROLE OF FDI****SHAILESH BHOITE****STUDENT****SYMBIOSIS INSTITUTE OF MANAGEMENT STUDIES****KHADKI****DR. ASHA NAGENDRA****PROFESSOR****SYMBIOSIS INSTITUTE OF MANAGEMENT STUDIES****KHADKI****ABSTRACT**

**Purpose:** The main purpose of this report is to highlight and analyse the current scenario of the defence manufacturing industry of India pre and post the inception of Make in India. Make in India has created a lot of interest both within India and outside of India in the national defence manufacturing industry. Policies have been changed from time to time and after Make in India FDI have been allowed 100% in India. Private and public firms have joined hands with foreign manufacturers to bring latest technology into India. These changes and developments have been our motivation to write this report. Increase in FDI inflows, joint venture contracts, acquisitions are some of the major highlights. Major deals have been signed after 2014. Through this report we have shown and explained some the trends in the defence sector.

**Design/methodology/approach:** A descriptive approach has been utilised to compile this report. Various articles have been published regarding the defence sector. The necessary data has been taken from various publications and the information released by the Department of Policy and Procurement. Also information published by Ministry of Defence. Data has retrieved from various secondary sources such as articles published, journals of PWC and McKinsey and the data available on government website. The graph trends and GDP growth rates have been retrieved from World Development Indicators site. Thereby secondary sources have been referred to compile this report.

**Findings:** It was analysed that since the birth of Make in India there has been 9.86% increase in the deal values that have been signed. This indicates that Make in India has been successful in attracting both foreign and private players in the sector. The vision of Mr. Narendra Modi is to make India self-reliant in defence manufacturing. Countries, apart from USSR and USA which are our major suppliers, such as Israel and France have shown their interest in India. As GDP has increased in the years and our growth rate is well over 7.5%, a very strong positive correlation has been observed signifying that as our GDP rises our defence expenditure (as a percentage of GDP) has also increased.

**Research limitations/implications:** A major limitation of the report is that data has been collected from secondary sources and the relevant illustrations have been taken from journal publication and information published by Department of Policy and Promotion and Ministry of Defence. The time frame of study is from 2007 till present date.

**Originality/value:** We have increased our defence expenditure but we still have a long way to go before we can become self-reliant. We have taken most of the data from the publications and information as disclosed by the ministry departments. And have analysed the data to obtain our findings.

**KEYWORDS**

make in India, defence manufacturing FDI, GDP.

**INTRODUCTION**

**M**ake in India was launched by Prime Minister, Shri.Narendra Modi on 25 September 2014, to increase Tax revenue, Gross Domestic product (GDP), capital Investment. The ambitious campaign launched to turn the country as a destination of design & global manufacturing hub. This campaign is attracting focus from global Original engineering manufacturer (OEM) companies for inflow of money, FDI & Job creation. In August 2014, the Indian government permitted 49% FDI and 100% case to case basis in the defense sector to boost inflow. "Make in India" has attracted Global financial institutes and entrepreneurs to make their investments in India. India is ranked as one of the most preferred destination for FDI, skills and youth availability and business environment has improved due to ease of policy. Being a developing country, need to address, defense obsolescence, modernize and build additional capacity have made defense market attractive. "Make in India" is national camping, raft of proposals to transform India in manufacturing power house with the help of Local & foreign OEM. CII and financial investor's reports have suggested that the defense sector has the potential to increase share of manufacturing from current 15 percentage of GDP to 25 percentages. It will create 10 million additional opportunities per year direct & indirect jobs. "Indian (designed, developed and manufactured) or Buy (IIDM)" - New defense procurement policy is introduced by department of industrial policy and promotion (DIPP), India to boost to "Make in India". As per Defense procurement procedure (DPP)-2016 introduced 3 categories opportunity to Indian OEM & Indian MSME. "Make-I (Government funded-90 percentage funding), "Make -II (industry funded project) and III (MSME funded)" funding in prototype development projects and government will reimburse the development cost of project if order is not placed within stipulated time frame. Building new capacity & modernize, will create \$14 billion opportunity to OEM by discharge of contract obligations by 2028.

To make defense offset guidelines flexible & accountable, DIPP has awarded 56 manufacturing defense permits to Indian private companies, it will help Indian OEM'S to start new production units for military equipments & participate new projects which are in process of Request of information (RFI) or Request for quote (RFQ) stage.

To achieve self-sufficiency, strategic capabilities, Indigenization & reducing dependency on global Original engineering manufacturer, Indian government has created ordnance factory & public sector units to meet the requirements of our armed forces. Indian OEM has shown self -sufficiency, Indigenization in other manufacturing sector, there is need to increase role of Indian companies to develop strategic capacity & capability in hi-tech military equipments. Due to stringent technical requirement, Indian PSUs and private companies are not well developed to support defense manufacturing; they have been encouraged to partner with foreign OEM for joint ventures, technology transfer arrangements. Military modernize plan is prepared. DIPP has made procurement procedure simple and efficient. It is big opportunity for domestic & foreign companies. Indian companies need to plan its investment, Research and development to meet the requirement. India is third largest armed forces. Indian defense budget is US\$ 38 billion & 40 percentages is used for capital acquisition. Indian government has made modernization plan of US\$ 130 billion for armed forces. With the help of present policy of "Make in India", the Indian industry can make best use of this opportunity for business, as well as the nations.Rs.25000 Crore obligations will be discharged in next 7-8 years under offset clause.

In the upcoming years there will be many changes in the defense sector market. Government has made major policy changes in investment policy, procurement and export policy, defense technology up graduation, new technology acquiring and defense permits licenses, industry need to come up and accept these challenges and make investment plan on long term gains rather than short term profits. Government has signed new deals in 2015 and many more are expected to be undertaken by 2016. Policies have also become more flexible to attract foreign as well as domestic investors. Defense sector is driven by innovation and there is a need to change our current mindset in this regard. However, there are challenges and barriers that need to be overcome before we can spearhead forward. This



study focuses on the current FDI trends. As we know that policies have been modified to attract investors, there is still reluctance among and this report will try to analyze the reason. Defense has been on the periphery of the development circle and as we progress towards becoming a superpower, we have to bring defense into the core of the circle. Make in India has provided a unique platform to bring all investors and policies on the same platform of development. This has our motivation behind this report.

## OBJECTIVES

1. To analyze the effect of FDI in the development of defense sector.
2. To analyze the role of Make in India in developing the defense sector.
3. To analyze the government policies that poses a challenge for the investors in setting of a defense manufacturing unit.

## LIMITATIONS OF THE STUDY

1. The relevant details and data has been collected from published sources such as journals, reports of the Government of India and DIPP published reports (secondary sources)
2. The study will be limited to effect of FDI and government policies that impact the defense sector under "Make in India".

## REVIEW OF LITERATURE

**Bambha (2016)** conducted and reported a study on the past year 2015's performance with regards to the defence sector. Since its inception, "Make in India" could not attract more than Rs. 56 lakhs in the defence sector putting the sector right at the bottom in a list of sectors that received FDI. A probable reason could be because of poor response from the foreign investors. The government of India has made changes in its FDI policy accordingly by allowing 49% FDI through the automatic route. (As of 2016 the government has allowed for 100% FDI, however when the article was published for "The Economic Times" in June 2016, FDI allocations were at 49% for the defence sector). Another major change observed was that the offset policies are now more flexible. Also "Services" has been included as an eligible offset opening up opportunities worth \$3 billion. Some of the hi-profile deals that could not come through in 2015 were those with Russia and Japan. On the bright side, "Make in India" has given a path for public private partnerships that could catapult our defence manufacturing capabilities. Also many private firms are now in direct deals with the Armed Forces and the Navy. In 2016 "Make in India" hopes to attract more FDI and consolidate on the partnerships formed by the private and public players. Further changes in the DPP are evident.

**Singhania (2015)** studied the defence scenario of India and laid stressed on the importance of an "indigenous and internationally competitive defence industry". An important fact that his study highlighted was that about 60% of India's defence requirements were met through imports making India the largest importer of defence equipment's. He highlighted that India has the ability to emerge as a major global platform for defence research and development and manufacturing. Having seen this huge potential, the Government of India has been making reforms in its policies to attract excellent foreign capabilities and promote domestic players to further enhance their capabilities in the defence sector by endorsing technology exchange through a more liberalized FDI policy. Opportunities for entry of foreign companies and collaboration of domestic players were highlighted in his article. His articles have brought some important facts to light regarding the defence sector in India such as India allocates 1.8% of its GDP towards defence expenditure. Of this 1.8%, 40% is reserved for capital acquisition. However, only 30% of defence equipment's are manufactured in India mainly by the PSU's. These facts and figures show a bright prospect for the defence sector. With Make in India, the Indian Government hopes to reduce the gaping difference between the imports and exports in the current defence procurement and manufacture. Technology transfer between domestic and foreign players is being encouraged.

**Sriram (2015)** conducted study on "A cannon yet to fire - not a single big ticket proposal" had commented that India is still reliant on importing military equipment to fulfill short-term needs. He has analyzed the position of India in the defense sector and the impact of easing FDI norms. He found that very little has come in by, way of tangible large investments. India reliant on importing military equipment to fulfill its short term needs. Global majors show reluctance incoming to India with new major projects. A part of this problem is linked to an ongoing debate about whether 49 per cent is actually enough given that the limit is designed to ensure that control of the venture remains with the Indian companies. Senior analysts have proposed to increase FDI capital to at least 74percent to get things moving.

## RESEARCH METHODOLOGY

### SELECTION OF TOPIC

Make in India was launched by Mr. Narendra Modi on 25<sup>th</sup> September 2014. Since then FDI inflows have increased. Policies have been revised to encourage private and public investments in the defense sectors. Recently, changes in policy have paved the way for 100% FDI inflows against the initial 49%. IMF and World Bank, global defense OEM's, investors, domestic investors have applauded this campaign. Asian Development Bank, WTO, RBI, UNCTAD, EXIM Bank has created a buzz around the "Make in India" as it will be a driving force for the Indian GDP as well as good prospect for long-term investments. Hence topic "Make in India-Defense Sector" selected for research.

### HYPOTHESIS

#### Hypothesis 1

- $H_0$  There is a negative perception about opportunities of FDI in defense sector under "Make in India".
- $H_1$  There is a positive perception about opportunities of FDI in defense sector under "Make in India".

#### Hypothesis 2

- $H_0$  There is a negative relation between increase in GDP of India and defense expenditure.
- $H_1$  There is a positive relation between increase in GDP of India and defense expenditure.

### COLLECTION OF DATA

Many secondary data sources have been referred to in making this report. Statistics related to flow of FDI has been brought together from reports as published by the Government of India and the Defense Ministry, RBI, DBIE, SEBI and Department of Industrial Policy and Promotion. Our study of the collected information is divided into two time frames that is the time period from 2007 till September 2014 and from September 2014 till date.

Some of the sources are:

1. PWC reports
2. DIPP Online Publications
3. RBI Online Publications
4. Ministry of Defense annual reports

Analysis has been done with an aim to investigate the changes in FDI inflow and the impact of policy changes.

## ANALYSIS

India is one of the largest defence industrial complexes in the developing world. It consists of 39 ordnance factories, nine defence public sectors undertaking (DPSU) which are under Ministry of Defence. There are about 50 defence research development laboratories that design and develop armaments for the armed forces.

The ordnance factories are offering product range from weapons guns-Rifles, Pistols, Carbines, Tank Guns, Anti-Tank Guns, Field, Ammunitions items-Rockets Launcher and missile systems Rockets, Armored vehicles-MBT Arjun, bullet proof vehicles and Infantry and Artillery Systems such as parachutes comfort High Altitude and Combat Clothing, Uniforms and Clothing.

Defence public sector undertaking (DPSU) such as Hindustan Aeronautics Limited, Bharat Electronics Limited, Mazagon Dock Limited Bharat Dynamics Limited, Goa shipyard and Hindustan shipyard Limited are offering products that range from fighter aircrafts and helicopter, Radars, communication equipment, electronic equipment, destroyers, frigates, submarines, anti-tank guided missiles Guided missile and many more.

India holds the third, fourth and seventh position in terms of military, air force and navy strength respectively. India is positioned sixth in the list of countries with high military expenditure and ranked fourth as an arms importer. Indian defence companies have never been able to capitalise their market beyond 0.7% of GDP. 30% of India's equipment's are manufactured by public sector unit's (PSU).

TABLE 1: COUNTRY WISE DEFENCE EXPENDITURE IN 2015

S. No.	Country	Spending (\$ Billion)	% of GDP
1	USA	597.00	3.30
2	China	215.00	1.90
3	Saudi Arabia	87.20	13.70
4	Russia	66.40	5.40
5	UK	55.50	2.00
6	India	51.30	2.30
7	France	50.90	2.10

Source: <https://www.sipri.org/research/armament-and-disarmament/>

FIGURE 1: COUNTRY WISE DEFENCE EXPENDITURE IN 2015

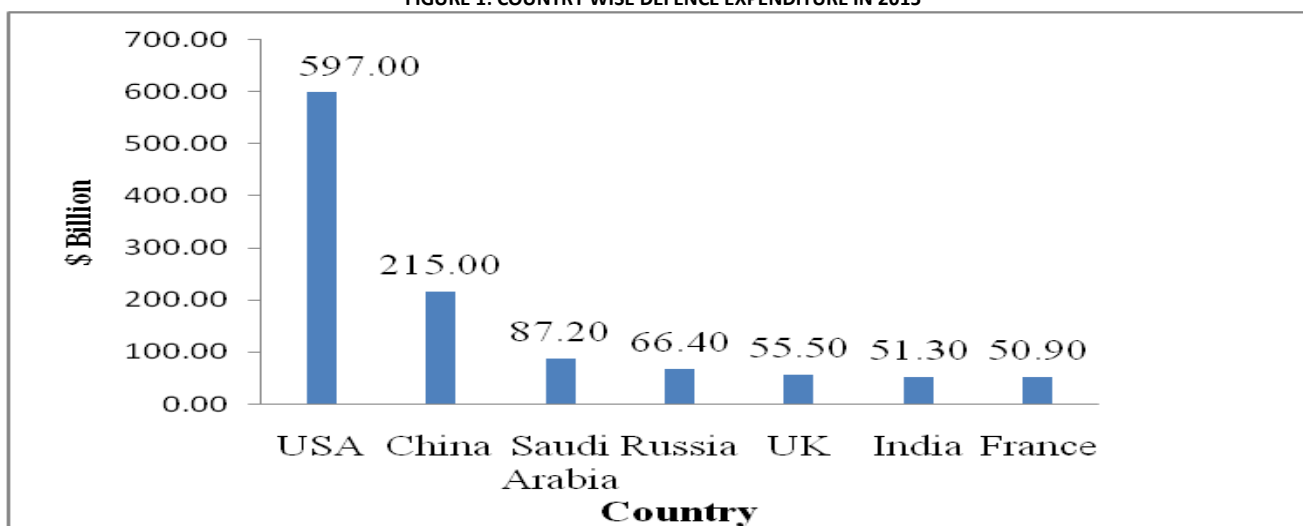


Table 1 and Figure 1 shows that USA was the world largest military spender in 2015, with \$597 billion dollars. The government spends billion dollars to purchase military arms and pay salaries to personnel and contributes 3.30% of gross domestic product. USA spending is 34% of military expenditure. China spend \$215 billion on military expenditures. Over last five years, China is major arm exporter in arms and having direct relationship with economic growth. China spends 1.90% of gross domestic products.

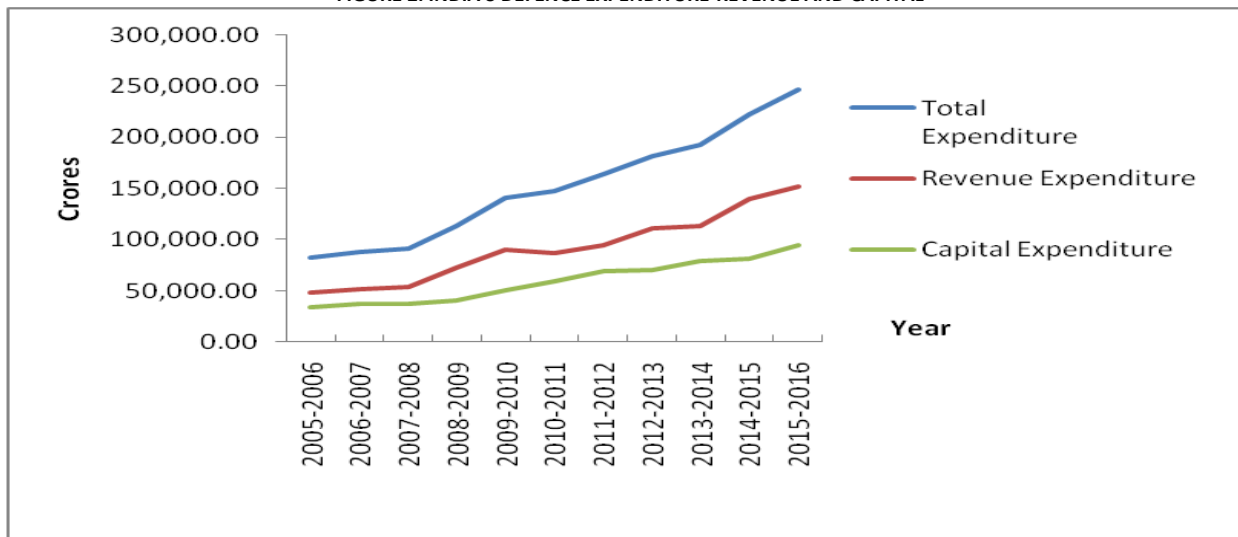
Saudi Arabia has the highest percentage growth in military spending worldwide in 2015 in the Middle East. Saudi Arabia military expenditure is \$87.20 billion in 2015 compared to \$62.8 in 2014.

India's military expenditure is \$51 billion, 15 per cent of the global total and about 2 to 2.5% of gross domestic product.

TABLE 2: INDIA'S DEFENCE EXPENDITURE-REVENUE AND CAPITAL

S. No.	Year	Total Expenditure (INR Crore)	Revenue Expenditure (INR Crore)	Capital Expenditure (INR Crore)
1	2005-2006	83,000.00	48,625.00	34,375.00
2	2006-2007	89,000.00	51,542.00	37,458.00
3	2007-2008	91,680.28	54,218.61	37,461.67
4	2008-2009	114,223.28	73,304.80	40,918.48
5	2009-2010	141,781.08	90,668.72	51,112.36
6	2010-2011	147,344.00	87,344.00	60,000.00
7	2011-2012	164,415.49	95,216.68	69,198.81
8	2012-2013	181,725.77	111,276.65	70,449.12
9	2013-2014	193,407.51	113,828.88	79,578.63
10	2014-2015 (RE)	222,370.00	140,404.80	81,965.20
11	2015-2016	246,727.00	152,139.00	94,588.00

FIGURE 2: INDIA'S DEFENCE EXPENDITURE-REVENUE AND CAPITAL



Tables 2 and Figures 2 shows that the Indian defence budget is divided into two parts, capital and revenue expenditure. The capital expenditure is spent on acquiring new technology, new weapons and army infrastructure development. The capital expenditure for year 2015-2016 is Rs.94, 588 Crore as compare to Rs.81, 965 Crore of budget of 2014-2015 which is an increase of 15%.

The operating expenditure is used to “operate “expenditure of three services. In 2015-2016, the revenue expenditure is increased by 8% compare to 2014-2015. Total defence budget for year 2015-16 has grown by 8 percentage compare to 2014-2015 budget.

Due to the threats from neighbours, obsolete military industry and modernization have forced India to increase expenditure. India Defence public sector unit are not enough capable to indigenization high end technology and product.

TABLE 3: YEAR-WISE FDI EQUITY INFLOWS IN DEFENCE

Amount in INR Crore							
Year	Before Jan-2010	Jan-2011	Jan- 2012	Jan-2013	Jan-2014	Jan-2015	Jan-2016
Amount	6.63	6.87	17.68	19.89	24.36	24.84	25.48

FIGURE 3: YEAR WISE FDI EQUITY INFLOWS IN DEFENCE SECTOR

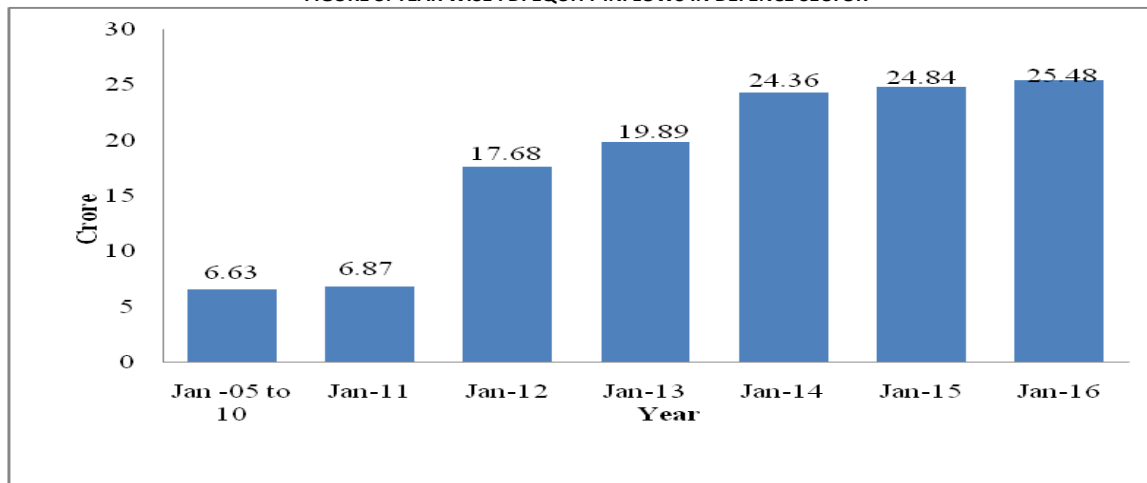


Table 3 and Figure 3 shows FDI in flows into defence sector in India from 2005 to 2016. FDI flow fluctuated from Jan 2005 to Jan 2010 between Rs.2.36 to 6.63 crore. The graph indicates that the defence sector has been able to attract foreign investors significantly. Due to new DPP-2008 and DPP 2011 offset policy, FDI inflows has increased from 6.87 to 24.36 crore from year 2011 to 2015, but due global recession, defence sector is not able to attract FDI inflows significantly.

TABLE 4: DEFENCE CONTRACT DEALS SINCE 2007

S. No.	Company Name	Area	Contract value (\$mn)	Year	Country	Type
1	Zen Technologies	Defence	4.47	2016	Egypt	smart target systems for its military
2	Aeque Private Limited	Aerospace	75	2016	France	A320neo program
3	Mahindra defence	Defence	750	2016	US	145 M777
4	Goa shipyard ltd	Defence	4784.7	2016	Korea	build minesweeping ships
5	TATA Group	Aerospace	56.4	2015	US	787 and Rolls-Royce Trent 1000 and Trent XWB
6	Reliance Defence	Defence	6000	2015	Russia	S-400 air defence systems
7	Taneja Aerospace & Aviation Ltd	Aerospace	1.91	2014	India	upgrade of MiG-29s and AN-32
8	Binani Industries	Aerospace and Defence	360	2012	India	Mfg- Fiber Glass Acquirer
9	Piramal Enterprise	Defence	8	2012	India	Bluebird (Israel)-Acquirer
10	ME Sovereign Fund	Defence	10	2011	India	Aero Facility India
11	NEA & Elephant Capital	Defence	27	2011	India	Aviation MRO
12	Pinebridg	Aerospace	10	2011	India	Maini Global Aerospace
13	L& T –EADS	Aerospace and Defence	20	2011	India	joint venture
14	SIDBI VC	Defence	3.3	2010	India	IT Products (Defence)
15	Mahindra Aerospace Ltd & Kotak Private Equity	Aerospace	35	2009	Australia	Buyout of Aero staff Australia & GippsAero-Acquirer
16	AST Security Equipment	Defence	5	2008	India	MKU-Acquirer
17	IBS Software Services	Defence	4.5	2008	India	VISAer-acquirer
18	New Vernon, Others	Defence	16.2	2008	India	Dynatomic Tech
19	Kotak PE, SIDBI VC	Defence	8	2008	India	Dynaspede Integrated
20	Kubera Partners	Defence	20.05	2007	India	Adayana-PE deal
21	Citadel, Trinity & 2i	Defence	77	2007	India	Pipavav Defence-PE deal
22	Axis Holdings	Defence	1.58	2007	India	Delopt-IT & ITES
23	Blackstone	Defence	65	2007	India	MTAR Tech

FIGURE 4: YEAR WISE CONTRACT AMOUNT SIGNED SINCE 2007 TILL DATE

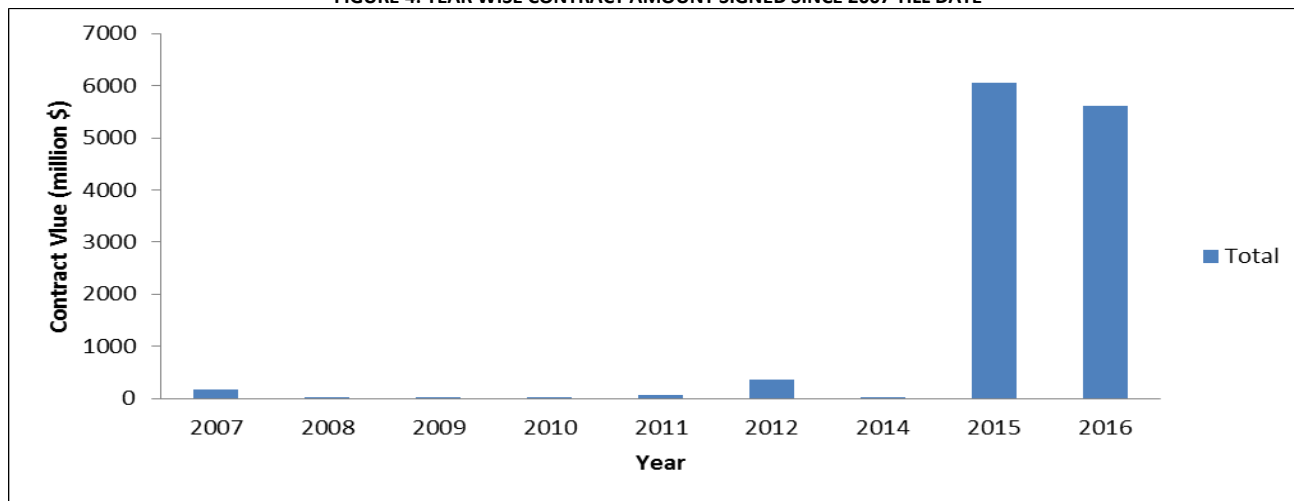


FIGURE 5: NUMBER OF CONTRACTS PER YEAR SINCE 2007 TILL DATE

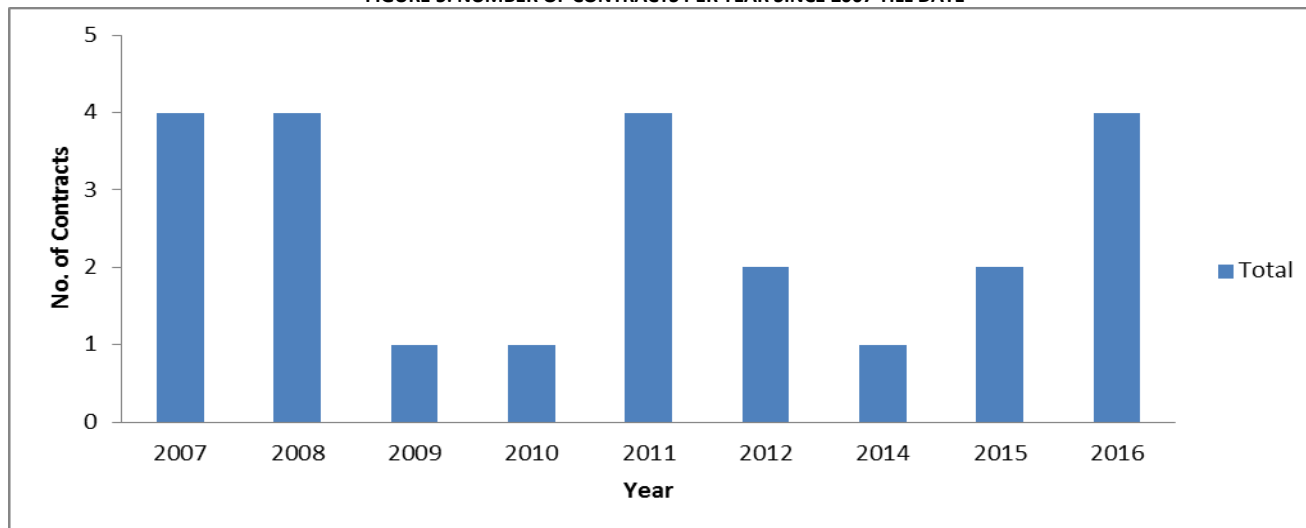


Table 4 and Figure 4 and 5 give an overview of the various deals that have been the highlights in the defence and aerospace sectors. Some of the major players in the Indian automotive industry such as Mahindra, Tata Group, Hinduja Group and other market leaders such as Reliance Industries have been very much active in defence equipment procurement. A major highlight is the acquisition of 3B Fiber Glass Company by the Binani Group of industries, thereby offering advanced and

fibre glass solutions to the defence and aerospace industry. Tata Advanced Systems and other subsidiaries of the Tata Group have also been investing in the defence sector. Make in Indian has encouraged increased participation from private sectors as well.

Figure 4 shows the increasing trend of investments in the defence and aerospace industry. Since the inception of Make in India, there has been an increase not only in the number of contracts signed but also the significant increase in contract amount can be observed. Before September 2014 (date of launch of Make in India) the total contract value signed has been close to 673.63 million dollars. After 2014 till date contracts valued at 1672.43 million dollars have been signed.

Figure 5 gives us the number of contracts signed per year since 2007 till date. Between 2007 and 2012, 16 contracts have been signed amounting to about 673.63 million dollars. From 2014 till date about 7 contracts have been signed valued at 1672.43 million dollars. Hence it can be observed that even though the numbers of contracts have reduced since 2012, but the contract value has increased by 8.99%. Since the inception of Make in India and the changes in policies have encouraged and brought the Indian and Foreign players under one platform. Private companies are now coming to the fore and have made collaborative efforts with both foreign and public companies.

TABLE 5: GDP, GROWTH RATE, DEFENCE EXPENDITURE AND DEFENCE EXPENDITURE AS % OF GDP

S. No.	Year	GDP (Billion USD)	GDP Growth Rate (in %)	Defence Expenditure (INR Crore)	Defence Expenditure as a % of GDP
1	2007	1238.7	8.61	91,680.28	2.34
2	2008	1224.1	3.89	114,223.28	2.55
3	2009	1365.4	8.48	141,781.08	2.89
4	2010	1708.5	10.3	147,344.00	2.71
5	2011	1835.81	6.64	164,415.49	2.65
6	2012	1831.78	5.62	181,725.77	2.53
7	2013	1861.8	6.64	193,407.51	2.46
8	2014	2048.52	7.34	222,370.00	2.48
9	2015	2073.54	7.57	246,727.00	2.42

FIGURE 6: RELATIONSHIP BETWEEN GDP AND DEFENCE EXPENDITURE SINCE 2007 TILL 2015

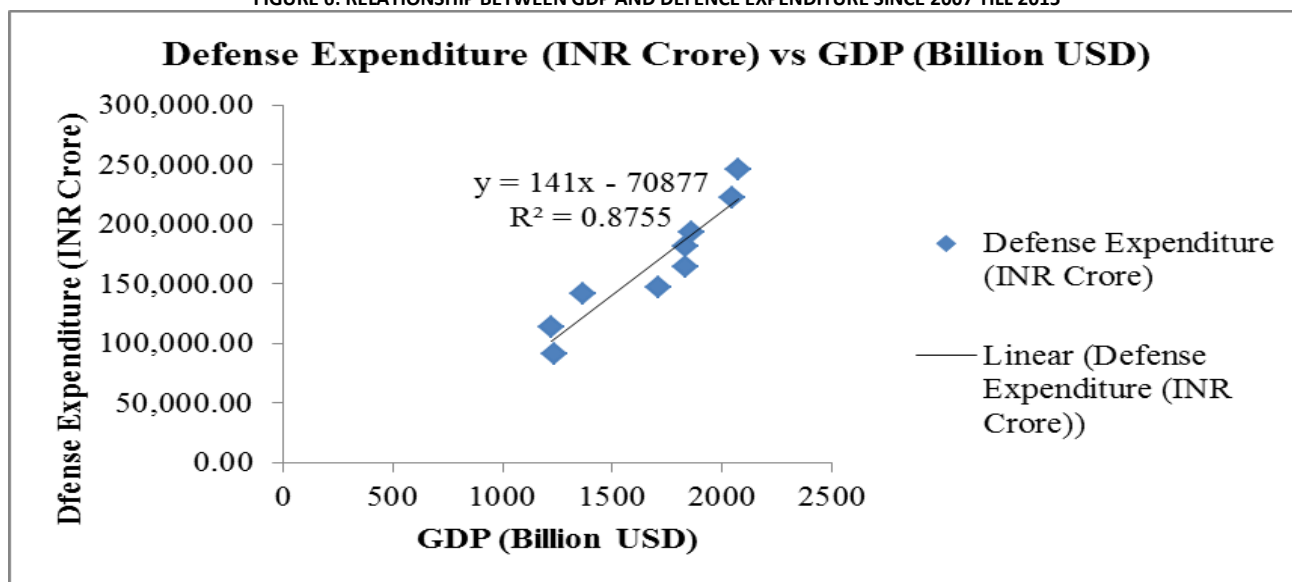


Table 5 and Figure 6 show the relationship between GDP (Billion dollars) and Defence Expenditure (INR Crore) from 2007 till 2015. A positive trend is observed. The co-relation co-efficient is 0.94 which indicates a very high positive co-relation between GDP and Defence Expenditure. As GDP of India has been on the rise since 2007, we been increasing defence expenditure accordingly. Our hypothesis that there is a negative relation between GDP growth and defence expenditure is rejected. A very high positive co-relation is observed that proves that there is a positive relation between GDP growth and defence expenditure.

The Growth rate of India has been fluctuating but our defence expenditure has been increasing between 2007 till 2015. Similarly, if we are to discuss on the growth rate of India we find a weak relation between the two.

Defence expenditure expressed as a % of GDP shows an increasing trend till 2009 after there is a drop.

**CONCLUSION**

As our GDP has increased so has defence expenditure expressed as percentage of GDP been increased and it shows a positive correlation. During the initial years after the economic crisis, only public sector undertaking such HAL was major players in defence manufacturing. Private participation was very limited. Foreign investors did not find investing in the Indian defence sector much attractive.

In 2007, the Indian government revised its defence policies and allowed 26% FDI and the defence market was opened to the private sectors also. Private players such as Tata Advanced Systems, Mahindra and Mahindra, Hinduja Group and Reliance Industries have started investing in various projects as is evident from the report. Foreign investors started showing interest. As FDI was increased to 49%, more investors showed interest in the sector. Private firms now started to form collaborations with the public firms. This public-private partnership led even more development of the defence sector. After the introduction of 100% FDI in the defence sectors under the Make in India scheme, more foreign players such Boeing, Lockheed Martin has shown interest in India. Countries have now shown interest in investing in Indian defence and have various partnerships with both public and private players.

Currently, we observe a positive future for the Indian defence industry. With private-public partnerships and joint ventures of foreign companies with Indian manufacturers, we are now at a stronger position than what we were in 2007. Innovation is the key to success. With Indian players joining hand with foreign majors, we can expect great results. If we analyse our position before and after the advent of Make in India, we can observe a 8.99% rise in the overall value of contracts signed. In future many other contracts will be signed.

However, the fact that we are still dependent on foreign intervention is still a major concern.

We need to become self-reliant as soon as possible. This is our way to succeed under the current scenario. Mr. Manohar Parrikar our defence minister, in his speech on the 26<sup>th</sup> of January/ 2015 stated the need to become self-reliant. He has cited the fact we have the ability to do so and if proper opportunities are given we shall achieve our goal. As per the vision of Make in India, it is now important to focus more on self-reliance. We need to work on our strengths. Mr. Narendra Modi has a great vision and it can be achieved if we direct our efforts towards self-reliance.

While incentives may be used to push Indian defence exports in several categories, there are certain weapons which are widely sought after chiefly on capability grounds by foreign nations. The BrahMos is of course a stand out example, with apparently 15 countries including Vietnam, Indonesia, UAE, Chile, Malaysia, the Philippines, South Africa, Algeria, Greece, Thailand, Egypt, Singapore, Venezuela, Brazil, and even Bulgaria reportedly expressing interest. However, systems such as the Brahmos, though MTCR compliant, will be sold on the basis of a balance of interests. Vietnam, with its key position in the South China Sea theatre and its closeness to Russia, the United States, and Japan is an obvious choice, especially since some in India see it as "our Pakistan." There have been reports that the UAE is also very keen for the BrahMos and that a decision is expected soon, but one should remain sceptical about this given India's ambitions in Iran. India will likely be even more judicious about the air-launched BrahMos once that enters production since all ASEAN Su-27/30 operators may be eyeing it. But then, that is a story for another day.

The future is bright but one must not get complacent as the road is tough but the goal can be achieved. A focused approach is required.

### SUGGESTIONS

Make in India, defence manufacturing permit & FDI relaxation up to 100% has created ample opportunity to private companies. Continuous focus should be done on the analysis of Defence import/export & effects on Indian economy.

Despite of having long presence in India, Indian public sector unit (PSU) are not enough competitive in project initiation, execution & implementation stage, advanced/cutting edge technology. Several reforms are made in the organization level, but failed due to lack of political will. The government needs to prepare long term plan/mechanism for the same.

PSU need to create mechanism to participate/train the people in defence projects.

Job opportunities due to favourable policies created in defence by private sector.

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## CUSTOMERS' PERCEPTION TOWARDS SELECT NON-GEAR VEHICLES IN NORTH GOA: A COMPARATIVE STUDY

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### ABSTRACT

*Goa is a small and beautiful state on the Western Coast of India. The state has population of about 1.45 million and area of 3702 sq. kms. It was given statehood on 30th May 1987 under the Goa, Daman and Diu Reorganization Act 1987. Tourism and mining are the major avenues of revenue. The State of Goa was ruled by Portuguese for nearly 450 years till it was liberated in 1961. Prior to the formation of the state, Goa was a major district of the former Union Territory of Goa, Daman and Diu. There are two districts viz., North Goa and South Goa and twelve talukas in the state. The present study is conducted in North Goa. A large number of non-gear bike riders are there in Goa and majority of them are young women. The perceptions of these modern young women are different from others. The present study revealed that every branded non-gear vehicle in the market has its own pros and cons, need to be studied, modified and introduced as per the needs of the land and people. The young women customers give priority to design, style, look and colour of the non-gear vehicles rather than the speed, the value and the mileage of the non-gear vehicles available in the market. These parameters observed to have dominated their buying decisions.*

### KEYWORDS

bike, Goa, non-gear, perception, transport.

### INTRODUCTION

 Goa is a small and beautiful state on the Western Coast of India. The state has population of about 1.45 million and area of 3702 sq. kms. It was given statehood on 30th May 1987 under the Goa, Daman and Diu Reorganization Act 1987. Tourism and mining are the major avenues of revenue. The State of Goa was ruled by Portuguese for nearly 450 years till it was liberated in 1961. Prior to the formation of the state, Goa was a major district of the former Union Territory of Goa, Daman and Diu. There are two districts viz., North Goa and South Goa and twelve talukas in the state. The present study is conducted in North Goa.

### VEHICLE POPULATION IN GOA

Two decades ago, before the introduction of non-gear vehicles in the country, Goans preferred to buy scooters because of topographical condition of Goa. The population of women riders and drivers increased at a galloping speed led to the sprinting demand for non-gear vehicles in Goa. The Times of India, daily newspapers reported that the registration of non-gear bikes shoot up till mid-October 2015 and the sale and registration of non-gear bikes as against to their geared counter parts has increased. According to statistics shared by the department of transport on the number of newly registered bikes in 2015 shows that 21,463 non-gear two wheelers were registered from January to mid-October this year as against 8,594 geared vehicles. In previous year (2014), 33,470 non-gear two wheelers have been registered as against to 12,749 geared ones.

### REVIEW OF LITERATURE

The research scholars in India have not done a sizable quantum of research to ascertain the perceptions of non-gear vehicle riders. In order to support research problem and find out the research gap, an available research works done on two wheelers in Indian has been referred.

(i) Delli Kumar Koti, et al (2016), analysed consumers' perceptions while purchasing two wheelers in Rayalseema Region in Andhra Pradesh.

### NEED/IMPORTANCE OF THE STUDY

It is observed that most of the studies done on customers' perceptions are relating to other products. The market for geared bikes is drastically reducing in the state of Goa. This perhaps has a lot to do with parking ease and comfortable usage. The non-gear bikes can be used by women, older adults and those with learning licences. The geared bikes are usually restricted to these motor bike users' communities. Many women in Goa purchased non-gear bikes enable everyone to use it irrespective of age group in the family. It comes in handy when someone needs to run errands or travel short distance. The average sale of non-gear bikes at showrooms is gone up to 85 per cent compared to that of the geared ones. The 30 plus working class mostly prefer non-gear bikes for the ease and comfort riding. Even though the common perception is that the non-gear bikes are for young women or female customers, today a transformation is observed that the male riders also preferring non-gear bikes because there is no stress about shifting gears, when in traffic, therefore making it user-friendly. Hence, the need is felt to study of the customers' perception to attract new customers and maintain them for ever.

### STATEMENT OF THE PROBLEM

A large number of two wheeler non-gear bikes riders are there in Goa and majority of them are young women. The perceptions of these modern young women are different from others. The pilot study revealed that every branded non-gear bikes in the market has its own pros and cons, need to be studied, modified and introduced as per the needs of the land and people. This study is need of the hour because the non-gear bikes have already encroached and grabbed the market share of gear bikes in Goa. With this back ground study, a survey was conducted in North Goa district of Goa State by meeting proud owners of non-gear vehicles of select brands viz., Activa, Dio, Maestro, Pleasure and Vespa.

### OBJECTIVES

1. To analyse the profile of non-gear bike owners in North Goa district.
2. To ascertain the perceptions of non-gear bike owners towards their bikes.
3. To find out the factors determining the purchase decisions of non-gear bike owners.

### HYPOTHESIS

A hypothesis is recognised and put for test after doing pilot study.

(i) The young women customers give priority to design, style, look and colour of the non-gear bikes rather than the speed, the mileage and the value of the non-gear vehicles available in the market.

**RESEARCH METHODOLOGY**

Present study is based on primary data collected through pre-tested questionnaire, issued to the non-gear bikes owners and riders, while doing survey in North Goa district. The secondary data is collected from news clips and web site of Government of Goa to give introduction to research study.

**RESULTS AND DISCUSSION**

1. The survey revealed that the general sex ratio of non-gear vehicle owners is 48:52 (Male: Female) in North Goa district. Survey also revealed that Maestro is liked by 18 per cent of the respondents followed by Vespa (17%), Dio (16%), Activa (13%) and Pleasure (12%). Interestingly almost a reverse picture is observed in case of women two wheeler riders i.e. Pleasure is liked by majority of women followed by Dio, Activa, Vespa and Maestro.
2. Survey revealed that a large number (35%) of the young generation between 16-25 years, observed to have purchased non-gear bikes followed by age group of 26-35 years (23%); 20 per cent each from the age groups of 36-45 and 46-56 years. It is also observed that just 2 per cent of the buyers are above 56 years. This indicated that non-gear bikes are actually a comfortable two wheeler, especially for youngsters (college going girls) and old people, who are above 50 years. Among the five brands, taken for study, Dio and Activa (12%) observed to have liked by young buddies and Vespa is liked by old people (3%), who are above 56 years.
3. It is observed that a large (30%) number of non-gear bike owners observed to have fallen under 'not earning group', majority of them are college going students, and also observed that 22 per cent of buyers are from the income group in between Rs. 10,000 to Rs. 20,000 p.m. This indicated that low income group earners, most of them are women, who preferred more mileage, small vehicles and controllable speed. These three basic needs made them to go for non-gear vehicles. It is also observed that Activa is the most popular among the low income earners (less than is 10,000 p.m.) followed by Dio, which is popular among the college going students.
4. The occupation structure revealed that about 32 per cent of non-gear bike owners are working in private concerns followed by student community (27%) and others (41%). Further, the vehicle owners from private employee category observed to have purchased Activa (8%) followed by Vespa (7%); students preferred Dio and others preferred Vespa.
5. The medium size (4 to 5 members) family observed to have preferred Dio (17%), Maestro (15%) and Activa. So far small families (less than 3 members) are concern, the members preferred Maestro (5%) followed by Pleasure (4%). The families with larger number observed to have preferred Pleasure.
6. The survey revealed that two fifth of the total number of the families observed to have two riders in their families followed by one fourth of the families, who have three riders. One fifth of the respondents observed to have one rider and just 4 per cent of the families observed to have five and above riders. In Goa generally people prefer to buy new vehicles. Survey also revealed the same fact that 96 per cent of the vehicle owners purchased from show rooms and the rest 4 per cent have purchased from their relatives and friends.
7. The number of vehicles came on the road increased from single digit to double digits (in terms of percentage), observed to have taken place in the last 3 years. The survey also revealed that there were upward and downward trends in sale of bikes in the past 5 years; sudden jump in sale is observed in the second and third year and again reduction in sale is observed in last year. Pleasure was popular 5 years back; Dio took its place 4 years back again. Dio and Pleasure retain their position 3 years back. Just 2 years back Vespa overtook Activa and Maestro and about a year back Vespa retain its position followed by Maestro.
8. To be owner of two wheelers, about 60 percent of the people observed to have used their own hard earned savings; one third of the people observed to have taken bank loan; about 12 per cent of the respondents, especially students and married women, observed to have got gift from their parents. About 7 percent of the students, especially girls and married women got pleasure bike in the form of gift. Maestro and Activa observed to have purchased with the help of vehicle loans from banks. Dio bike owners purchased their vehicles from their own savings followed by Vespa.
9. Survey revealed that 83 per cent of the bike owners purchased their vehicles as per the advice of the family members and rest 7 percent influenced by friends, colleagues (3%), neighbours (4%) and TV advertisements (3%). If we look at the individual brand and the person influenced, the family members' advice stands first. These family members have influenced on the buyers' purchase decisions effectively. The data says about the degree influence in terms of percentage are Vespa (19%) followed by Maestro (18%), Dio (17%) and Activa (16%).
10. One can see that 48 per cent of the respondents observed to have been using their two wheelers for business purpose or go to work destinations, 26 per cent of them have given their bikes on rental basis and earning money. Majority of them are from coastal belt people in North Goa. About 12 per cent of the respondents, especially students, who purchased non-gear bikes to impress their friends. About one tenth of vehicle owners observed to have purchased as a pride. Hardly 4 per cent of them using their vehicles to go market visit their relatives.
11. Survey revealed that 63 per cent of the people used their vehicles every day, 33 per cent of the bike owners used twice in a week and hardly 4 per cent observed to have used their vehicles twice in a month. Among the 5 brands taken for study, Brand Activa two wheelers (19%) are used by the owners almost every day. Majority of the respondents, who have purchased Vespa have told that their two wheeler performance is Good followed by Maestro owners.
12. In Goa, on an average, one *taluka* place is 30 km. away from another *taluka*. Goan people prefer to go by their own vehicles rather than make use of public transport. These two elements make them to buy their own vehicles and use everywhere. Thirty five per cent of the respondents revealed that they find it comfortable to go for long distance up to 60 km. without much problem and the rest of them found uncomfortable, especially the riders, who crossed 40 years of their life. About 19 per cent of the Dio owners told that Dio is not suitable to go for long distance followed by Maestro. Survey revealed that 53 per cent of the respondents that other factors such as road conditions, small vehicle size, speed, wheel size etc., made them not to go by non-gear vehicle to a far distance. So far individual brands are concerned, the riders opined that Pleasure's seat is uncomfortable and Dio's handle bar is uncomfortable.
13. Today's youngsters are very crazy to have two wheelers of their own. Most of their purchase decisions are influenced by a special character or features of the vehicle. The analysis shows that non-gear vehicle buyers observed to have given priority to Design, Style, Look and Colour (45%) followed by Brand Image (33%), and rest three parameters, Mileage, Speed and Value of the non-gear bikes, which have influenced less on buying decisions. It is also observed that Vespa stood at top so far Brand Image, Design, Style, Look and Colour are concerned followed by Pleasure.

**FINDINGS**

- (i) The sex ratio of non-gear bikes owners in North Goa district is about 1:1 (Male: Female). The orders of preference is given by male are Maestro, Vespa, Dio, Activa and Pleasure. Interestingly almost a reverse picture is observed in case of women two wheeler riders.
- (ii) Survey revealed that a large number of the young generation between 16-25 years, observed to have purchased non-gear bikes followed by age group of 26-35 years. The non-gear bikes are actually a comfortable two wheeler for youngsters and old people, who are above 50 years.
- (iii) It is found that one third of non-gear vehicle owners observed to have fallen under students group and also observed that one fifth of respondents are from the income group of less than Rs. 20,000 p.m.
- (iv) The medium size family observed to have preferred Dio and Maestro; small families preferred Maestro and Pleasure; the families with larger number observed to have preferred Pleasure. If we look at the types of the vehicles used by individual families and the number of riders, the figures indicated that 14 per cent of the vehicle owners preferred Vespa followed Dio (9%). Further also seen that the families in which just one-member rider, is observed to have preferred to purchase Maestro (8%) followed by Dio (5%).
- (v) Deviations in quantum of sales of all five brands are observed in last five years. Most of their purchase decisions are influenced by a special character or special features of the vehicle. The non-gear vehicle buyers observed to have given more priority to Design, Style, Look and Colour followed by Brand Image, Speed, Mileage and Value of the non-gear bikes, which have influenced less on buying decisions. So far Brand Image is concern, Vespa is at top. So far Design, Style, Look and Colour are concerned again Vespa stood at top followed by Pleasure.



**RECOMMENDATIONS / SUGGESTIONS**

- (i) The topography of Goa needs special type of engine to be fitted in non-gear bikes, which can easily climb up hilly areas with a load carrying capacity of two adults.
- (ii) Due to climatic conditions (heavy rain, salty weather and sun light) in Goa, vehicles are getting rusted within a year. The vehicle manufacturers should look into this suggestion given by the respondents and design forthcoming models, which can sustain extreme weather conditions of Goa.

**CONCLUSIONS**

The set hypotheses after doing pilot study, which was put for test proved positively.

- (i) The young women customers give more priority to Design, Style, Look and Colour of the non-gear bikes rather than the Speed, the Mileage and the Value of the non-gear vehicles available in the market observed to have proved positively.

**LIMITATIONS**

- (i) Since the study is conducted with limited sample size of respondents, conclusions arrived based on the data and personal opinions of non-gear vehicle users, hence, the opinions stated in this study cannot be generalised.
- (ii) Since the respondents are selected at random and the area covered is limited, the conclusions arrived cannot be considered as the opinions of non-gear vehicle users of the state of Goa or entire community of non-gear vehicle users of our country.

**SCOPE FOR FURTHER RESEARCH**

Further research can be taken up at state level, which may give concrete conclusions so that non-gear bike manufacturers can design their non-gear vehicles as per the needs and passion of *Goan* people and *Goan* topography. The present study revealed that every vehicle has its own pros and cons, need to be studied, modified and introduced as per the needs of the land and people of Goa.

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**MAKE IN INDIA – OPPORTUNITY FOR MANUFACTURING INDUSTRY IN NAVAL SHIPBUILDING**

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**ABSTRACT**

*The Make in India initiative has generated a lot of enthusiasm in areas of manufacturing in Indian Defence sector. The Ministry of Defence (MoD) has promulgated new Defence Procurement Policy (DPP) early this year. The DPP has effected a number of policy changes, aiming to provide a level playing field to the Indian Private Sector. The authors are undertaking a detailed research study on the impact of 'Make in India' in areas of Naval Warshipbuilding. The aim of the study is to suggest a roadmap for indigenous manufacturing of critical technology equipment that are presently being imported. The research study will be primarily be based upon secondary research data as the information is very sensitive in nature. The authors have explained how Indian Navy moved from 'Buyers' Navy to 'Builders' Navy a long time ago. The frontline warships built in Indian Defence Shipyards in 1990s have earned accolades in International Maritime Exhibitions, participated by global Navies. The Indigenously built ships are reckoned at par with those built by shipyards of advanced countries. However, a large number of warship equipment and systems are still imported. There is a need to manufacture this equipment in India for self-reliance. The authors have touched upon a decade long journey of a business unit of L&T that has been involved in indigenisation of equipment for Indian Navy. The authors have suggested pilot projects in areas promulgated by Indian Navy as target systems for indigenisation. The authors have briefly described the steps required for adaptation of an equipment for naval applications. The authors intend to undertake detailed research study and come up with a concrete roadmap for creating Life Cycle Support capacity within the country for critical technology areas in naval shipbuilding.*

**KEYWORDS**

warshipbuilding, defence procurement policy, naval indigenisation plan, technology transfer.

**INTRODUCTION**

Indian Naval shipbuilding is poised at an ambitious and aggressive phase to counter the strategic threat posed globally. Buoyed by the success of indigenous naval shipbuilding in past 3 to 4 decades and the catalytic effect of 'Make in India (MII)' initiative of the Government of India (GoI), Indian Navy has chalked out a plan to grow into a strong 200 plus blue water fleet by year 2027. Therefore, at the outset, it is prudent to dwell upon some relevant aspects of MII initiative and their significance in Naval Shipbuilding.

The 'Make in India' (MII) drive of the Hon'ble Prime Minister Mr. Narendra Modi offers a way of improving the country's self-reliance in defence production. However, for the MII to succeed in the defence manufacturing sector, the government needs to address some legacy issues. These are related to 'Establishing a Defence Minister's Council on Production (DCMP) to prepare a long term roadmap', 'converting the Long Term Integrated Perspective Plan (LTIPP) of the Indian armed forces into a defence manufacturing and R&D plan', 'promoting a certain degree of defence research and development outside the Defence Research and Development Organisation (DRDO)', among other issues. However, the most important legacy issue to address is to 'treat the private sector as an equal partner and expedite big-ticket contracts to be awarded to them under the 'Make' and 'Buy and Make (Indian)' procurement categories'.

In pursuance of the MII drive, the Defence Ministry (MoD) has tried to bring about some policy changes in the defence procurement procedures. The MoD announced the new 'Defence Procurement Policy (DPP) – 2016 on 28<sup>th</sup> March 2016. This DPP was formally released in June 2016. In the preamble of the DPP-2016, the Hon'ble Raksha Mantri has brought out the focus on the MII in a straight forward manner. The DPP-2016 lays down significant emphasis on establishing balance between competing requirements such as expeditious procurement, high quality standards and appropriate costs while maintaining highest standards of probity and public accountability. It acknowledges the immense potential to leverage the manpower and engineering capability within the country for attaining self-reliance in design, development and manufacturing in defence sector. The DPP focuses on institutionalising, streamlining and simplifying defence procurement procedure to give a boost to 'Make in India' initiative of the Government of India, by promoting design, development and manufacturing of defence equipment, platforms, systems and sub-systems. The essence of spirit of the DPP can be summarized as follows: -

**"It is, therefore, of utmost importance that the concept of 'Make in India' remains the focal point of defence acquisition policy/ procedure."**<sup>1</sup>

The DPP-2016 has generated significant enthusiasm in the Indian Industry involved in manufacturing in defence sector. Such an environment has been sought by major industry players and institutions like FICl, CII, L&T (Larsen & Toubro) etc. for a very long time. The DPP-2016, is yet to percolate to the ground level where the Indian Industry starts contributing in a big way towards defence manufacturing. However, the stage is set for manufacturing houses to commence restructuring of the internal processes and getting collaborations/ joint ventures with global technology leaders in place so as to be ready for fulfilling the trust and confidence posed by the MII initiative in them.

**BACKGROUND**

India is not new to shipbuilding. The history has documented ships being built in the country as early as 3000 BC to 1500 BC. This is evident by unearthing of a dry dock during excavation of Lothal, a major port city of erstwhile Harrappan civilization of India. This dry dock was used for ship repairs as well as ship building. Down the years, HMS Trincomalee was built in Bombay in early 19<sup>th</sup> century for British Navy. The acknowledgement of India's shipbuilding capability worldwide finds ample mention in recorded history. Various naval powers had been sourcing their requirement of ships from shipyards in India. Indian shipbuilding saw a dark age during British rule. While laying the foundation stone of Scindia Shipyard (now Hindustan Shipyard) in Visakhapatnam on 21 Jun 1941, Dr Rajendra Prasad summarized thus:

*"Indian shipbuilding was thus able to hold on its own till about 1840. But India had to go to wall, in the interest of British shipping."*<sup>2</sup>

However, post-independence, Indian Navy put its act together and commenced indigenous warshipbuilding in Defence shipyards viz. Mazagon Dock Shipbuilders Ltd. (MDL), Mumbai, Garden Reach Shipbuilders and Engineers (GRSE), Kolkata early on. The upgraded Leander Class ships, were built by MDL under 'License Production'. The Nilgiri-class frigates, an updated versions of the Leander class ships, were designed and built for the Indian Navy by Mazagon Dock Limited in Mumbai. Six ships were built between 1972 and 1981. Vessels of this class formed the 14<sup>th</sup> Frigate Squadron. The lead ship INS Nilgiri was the first major warship to be built in India in collaboration with Yarrow Shipbuilders of the United Kingdom. However, Indian Navy did not have in-house design capability at this stage and was dependent upon foreign Navies and shipyards for the design documentation. Navy was quick to set up a correcting mechanism for that and the capability was gradually developed in the design directorate of the Indian Navy.

The Indian Naval Shipbuilding came of age in 1990s with the production of Delhi Class Guided Missile Destroyers at MDL. Three ships viz. INS Delhi, INS Mysore and INS Mumbai were built and commissioned in the Indian Navy through 1997 to 2002. These ships were designed indigenously and Indian Navy is proud to the fact that these ships evoked awe and inspiration in the world naval powers during International Maritime Exhibitions. The first exhibition was held at Langkawi Malaysia in year 1997 where INS Delhi showcased the capability of India in warshipbuilding. INS Mumbai took part in International exhibition at Abu Dhabi in year 2003. The author is proud to be an integral part of the shipbuilding endeavor of Delhi Class Destroyers for more than a decade in various capacities; designer, overseer and crew. Indigenous Naval Shipbuilding has not looked back and every year a ship or two are launched or commissioned for Indian Navy in Indian Shipyards.

Having achieved indigenous capability in ship design, Indian Navy focused on the equipment that go inside a ship. It was realized that much was to be achieved for it to be truly a warshipbuilders' nation. The self-reliance is established as far as the design and construction of the ship 'Hull' is concerned. But a ship is not Hull alone. The hull has to house a plethora of equipment, machinery and systems that make the 'Hull' a 'Mean Fighting Machine'. This is an area where much is left to be desired for achieving the 'Make in India' aspect in naval shipbuilding in 'Letter and Spirit';

At this stage, it is important to take stock of what goes into a warship and, more importantly, how much of it is indigenous. A Naval ship has equipment that can be broadly classified in three categories; Float, Move and Flight. The Float category pertains to equipment and machinery that help ship float in water. The steel hull of the ship constitutes a major portion of this category. The Move category pertains to equipment and machinery helping the ship move in water. The flight category includes radars, weapons, guns, missile systems, torpedo launch systems etc. Further, some special ships like Aircraft Carriers and submarines have specialized equipment.

A majority of 'Float' material, equipment and systems are indigenous. About 50% of the 'Move' equipment & systems are indigenous. However, a majority of the 'Fight' equipment and specialized equipment for Aircraft Carrier & Submarine are imported. Indian Navy has all along been aware of this fact and has been laying emphasis on indigenisation. However, Indian Navy took a while to come out with a comprehensive Indigenisation Plan in year 2015.

### INDIAN NAVY'S INDIGENISATION PLAN

As brought out earlier, Indian Navy has moved from 'Buyer's' to 'Builder's' Navy a long time ago. Indigenous shipbuilding has been reckoned a successful venture with the induction of Delhi Class Guided Missile Destroyers in late 1990s. These ships were built with total in-house design capability of Indian Navy and Mazagon Dock & Shipbuilders (MDL). Though these ships were designed and constructed indigenously, almost all the specialized systems and equipment were imported. It was then realized that Indian Navy must explore domestic industry to substitute these imports with indigenous equipment.

### PROBLEMS WITH IMPORTS

An imported equipment comes with its share of problems. It is generally observed that the foreign supplier delivers the equipment and makes it operational onboard ship. Proper technology transfer and training of the Indian crew are invariably deficient. Therefore, the Navy is not able to exploit and maintain the imported equipment optimally, necessitating deputation of foreign supplier's technicians or engineers. This is a costly proposition involving expenditure to the tune of thousands of Dollars per day. Further, there is a fear of support denial in scenario of conflicts. It is observed that, more often than not, the equipment becomes 'Unsupportable' after the expiry of warranty period. There have been instances where Navy had to resort to 'Cannibalisation' of spares from a ship under refit, to keep the fleet operational. The upgrades are not available making the equipment 'Obsolete' in a short time. This situation has been experienced by Navy for equipment imported from Western world or even from Russia who is a staunch supporter of India in defence equipment supplies.

Indian Navy had realized the perils of importing equipment all along. There were indigenization drives undertaken at various formation and levels in Navy, however, a holistic approach had been long desired. The Make in India initiative gave the necessary impetus to Navy's Think Tank prompting a comprehensive document on this aspect.

Indian Navy came out with an Indigenisation plan and commenced exploring Indian industry for sourcing this equipment. Some of the relevant areas are listed below: -

- Electric Propulsion Motor operating at of 6.6 KV with a capacity of 3 MW and above (AC motors as well as and DC motors)
- Active Front End Drive
- Power management systems associated with motors and drives mentioned above
- Diesel generators of 1 MW capacity and above
- Diesel generator control systems
- Gas turbines and Gas turbine Generators
- Gas Turbine Control Systems
- Submarine Motion control systems and submarine equipment
- Navigation radars and Inertial navigation systems
- Global positioning systems
- Weapon radars and missile systems

Indian Navy has listed equipment and systems for indigenisation is its Indigenisation Plan.<sup>3</sup>

### ROLE OF INDIAN INDUSTRY IN NAVAL SHIPBUILDING

It is pertinent to mention here that the Indian industry has been active in naval shipbuilding for quite some time now. A majority of warship equipment in Float category is sourced indigenously. A significant portion of the Move category is also sourced indigenously. Actually, the Indian industry has always been technologically at par with many of the equipment and systems onboard a warship. But these 'Industrial' equipment are not readily suitable for shipborne applications. Some of the typical hazards onboard a warships are shock, vibration, corrosion, humidity and electromagnetic interference. An equipment has to be ruggedized and tested for immunity for the above hazards prior to its induction into Navy. The situation is valid even today. Therefore, an easy way to gain successful entry into naval shipbuilding is by mapping industrial products for functional suitability and getting them 'ruggedized'. Then there are some areas which are not applicable to Indian industry and, hence, these technologies have to be 'Imported'. Examples are engines, generators & associated control systems, magnetic stealth of the ship, navigation equipment, missile systems etc. Indian firms viz. L&T, Tata Group of Companies, Mahendra Defence. Kirloskar Group. Kalyani Group, Bharat Forge, Walchandnagar Group and many other firms have established indigenous manufacturing facilities and are supporting Indian Navy in achieving desired levels of Indigenisation.

L&T identified global technology leaders and set about developing indigenous capability by adopting 'Knowledge Acquisition' model. A business model was developed to ensure the financial interests of the technology provides as well as L&T and also satisfying indigenisation needs of the Indian Navy. The journey of this nascent group of L&T is given below in brief.

### ROLE OF L&T – ELECTRICAL AND AUTOMATION IC

The Electrical & Automation Marine Business of L&T came into existence a decade ago. In this short time, the group has demonstrated knowledge acquisition model with global partnership approach and indigenised the complete range of electrical and automation equipment of a warship. Today, this group has a unique distinction of being the only group in eastern globe with capability to cover the electrical and automation range of a warship in a 'Turnkey' model. The business group has delivered several 'Single Window Solution' projects for warships of Indian Navy. The global footprints have also commenced with sizable supplies to Royal Malaysian Navy, Sri Lankan Navy and Mauritius Navy. Some of the global partners and the technology areas are listed below: -

- (a) Magnetic stealth of a warship with technology tie-up with Thales, France, Ultra, UK and STL, Germany.

- (b) Platform Management Systems with Servowatch, UK. (L&T acquired Servowatch in year 2012).
- (c) Medium Voltage Switchgear with TAMCO, Malaysia. (L&T acquired TAMCO in year 2008).
- (d) Gas Turbine monitoring and control with Zorya Mashproekt, Ukraine.

### ROLE OF OTHER FIRMS

In addition to L&T, a number of firms are active in defence manufacturing sector. Notably among them are Tata Advance Systems, Tata Power, Mahendra Defence, Bharat Forge, Kalyani Group. These forms have been supporting the indigenisation drive of Indian Navy for the past three decades or so. However, before the launch of MII drive and promulgation of DPP-2016, there was a strong bias on imports as the taxation and commercial regulations favoured imports. A level playing field was not available to Indian Industry. The DPP-2016 is expected to remove this bias and promote local manufacturing.

### RELEVANCE OF THE STUDY

There is a huge opportunity for the Indian Manufacturing sector to implement the 'Make in India' dream true by producing the equipment within the country. This paper aims to bring about the indigenisation plans of the Indian Navy in the coming decade or so and the opportunity it provides for the manufacturing industry in areas of electrical, power electronics, control systems and power generation. The paper will suggest a broad roadmap for indigenous manufacturing of these equipment as pilot projects, keeping in mind profitability and business viability for the private industry. As brought out earlier, a large number of warships and submarine equipment are predominantly imported even today and the business potential for import substitution is significant. At a rough estimate, Indian Navy will be spending sums to the tune of hundreds to thousands of Crores on import of equipment over the period till year 2030. The annual return for the industry depends upon building of capability and capacity within the country with collaboration between Indian Industry as well as with global technology leaders. The scope of paper is restricted to the technological and technical aspects of the process that can benefit Indian Industry and Indian Navy and do justice to the confidence posed by the MII on Indian Industry. However, a flavor of the potential is essential to evoke enthusiastic response from firms.

"It is envisaged that the Indian Navy will be placing orders for more than 90 vessels by year 2027. Further, a total of about 60 vessels are currently on order on Defence and private shipyards. This ambitious plan entails a capital expenditure on about INR 847000 Crore by year 2027".<sup>4</sup> At a very conservative estimate, a potential of Rs. 17,500 Cr (roughly 2%) exists for equipment and systems mentioned above. On an average, the potential works out to be about Rs. 1200 Cr per year. In the first few years, the potential may be less as Indian Industry may not be able to substitute the imports, but with methodical capability building, the potential in the subsequent years will increase.

### SCOPE OF THE STUDY

As mentioned earlier, the scope of this paper precludes estimation of accurate potential at this stage, the mapping of potential will be undertaken as part of a detailed research study subsequently. The scope of the paper is limited to drawing up a roadmap for pilot projects for the technologies listed earlier in this paper. The paper explores the opportunities and challenges thrown up by MII in Indian Naval Shipbuilding context. The paper restricts its scope to induction of new technology in the 'Electrical and Automation' areas of naval warship building. The paper keeps a sharp focus on the underlying spirit of MII, i.e. capability and capacity building within the country to be able to attain 'Self Reliance' in providing 'Life Cycle Support' to strategic technology areas in Defence Sector.

### OBJECTIVES OF THE RESEARCH PAPER

1. Understand the significance of Make in India initiative on indigenous warshipbuilding
2. Understand the new Defence Procurement Policy
3. Build up a case for indigenous manufacturing of equipment and systems for the Indian Navy by initiating pilot projects in suggested area
4. Study the steps involved in induction of equipment in Indian Navy

### RESEARCH METHODOLOGY

The research methodology will mainly cover secondary research as the information is very sensitive in nature and confidential.

#### ROADMAP FOR PILOT PROJECTS

The technology for induction into the Indian Navy is not 'Unmanageable'. A number of companies in India are dealing with similar equipment and also equipment of higher technology. Therefore, a manageable paradigm shift in the operations of the industry can be the game changer. This paradigm shift primarily pertains to the following two areas

- Adaptation of the equipment for naval environment, i.e. taking into aspects of shock, vibration, electromagnetic interference etc. at the design stage.
- Understanding the procurement procedure of Indian Navy and following the steps for indigenisation of an equipment.

It is suggested that the industry take up manufacture of following equipment locally:

- Alternators of 1 MW capacity
- Static Frequency Converters of 300 KW capacity
- Uninterruptible Power Supplies of 300 KW capacity
- Battery Monitoring system for submarines
- DC Motors of various capacities for submarines
- Power supplies for Avionics on Aircraft Carrier
- Lift Control System on Aircraft Carrier

It is suggested to undertake pilot projects to establish the process and capability of getting these successfully inducted into Navy. All the above equipment can be straightaway adapted from industrial systems to naval systems. According to the researchers, no technology transfer from a global player is involved for these equipment as they are in abundant use in civil industry. There are many similar areas and once a headway is made, further avenues will automatically unfold.

**Larsen & Toubro offers to undertake the coordinating role in facilitating the interested industry player in entry into Indian Navy. In some areas, it may necessitate formation of a consortium with a DRDO Laboratory.**

### ROADMAP FOR THE INDIAN INDUSTRY – DISCUSSION POINTS

The detailed mapping the financial potential in terms of revenue and profits will be undertaken as part of a detailed research study by the authors. Further the requirement of capital investment involved in setting up manufacturing units for some of the equipment will also be undertaken in the detailed research study. Some areas need no capital investment and the existing manufacturing set-up can be fine-tuned into a dedicated assembly line to adapt the products for naval use.

The typical steps involved in induction of a new technology are listed below: -

#### WITH INDIGENOUS CAPABILITY

- **Identification of the technology area in line with the expertise of the business group and requirement of naval ships:** This step may take upto three months and involves discussions with naval authorities and visits onboard naval ships.
- **Preparing a project plan in consultation with Navy:** This plan can be prepared parallelly while interacting with Navy and can be concurrently ready on conclusion of identification of the equipment. This plan would typically have following steps.

- **Design adaptation of equipment:** This is a very crucial stage and a thorough involvement of competent design engineers with naval specialists is required. The success of the induction is heavily dependent upon the thoroughness of the design adaptation of the equipment. This process may take between 3 to 6 months. Parallely, the trials schedule can be drawn and approved by Navy.
- **Manufacturing Cycle:** A prototype equipment is manufactured and subjected to the functional trials. This step may also take upto 3 months.
- **Environmental Testing:** The prototype equipment is subjected to various trials in naval test facilities and laboratories. This process needs very meticulous project management as this process involves movement of the equipment across the country, testing into environmental chambers and correction in the event of failures. This process will take minimum three months. The success of the testing is dependent upon robust design, good manufacturing and thorough testing by internal Quality Assurance team.
- **Trials onboard a Warship:** On successful functional and environmental trials of the equipment, Navy nominates one of the warships where the equipment can be installed for trials in real environment. The duration of the trials may be between 3 to 6 months. This step also involves meticulous project management as the ship availability is crucial for this stage.
- **Empanelment of the Supplier:** After all the steps listed above, Indian Navy empanels the supplier for the subject equipment and a notification to this effect is issued to all shipyards. Then the regular procurement process begins.

#### GLOBAL TECHNOLOGY TRANSFER

Some of the technologies are not available within the country. Therefore, it is imperative to tie-up with a global technology leader. The new DPP has helped Indian industry in this area significantly by giving incentives for indigenous manufacturing by technology transfer.

The steps involved are similar as above. In addition, the technology leader becomes a part of the induction process. There are complex financial considerations for settlement before the technology transfer can take place. Further, knowledge acquisition and making Indian team capable of providing service support is imperative. One cannot resort to seeking intervention of the foreign engineers for support as the costs are prohibitive. Some of technologies may need substantial capital investment. Some of the technologies for induction within a time frame of 5-10 years are listed below: -

- Propulsion Motors of 6.6 KV with 5 MW capacity
- Active Front End Drives and associated power management systems
- Rugged Transformers 6.6KV/ 415 V of 3 MW rating
- DC Motors for submarine propulsion
- Electromagnetic Aircraft Launch Systems (EMALS) and equivalent Advanced Arrester Gears (AAG)
- Gas Turbine Generators
- Gas Turbine Control system

#### CONCLUSION AND RECOMMENDATIONS

The Defence Procurement Policy – 2016 issued in consonance with the Make in India initiative of Shri Narendra Modi has thrown open avenues for Indian Manufacturing sector for making a grand entry into Naval shipbuilding areas. Indian Navy has an ambitious plan of induction of a number of warships in next 10 to 15 years. Indian Navy has also promulgated a list of equipment that are being imported. The DPP favours indigenous capability building and the time is ripe for the industry for setting up manufacturing base for these equipment. This can be done with full indigenous capability, either by a single player, or by formation of a consortium. In some cases, the consortium may involve a DRDO establishment and Academia. Some technologies that are not available locally can be inducted by forming suitable alliances with global technology leaders. The EAIC Marine Business of Larsen & Toubro has a proven track record of more than a decade of Indigenisation of Naval equipment. L&T today enjoys a partnership status with Indian Navy in establishing indigenous Life Cycle capability in the country for supporting Naval warships. L&T offers to take a coordinating role in facilitating manufacturing industry to approach Indian Navy with their offerings in the listed areas. There is an opportunity in exports of these warship equipment to foreign navies also. Therefore, it is time for the Indian manufacturing industry to take the big leap in making the dream of Make in India a reality.

Naval shipbuilding at the private shipyard is in its nascent stage and therefore is facing considerable challenges. Proactive measures therefore need to be adopted to plug the existing loop holes in warship contracts and improve warship acquisition through competitive bidding. The shipbuilding industrial base in the long run will bring about economic benefits along with quality and efficiency in construction and repair of warships. Naval and Coastguard expansion and the promotion of indigenous manufacture in keeping with the "Make in India" campaign can offer unprecedented opportunities to all the stake holders. The private shipbuilding industry needs to rise to the occasion with enhanced competitiveness and graduate towards a reliable and resilient pillar in nation building.

Investment in modern defence equipment involves heavy initial expenditure with long gestation period before income starts flowing in. In India, the government has the capability of investing large amounts for developing a product, and the private industry has the ability to speedily absorb and produce a product. So co-operation between the original equipment manufacturer, the government agencies and the private sector will pave the way for high degree of indigenization for such critical systems.

Advanced Navies are already making rapid strides in various associated areas towards enhancing their capabilities. The Indian Navy also needs to be the prime mover for indigenous development & early realization of such capabilities. This assumes urgency keeping in view of the large gestation period of these and resultant ship building efforts.

#### LIMITATIONS

The proposed research study by the authors aims to suggest optimum methodology for induction of cutting-edge technology in the Indian Navy. However, no such research has been undertaken prior to this proposed study. Also, a large amount of information is in the restricted domain and needs sensitive handling. Therefore, the research methodology and research design for the proposed study is largely based upon secondary data collection by means of structured interviews of personnel from Indian Navy, defence shipyards, Ministry of Defence, FICCI, CII and prominent Indian industry players like L&T, Tata Group, Kalyani Group etc. The research study will map the potential for tapping by the Indian industry in the next 15 years and the steps required to be taken to be able to convert the potential into business. The present paper is merely a prelude to the details research study.

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## APPROACHES AND VIEWS TOWARDS CORPORATE SOCIAL RESPONSIBILITY: A CONCEPTUAL STUDY

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### ABSTRACT

Almost in all the workshops, seminars and conferences, very loud comments are passed, quite often, on the topic of 'Corporate Social Responsibility. The word 'Corporate Social Responsibility' can roughly be defined as an obligation of a Corporate Organization to protect and enhance the society within which it operates. It can also be defined as the Ethical Behavior of a Company towards the Society, at large. The broad areas of Corporate Social Responsibility include Ecology and Environmental Quality, Consumerism, Community Requirements, Relationship with the government, Minorities and Disadvantageous Persons, Relationships with Labors, Relationships with Share Holders. The approaches towards Corporate Social Responsibility include Social Opposition, Social Obligation, Social Responsibility and Social Contribution. Moreover, arguments for Corporate Social Responsibility include Public Expectations and resultant Image, Dominance of the Competitors, Favorable Environment leading to Corporate Success, Overcoming Government Rules and Regulations, Maintenance and Development of Goodwill, Appropriate Utility of Corporate Resources, Courteous Social Behavior Augmenting Profits, Assured Survival and Stability. Arguments against Corporate Social Responsibility cover Loss of Profit Maximization, Dominance of the Competitors, Favorable Environment leading to Corporate Success, Overcoming Government Rules and Regulations, Maintenance and Development of Goodwill, Appropriate Utility of Corporate Resources, Courteous Social Behavior Augmenting Profits. This Research Paper studies the conceptual understanding of corporate Social Responsibility and tests various views and approaches towards the same.

### KEYWORDS

social opposition, social obligation, social responsibility and social contribution.

### INTRODUCTION

Corporate Social Responsibility is one of the major trends in modern business. Almost in all the workshops, seminars and conferences, very loud comments are passed, quite often, on the topic of 'Corporate Social Responsibility. The idea of Corporate Social Responsibility emerged for the first time in the year 1953, sixty-three years earlier.

Sometimes, Corporate Social Responsibility (CSR) is roughly interpreted as an Academic Discipline. This means that it is a coherent body of knowledge addressing a central theme. Prime focus of Corporate Social Responsibility is on the relationship existing between the business and wider society and also as to how it can be managed, quite effectively, in practice. Moreover, Corporate Social Responsibility can also be presented as a Management Approach that is a technical and instrumental response to the overall business environment.

As a matter of fact, Corporate Social Responsibility should ideally be treated as a field which includes both the Academic and Practitioner perspective. Furthermore, the overall constituents related to Corporate Social Responsibility get affected either favorably or adversely because of the very existence of the Corporate Organization, in itself and moreover its performance, in the society. The society, just referred to, consists of different elements like Customers, Employees (also termed as Internal Customers), Creditors, Competitors, Suppliers, Shareholders, State Government, Internal Groups, Community Groups, to mention a few.

### REVIEW OF LITERATURE

India has the world's richest tradition or heritage of Corporate Social Responsibility. In India, this concept predates back to **Mauryan History** where the great philosopher like **Kautilya** emphasized on Ethical Practices and Principles while conducting business. In fact, it is practiced since ancient times, though not in the formal form, but, no doubt, in informal form of charity to the poor, the needy and the disadvantaged people from the community. India has a Penetrated Culture of 'Sharing and Caring' as the same is reflected through several scriptures at various places which highlight the significance of sharing one's earning with the deprived members of the society.

Further, in the words of **Dietrich Bonhoeffer**, "Action springs not from thought, but from a readiness for responsibility." In other words, actions towards Social Responsibility can surely spring only when the society, as a whole, is really ready to accept Social Responsibility, as a concept and also in principle. **Carroll** views Corporate Social Responsibility as a Multilayered Concept that can be divided into four interrelated Responsibilities, namely, Economic Responsibilities, Legal Responsibilities, Ethical Responsibilities and Philanthropic Responsibilities and further comments that it is a concept whereby the Companies integrate Social, Environmental and Health concerns in their Business Strategy and Operations and also in their interactions with the stakeholders on a voluntary basis. The Social Responsibility of Business encompasses the Economic, Legal, Ethical and discretionary expectations that society has of the organization at a given point in time. According to **Donaldson T., and L. E. Preston**, who are pioneers of Stakeholder Theory, Corporate Social Responsibility is based on the Stakeholder Theory of the firm, which contends that companies are not managed purely in the interests of their shareholders alone. Rather, there is a range of Stakeholders that have a legitimate interest in the Company as well.

**Amaeshi** pointed out that the precise nature of Corporate Social Responsibility is understood in different ways, with differences in understanding or representation of the concept relatable to different paradigms and concerns. Although there are several contested notions of what Corporate Social Responsibility should be and how it should work, there is some agreement upon what it broadly entails. A number of concepts and issues are subsumed under the heading of Corporate Social Responsibility, including Human Rights, Environmental Responsibility, Diversity Management, Sustainability and Philanthropy meaning that it is a complex area with an interdisciplinary focus.

In a study conducted by **Brammer, Jackson and Matten** and titled as 'Corporate Social Responsibility and Institutional Theory; new perspective on Private Governance' it was concluded that Corporate Social Responsibility is not only a voluntary action but beyond that. Regulation or Governance is necessary for enhancing Corporate Social Performance of businesses through Corporate Social Responsibility.

**European Union** describes Corporate Social Responsibility as the concept that an Enterprise is accountable for its impact on all relevant stakeholders. It is the continuing commitment by the business to behave fairly and responsibly and contribute to Economic Development while improving the quality of life of the work force and their families as well as of the local community and society at large. **Narayan Murthy**, the Founder of 'Infosys,' states that Corporate Social Responsibility is to create maximum Share Holders value working under the circumstances, where it is fair to all its Stakeholders, Workers, Consumers, the Community, the Government and the Environment. According to **Das Gupta**, today Corporate Social Responsibility has gone beyond merely 'Charity and Donations' and is approached in a more organized fashion, it has become an integral part of the Corporate Strategy.

After detail scrutiny of Annual Reports and Balance Sheets of leading Corporate in India like **BHEL, Indian Airlines, Bharat Petroleum Corporation Ltd., Maruti Suzuki India Ltd., Hindustan Unilever Ltd., IBM, Tata Steel, Reliance Industries, HSBC India, Standard Chartered Bank, Max New York Life Insurance Company, SAP India, Oil and Natural Gas Commission, ONGC, Infosys**, to name a few, it is comfortably and empirically inferred by the Researcher that they are involved in Corporate Social Responsibility Programs in many areas like **Education, Health, Livelihood Creation, Skill Development, Empowerment of Weaker Sections of the Society, Promotion of Culture and Rural Development, Disaster Management, Adoption of Villages, Provision of Medical and Sanitation Facilities, Building of Schools and Houses, Arrangement of Teaching Schedules Vocational and Business Skills for making villagers Self-reliant and Self-sufficient, Joining hands with Tribal Development Department for Upliftment of Tribal, Improvement of Agricultural Productivity for raising standard of living of poor farmers, Coordination**

*of Projects, for example, 'Drishti' for visually challenged Indians from the Economically Weaker Sections of the Society, Initiation of 'Green Movement,' Short-term and Long-term Rehabilitation of Victims of Natural Calamities or Acts of God, etc.*

There is a real need to create awareness about Corporate Social Responsibility among the Public at large in order to make such initiatives practically highly effective. It is quite difficult for any one Organization to bring about desirable change as it is required on a very massive scale. It may necessarily not, at all, be out of place to suggest over here that fruitful and beneficial partnerships or collaborations among different Corporate Houses, NGOs and the Government should be encouraged so that overall Social Development of India should result at a fast rate.

## DEFINITIONS OF CORPORATE SOCIAL RESPONSIBILITY

After undertaking review of pertinent literature related to the concept of Corporate Social Responsibility, one can certainly arrive at a number of definitions of this word. It is not thought fit by the Researcher to include all such definitions in this Research Paper. However, for the purpose of conceptual clarity a few definitions of this word are included in the following lines.

As a matter of fact, there is no unanimity among Academicians, Practitioners, Management Consultants and Practitioners as regards the definition of the word 'Corporate Social Responsibility.' This kind of opinion differentiation exists basically because of varying approaches and angles to look towards this concept. At the same time, there are different perceptions of the same concept among the Governments, Private Sector as well as Civil Society Organizations.

The word 'Corporate Social Responsibility' can roughly be defined as an obligation of a Corporate Organization to protect and enhance the society within which it operates. It can also be defined as the Ethical Behavior of a Company towards the Society, at large.

Corporate Social Responsibility is also defined under Institutional Theory which states that Corporate Social activities are not only voluntary activities but they are a part of interface between business and society.

## RESEARCH PAPER OBJECTIVES

The Research Paper Objectives are as follows.

1. To Develop Conceptual Understanding about Corporate Social Responsibility
2. To Test various views and Approaches towards Corporate Social responsibility

## RESEARCH PAPER METHODOLOGY

The Methodology adopted for writing the research Paper is as follows:

1. Review of literature was done through books and a website (The details about the books and the website are given at the end of the Research Paper in the section titled as 'Categorized Bibliography.')
2. Several inferences were arrived at and personal views were formed after applying logical interpretations of Secondary Data, collected as above.

## AREAS OF CORPORATE SOCIAL RESPONSIBILITY

The following main areas have already been identified towards Corporate Social Responsibility. However, there is no attempt on the part of the research paper writer to conclude that the Corporate Social Responsibility is, in fact, strictly restricted only to those areas mentioned in the research paper. Thus, in other words, these areas are undoubtedly suggestive and not, at all, exhaustive, in practical nature.

### (A) ECOLOGY AND ENVIRONMENTAL QUALITY

This area broadly includes the following:

- Pollution Clean-up and Prevention
- Dispersion of Industries
- Appropriate Utility of available Land and its Beautification

### (B) CONSUMERISM

This area includes the following:

- Truth in Lending and in Advertising
- Fair and Ethical Business Practices
- Product or Service Guarantee or Warrantee
- Believable Service - Before and After Sales
- No sale of harmful products
- No sale of food items injurious to human health

### (C) COMMUNITY REQUIREMENTS

These include the following:

- Proper Utilization of Expertise and Competency of Eminent Personalities for resolution of local problems
- Appropriate Aid with Health-care facilities
- Provision of adequate educational facilities
- Service in voluntary Groups

### (D) RELATIONSHIP WITH THE GOVERNMENT

This relationship covers the following:

- Strict restrictions on lobbying
- Dominance or consequent control of business through political influence

### (E) MINORITIES AND DISADVANTAGED PERSONS

Services to these include the following:

- Provision of Training to unemployed people
- Ensuring equal employment opportunities without bias or prejudice
- Deliberate location of plants and other offices in minority areas
- Encouragement of purchases from minority businesses houses

### (F) RELATIONSHIPS WITH THE LABORS

These relationships cover the following:

- Improved conditions for Health and Safety
- Provision of sufficient Day-care Centers
- Provision of options of flexible Working Hours

### (G) RELATIONSHIPS WITH THE SHARE HOLDERS

These relationships include the following:

- Provision of Public Seats on the Board of Directors
- Transparent Financial Disclosure.

**APPROACHES TO CORPORATE SOCIAL RESPONSIBILITY****1. SOCIAL OPPOSITION**

Some Corporate take firm stand that they do not, at all, owe any Responsibility towards the Society, at large. They try their all the best to cover up or deny this kind of behavior through their strong justification which is interpreted by some other corporate houses, as totally Unethical or Illegal, especially those who admit their Responsibility towards the Society.

**2. SOCIAL OBLIGATION**

On the other hand, some Corporate admit and undertake Social Responsibility as a part and parcel of their Social Obligation. In other words, they follow all the provisions of relevant and prescribed Statutes or Laws those are applicable to their Organizations. At the same time, they do not intend to go beyond these provisions.

For example, they do install all the safety equipments as are ideally imposed by the Law. However, they do not incur additional expenditure for the purpose of installation of better safety equipments.

**3. SOCIAL RESPONSE**

Some Selective Corporate, indeed, go beyond the Legal Boundaries and they tend to be relatively more socially Responsive or Sensitive towards shouldering their social responsibility.

For instance, they take an active part in socially beneficial activities. But, at such times they take adequate care that after undertaking cost benefit analysis, benefits are more as compared to the actual costs incurred. No doubt, this stand seems quite rational as well as practical in character.

**4. SOCIAL CONTRIBUTION**

Some Corporate treat themselves as responsible citizens and they contribute maximum to the best of their capabilities in almost all the projects meant for improvement and betterment of society, at large. No doubt, they believe in deep social effort in serving the overall community.

**ARGUMENTS FOR CORPORATE SOCIAL RESPONSIBILITY****1. PUBLIC EXPECTATIONS AND RESULTANT IMAGE**

In order to meet ever expanding or increasing expectations of the public at large, the Corporate must necessarily possess deep conviction, determination as well as dedication for overall welfare of the public at large. Moreover, proper recognition and subsequent consistent responsible practice of Corporate Social Responsibility definitely helps to create positive and lasting longer impact on the Public Image. On the other hand, if the expectations of the public at large are not met, may, necessarily, not, at all, be fully, but reasonably, there does lie a great threat to goodwill or reputation. This is not a good sign for the Corporate either for stability or growth, particularly, in the long run, as the same attempts at long run viability.

**2. DOMINANCE OF THE COMPETITORS**

If Corporate Social Responsibility is not properly recognized and effectively practiced, the competitors, especially the leading competitors, may assume the same. As a result, there is a danger of losing of initiative efforts and influence, in the short run in the society.

**3. FAVORABLE ENVIRONMENT LEADING TO CORPORATE SUCCESS**

Through continuous practice of Corporate Social Responsibility, the Corporate can certainly create favorable as good as stable environment within the society. The existence of such kind of environment really ensures future success for the Corporate.

**4. OVERCOMING GOVERNMENT RULES AND REGULATIONS**

If it is perceived that the Corporate is meeting expectations of the public at large, the Corporate can go beyond the clutches of costly, cumbersome and restrictive rules and regulations of the government. Undoubtedly this benefits the Corporate in the sense that the level of autonomy automatically rises, thereafter.

**5. MAINTENANCE AND DEVELOPMENT OF GOODWILL**

The responsive or sensitive social areas where other social institutions miserably fail to shoulder their responsibility properly either because of its no recognition or their own restrictions or limitations, the Corporate can dominantly interfere in such areas to shoulder the responsibility in order to resolve social problems. No doubt, this ultimately helps to maintain and develop goodwill.

**6. APPROPRIATE UTILITY OF CORPORATE RESOURCES**

The Corporate, as an enterprise, is a very strong reservoir of capital and expertise. This, in itself, amounts to tremendous potential which can comfortably be offered for service of the public, at large. When this is done in the best interest of the public at large, unknowingly, there is an appropriate utility of Corporate resources which would be underutilized otherwise.

**7. COURTEOUS SOCIAL BEHAVIOR AUGMENTING PROFITS**

If the Corporate would apply its unique or exceptional, innovative and creative skills towards shouldering Social Responsibility and solving significant and serious social problems, in turn, the society would give handsome returns in the practical form of augmented profits to the Corporate, over a period, simply out of courtesy or reciprocity.

**8. ASSURED SURVIVAL AND STABILITY**

If social problems are not resolved in time, they may get aggravated with the passage of time. The society living with enormous problems is naturally and normally not expected to respond, quite favorably to the Corporate. In case, the nature of the problem is severe, no desirable response from the society may endanger the survival of the Corporate, especially, in the long run.

**ARGUMENTS AGAINST CORPORATE SOCIAL RESPONSIBILITY****1. LOSS OF PROFIT MAXIMIZATION**

Indulging in socially beneficial projects involves investment of precious resources of an organization like Money, Manpower, Time, etc. As a matter of fact, this investment is not, at all, a waste and therefore it should be treated as a fruitful or productive investment. However, some corporate interpret this kind of investment as diversion of precious organizational resources, as they feel that shouldering social responsibility is not consistent with their Vision, Mission or Objectives. They also think that such kind of investment would reduce proportionate percentage of rightful gain of their share holders. Furthermore, this situation may dilute the level of faith of the share holders; consequently, the capability to raise the finance in future may get affected, quite adversely.

**2. COMPROMISE OR SACRIFICE OF INVESTMENT OPPORTUNITIES**

The overall level of monetary investment necessary for running socially responsible programs may be relatively very high. If the same investment is done for a project which possesses potential to yield relatively better rate of return either in near future or in long future, there can certainly be rise in the level of resultant profits. As a result, the corporate is not ready and willing to compromise or sacrifice their additional investment opportunities at the cost of social responsibility.

**3. LACK OF ESSENTIAL SKILLS**

A specific Corporate House may necessarily not possess all the skills fundamentally essential for effectively and efficiently dealing with any social issue. At the same time, the same is also not expected out of a Corporate House. Besides, hiring of external services for such desirable skills is not an easy as well as an economic task, always. So also, some Corporate are not ready to accept and shoulder Social Responsibility.

**4. PURPOSE DILUTION**

As per the view of some Corporate, concentration on the objectives related to Social Responsibility may dilute the basic objectives for which they actually exist and may deviate their prime attention from main objectives to ancillary objectives which need not be achieved. When this view turns prominent, Social Responsibility undoubtedly plays second fiddle to the main objectives of the Corporate.



**5. NO SOCIAL ACCOUNTABILITY**

Prima facie, any Corporate can certainly and ideally not be held accountable for the outcomes of social programs, irrespective of the fact whether or not they are either right or wrong in the light of existing social or moral principles, good or bad in practical consequence, for the society. Moreover, a specific Corporate House may not enjoy the credit even after successful running of any social venture.

**6. PUBLIC SUPPORT – A MAGICAL PHENOMENON**

Public support is, more often than not, experienced as a magical phenomenon in the sense that sometimes public, at large, supports a Corporate for a social campaign having ordinary objectives whereas it does not support for a real noble or a charitable cause. In other words, the public, at large, may be well split on the issue of giving support to any social adventure undertaken or even initiated by a corporate firm. Thus, for want of consistent or reasonably stable results, in practice, some Corporate arrive at a decision not to indulge in Social Activities, at all, as a Practical Policy or Corporate Philosophy.

**7. LACK OF SOCIAL POWER OR INFLUENCE**

All the Corporate are not powerful or influence-able in the society, as a whole, to the extent required for successful running of a Social Project. As a result, in spite of existence of an intention to undertake Social Responsibility, as a project, they do not find themselves in a socially sound as good as comfortable position to initiate any thing in the direction of any activity which is directly or consequently related to social welfare.

**PERSONAL VIEWS OF THE RESEARCHER AS REGARDS CORPORATE SOCIAL RESPONSIBILITY**

A few months back, there was an interesting and curiosity arousing article in one of the leading daily newspapers namely Times of India about statutory contribution of the leading corporate towards Corporate Social Responsibility. In this article, a list of some leading Corporate was given who have not contributed towards Corporate Social Responsibility in the last financial Year 1<sup>st</sup> April 2015 to 31<sup>st</sup> March 2016, as it was required statutorily.

Thus, on one hand, indeed, there are a number of Corporate who are contributing even more than the statutory limit and at the same time, on the other hand there are a number of Corporate who are not contributing even what is required as per statutory limit. After learning about inconsistency among corporate about Corporate Social Responsibility through sensational news, several *inevitable and unanswered questions* emerged as follows.

***Whether or not Corporate have any Social Responsibility? Whether their approaches towards Corporate Social Responsibility are correct and legal in their nature?***

This implies that all the Corporate do not have unanimity as regards not only the concept but also the practices of Corporate Social Responsibility. In other words, already this concept has consequently led to the emergence of several approaches which are described earlier.

After careful and thoughtful study of all the approaches, described above, of the concept of Corporate Social Responsibility, the ordinary member of the society may develop a deep and considerable confusion whether or not the Corporate really has the Social Responsibility. No doubt, his confusion is quite understandable, rational as well as logical.

However, the ***Research Paper writer is of the firm view that the Corporate does have Social Responsibility*** for the following main reasons.

1. The Corporate act only within the four parameters of the society and not, at all, out of the periphery of the society. Therefore, they do owe the Responsibility towards the Society.
2. The fact of very existence of the Corporate, in itself, is basically because of the existence of Society, as a whole. In simple words, if the society would not exist, the Corporate, too, would cease to exist.

Furthermore, the ***arguments passed against practicing of Social Responsibility are intelligently needed to be curbed out and overcome through persuasion and emphasis of its different benefits.***

**RESEARCH PAPER LIMITATIONS**

1. As the Research study for this paper is based on Secondary Data, all the limitations of Secondary Data have direct and deep impact on various views formed and inferences arrived at by the Researcher in this Research Paper.
2. As the Research study for this paper is purely of Academic Orientation, some sort of adaptation to prevailing factual conditions is ideally necessary before its direct application in practice.
3. As the Research study for this Paper is based on Human Views, that is, Views of the Researcher, all the limitations of Human Views have direct impact on various views formed and inferences arrived at by the Researcher in this Research Paper. (At the same time, it may, necessarily, not, at all, be out of place to point out, over here that those views and inferences are based on fully considered, well balanced and sound judgment of the prevailing social situations as regards Corporate Social Responsibility.)
4. Various views expressed in this Research Paper are partially based on Social Observations of the Researcher and his Experiences during Social Interactions with many people on a number of occasions. As a result, full concurrence with all the personal views as well as personal opinions of the Researcher is certainly not possible, in practice.
5. Different areas of Corporate Social Responsibility mentioned in this paper are suggestive and not at all, exhaustive in their nature.

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**MAKE IN INDIA – OPPORTUNITIES AND CHALLENGES****DEEPA NATHWANI****ASST. PROFESSOR****MANGHANMAL UDHARAM COLLEGE OF COMMERCE****PIMPRI****ABSTRACT**

*In today's day and age when the growth of economy is so very important the concept of Make in India promoted and brought forward by Narendra Modi is of great importance and should be discussed with utter importance. Opportunities that come with the Make in India concept are many, Ease of doing business, Employment generation, Technological enhancement, Increment in revenue by taxes paid by the existing companies. Along with the challenges that India faces today, of being ranked at 130th position in Ease of doing business, conditions in which the labourers work, Proper laws for development of business ambience all these have to be taken into consideration for forming a road map for Make in India. Companies all over the world are aimed at to make investments in factories in India and also make use of the highly intelligent manpower to create products with their technology to enable minimum wastage of resources with accuracy and zero-defect product. The vision for this campaign is also to amplify the share of input the manufacturing sector has towards the GDP of India. Recognizing the natural, cultural along with economic diversity which will include inherent advantages of specific geographic regions, Make in India campaign has set out with a goal to yoke the a two-fold benefit for the states and Indian Economy as a whole. This paper studies the various opportunities and challenges in key sectors in Make in India project.*

**KEYWORDS**

Indian economy, make in India.

**INTRODUCTION**

Indian Industry in today's day and age will benefit Indian economy to a great extent. The main motto of the Government of India is to invite business entities from all the world to invest in Indian Manufacturing industry. For this GOI is trying to simplify the rules and regulations to invite investment from foreign investors.

MIA is adopted by our Honourable Prime Minister to promote India as a destination for foreign investment, thereby featuring India as a global manufacturing hub for addressing country's multi-socio economic issues.

India is such a fast growing country that this leads to generation of employment along with many other opportunities with all the other factors mentioned above

**HURDLES OF MANUFACTURING IN INDIA**

Mass production with all the good produced by the other countries of the world is the major hurdle India is facing today. But with the help of the new initiative of banning use of products made in China for example, is a new step towards making Make in India a new success story.

**THE VISION OF MAKE IN INDIA**

Its vision is to promote production in India which will help generate employment opportunity and encourage entrants in the new FDI sector and change the perspective of People c=viewing India to be a major hub of manufacturing which will cater 25 sectors of huge and vast economic horizon

**REVIEW OF LITERATURE ON MAKE IN INDIA: THE REAL OPPORTUNITIES**

The literature review prepared for this study on Make in India the real opportunities reflects the opinion of various experts based on their experience. In order to validate the importance of this study, the following various literature has been reviewed to get research gap. Times News Network (2015) addressing the top brass of the central bank in an event to Reserve Bank of India (RBI's) 80th anniversary, Prime Minister Sri Narendra Modi raised the topic of "Make in India", a subject close to his heart Christine Lagarde (2015) pointed out that India for being a 'bright spot' on a cloudy global horizon, urged government to seize its opportunity and even told students at Lady Shri Ram College that she would personally invest her money in India. Her positive prediction that India's GDP would be double in size by 2019 from what it was in 2009 is of a piece with similar gung-ho declarations of faith by visiting high profile dignitaries, corporate honchos and economists in the past. With its young demography, huge market size and managerial prowess India has for years been thought of as ready for takeoff. Times News Network (2014) reported that the government has a string of changes, including making the decision-making nimble and inclusive, to push his make in India initiative, after 23 top bureaucrats suggested several initiatives and a stable policy regime to boost the anaemic manufacturing sector.

Sriram Ramakrishnan (2014) advocated that India has its own share of environmental problems and they have only multiplied in recent years due to neglect and the excesses caused by crony capitalism.

Yasmin (2015) described that the 'Make in India' initiative has now brought the focus on the manufacturing sector where the skill sets required are going to very different. However, the industry-academia gap still persists as a grave issue in India. The challenge for the human relation heads of this sector is to hire and train young aspirants to the growing demand for talent in this sector. How are they skilling the young workforce?

**OBJECTIVES**

The major objective behind the initiative is to focus on job creation and skill enhancement in 25 sectors of the economy. The major objectives are as below:

1. To transform India into Global Industrial centre
2. To Provide Employment and its growth
3. To inflate Economic Growth and standard of living
4. To urge both local and foreign companies to invest in India

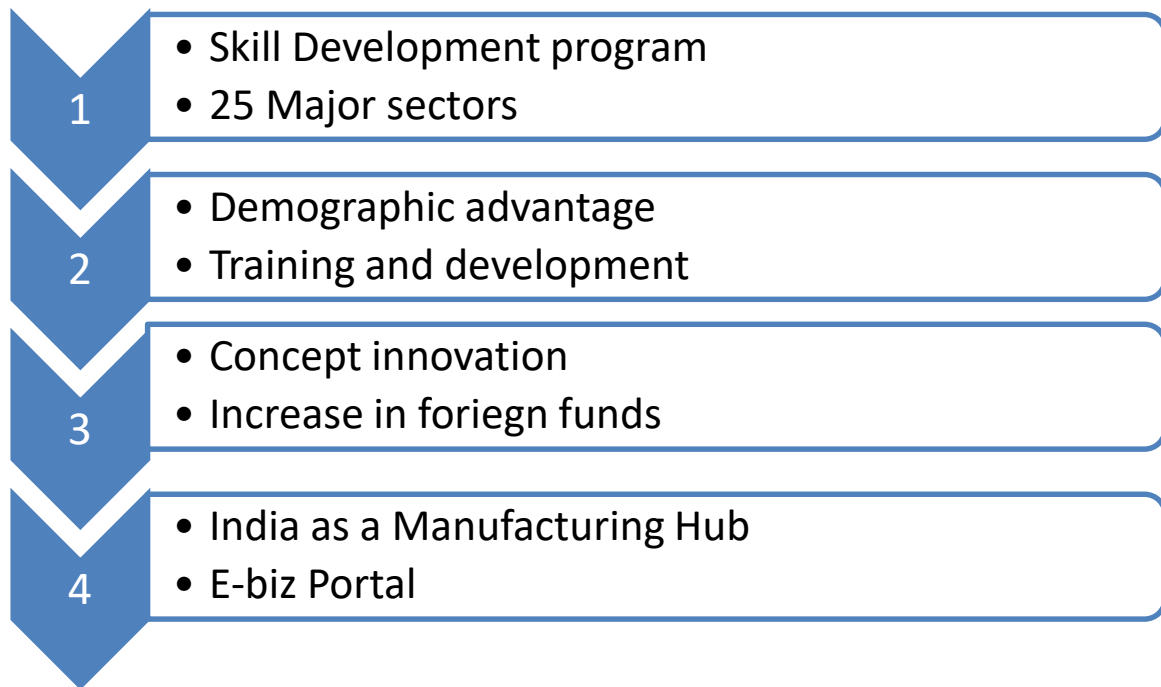
**MAKE IN INDIA CATERS THE FOLLOWING SECTORS OF ECONOMY:**

1. Automobiles
2. Automobile Components
3. Aviation
4. Biotechnology
5. Chemicals
6. Construction
7. Defence manufacturing
8. Electrical Machinery
9. Electronic systems
10. Food Processing

11. Information Technology and Business process management
12. Leather
13. Media and Entertainment
14. Mining
15. Oil and Gas
16. Pharmaceuticals
17. Ports and Shipping
18. Railways
19. Renewable Energy
20. Roads and Highways
21. Space and astronomy
22. Textiles and Garments
23. Thermal Power
24. Tourism and Hospitality
25. Wellness

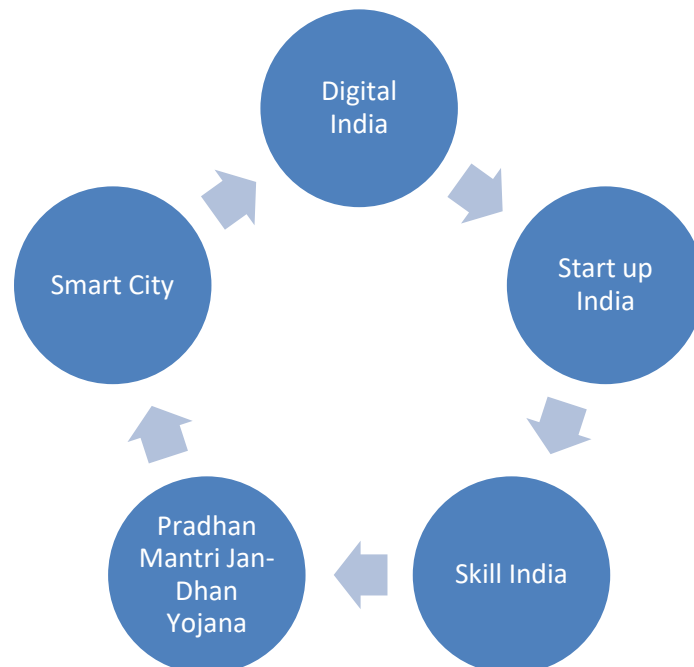
**HOW THIS WOULD BE ACHIEVED - A ROADMAP - PROGRAMMES AND INITIATIVES**

FIGURE 1



The government of India has already taken several steps for some much needed change in the country.

FIGURE 2



**THE MAKE IN INDIA CAMPAIGN AIMS AND FOCUSES AT**

1. **Ease of doing business** – The government plans to issue licences easily to all manufacturing services. It also aims to provide easy access loans.
2. **Zero defect Zero Effect** –It basically believes in lean manufacturing.
3. Attracting and helping businesses to invest and set up their manufacturing units in India. This initiative targets the youth.

**MAJOR ISSUES AND CHALLENGES**

The concept could face the following major issues and challenges:

1. Creating healthy business environment will be possible only when the administrative machinery is efficient and prompt. India has been very stringent when it comes to procedural mechanisms and regulatory clearances. A business-friendly environment can only be created if India can signal easier approval of projects and set-up hassle-free clearance mechanism. For the issue of unnecessary defunct laws and regulations and making stringent bureaucratic processes easier, shorter, transparent and responsive as well as accountable proceedings, it has emphasized the concept of single online portal. This is an extension policy of exiting single window system employed under the Vibrant Gujarat Summit and banking sector as well. As contemplated by the authorities, the system will be lead by an eight-member team dedicated to answer investor queries which will facilitate the clearance of projects in a time bound framework.
2. Indias Make in India campaign will always be compared with standard products from other countries. India should constantly keep its strength so goods. Furthermore, a direct tax exemption during the initial years of operations for micro, small and medium enterprises (MSME) will give much needed impetus to the manufacturing sector.
3. Privatization: Privatisation requires to fully or partially privatizing loss making government units. First, identifying those manufacturing units and second, to privatize those with foreign companies may create issues such as percentage holding, management, resistance to change, labour union opposition, etc. However, as the whole campaign brief is solely under the control of government, such issues can be resolved progressively through proper reforms and initiatives.
4. Skill Development: Labour requirement in the primary sector is falling quickly as mechanization increases. Through skill development initiatives, this labour force can be converted into secondary manufacturing sector. Semi-skilled labour can also be absorbed by manufacturing sector with the help of skill development programs.
5. Labour: This is an important factor in economic expansion of a country. China as a Marxists Country attracted outside business by meeting all the requirements of industries with liberal laws and incentives but in India it is difficult as it is a democratic country. Labour reforms which will help labour rights, human resource management, and worker and management relationship with proper safety norms and efficient transport facilities, is the need of the hour.
6. Good Infrastructure Facility: Make in India promotes "initiative is to focus on heavy industries and empowering secondary and tertiary sectors. If authorities facilitate the requirements of the national programme of 100 "Smart Cities" and "Industrial Corridors", we can truly fulfill the Make in India concept and make it a worth. We will have to provide internet connectivity with LAN, WAN with high speed data transfer as Information Technology is also a part of Infrastructure now. Further, under the „Make in India“ campaign, the rural infrastructure, which is an important ingredient for ensuring sustainable rural economic development, needs to be given a fillip.
7. World-Class Standards: After all, foreign companies demand highest level of qualitative work which is known as "world class standards". The quality of product under Make in India initiative should not differ with foreign product. Here the Issue is to make Indian labour achieve such competencies to make high quality products through skill development programs.
8. Land Acquisition: Land acquisition is a major issue and challengeable as the existing laws have made the acquisition of land more complex and costly. These laws create hurdles in investment into preferred sectors like manufacturing, construction, infrastructure and mining.
9. Brain Drain: Whenever human talent goes in some foreign country, it is known as Brain Drain. Several reasons like lethargic beauracracy, lower salary structure and less employment opportunity may be some of the causes.

**WEAKNESSES OF MAKE IN INDIA CAMPAIGN**

- International relations have to be nurtured over time. Flashy wooing won't bring immediate results.
- Government appears to be taking too many activities which mean efforts will be too wide and thin; specific goal- oriented projects may prove more beneficial in long run.
- There is a perception government is more acting for the growth of Industry and not paying attention to farmers. This has to be rectified both in policy and action
- Environment – business & political environment still need to become more transparent, mature & speedy.
- Time taken in execution of decision & bureaucratic system.
- Multi layer processing system. differences in state government & central government interest synchronization process.
- This is just a start; maturity may take time.

**STRENGTH**

1. Removal of bottle-necks for doing business will attract more investment from industries abroad over a period.
2. Improvement in ties with countries around India will enhance bilateral relations and trade.
3. Making banks open savings accounts of over 10 crore people under Jan Dhan Yojana from low income group will give them a sense of pride and identity while eradicating middlemen in payments.
4. By apportioning higher share to states, Centre has tried to improve Centre-State relationship.
5. Foreign visits and contacts can enhance India's chances for UN Membership in Security Council
6. A year of corruption free governance, a welcome change from scam ridden past.
7. Direct contact with farmers, children, students through radio talks, 'Mann ki Baat'
8. 'Swachh Bharath Abhyaan' is a good initiative to inculcate cleanliness but institutional momentum is required to sustain the same.
9. Orientation of erstwhile Planning Commission to Niti Ayog hopefully brings new culture to start people-oriented projects than an ivory tower concept that all projects should emanate only from Planning Commission.

**MISSION, MAN, MACHINE, MONEY, MIND, MARKET, METHOD, MANAGEMENT, MATERIAL, MORAL VALUES, MEANING FOR BUSINESS, MARKET**

- Availability of huge domestic market & global export market.
- Indian economy is one of fastest growing economy in world.
- Good international relationship.
- Favourable talent pool across globe in different MNC to influence decision to invest in India.
- Strong fortune industrialist from India, capable to support the global investment & make in India campaign.
- Strong global confidence in Indian system.

**OPPORTUNITIES IN INDIA**

Make in India campaign, a conducive environment can be created once again Indian talented youth can be retained and a new trend of reverse brain drain can be established i.e. foreign talent of Indian origin will again start to seek opportunities in India. Thus, the slogan "stay in India" can be made realistic. The talented youth migrating to foreign countries can come back and make our mission of Make in India more effective and powerful.

- normous potential of expats in terms of knowledge and investment can help in leapfrogging ahead with new technology for agriculture and industry.
- India as emerging global economical / political power.
- Second largest domestic market with potential of 1.2 billion consumers with growing purchase & consumption capacity.
- Competitive mfg, operating global cost due to domestic & neighbouring market availability.
- 360 \* govt. Supports to make it easy for make in India
- Availability of all positive business environment required by organizations.

**REASONS TO LAUNCH MAKE IN INDIA BY GOVERNMENT OF INDIA**

Make in India is an ambitious plan of Narendra Modi Govt.

- It will be a growth engine to boost economy of India & global/Asian economy.
- Developing additional employment for Indian / global population.
- Developing additional work opportunity/jobs to fight with unemployment & other domestic economical problems of Indian population.
- Utilizing available talent pool in India.
- Fighting global economic race.
- Competeting with emerging economies like china etc.

Ultimately bringing derailed Indian economy on track to make India global power by make in India campaign

**CONCLUSION**

The researchers provide theoretical footings of the make in India a manufacturing hub. The key important points of this make in India descriptive research was to bring various disciplines of make in India together to gain effectiveness in the manufacturing sector. This paper tries to present a balanced review of the various opportunities and challenges of make in India. There is vast support and few oppose among the authors for make in India a manufacturing hub. In view of the purpose that it serves a large section of the society, we assert that it is imperative to study the make in India a manufacturing hub. It is also concluded from the review that, the, land acquisition, licensing and taxation to make the India as global manufacturing hub in coming years. And also the government is working with the mission to reduce poverty with greater purchasing power through employment generation in industrial sectors. Now, we have to pause and look for how the make in India plan comes true with existing labour market and revised FDI policy. So, the most positive combination of skill development of labour, new innovations and regulatory change to ease of doing business, revised FDI policy may accelerate development of the manufacturing sector to achieve 'Make in India's goal.

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**BUILDING AN AYURVEDA THERAPY DATA WAREHOUSE FOR CANCER TREATMENT**

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**ABSTRACT**

*This research paper presents architecture for health care data warehouse for cancer treatment which could be used by Ayurveda practitioners to support the healthcare process of the cancer patients. The line of treatment (data) of Ayurveda practitioners exist in multi sources with different formats make it necessary to have some techniques for data integration. Ayurveda practitioners need access to previous information so that they can decide the further line of treatment. Timely and accurate information (various test reports of the patient) is one of the most important factors to a health care organization. A health care data warehouse for cancer treatment is therefore necessary to integrate the different data sources into a central data repository and analysis this data. The objective of this paper is to show the contribution of a cancer data warehouse in solving cancer care management problems. The ability to research various conditions, evaluating medical procedures and protocols to define statistically optimal outcomes is an incredibly powerful tool to improve the efficiency and quality in an Ayurvedic cancer treatment.*

**KEYWORDS**

ayurveda therapy, components of cancer health data, data warehouse architecture, health care data warehouse and cancer, flow of treatment.

**1. INTRODUCTION**

The healthcare industry is one of the world's largest, fastest-developing and most information rich industries. The growing need for integrated healthcare has led this industry to open towards adoption of extensive healthcare decision support systems. Information technology in health care is still a topical subject, has stimulated developments in physician order entry, decision support systems and shared patient records. Despite all the efforts, many health care organizations still have stand-alone information systems that do not communicate with each other. More importantly, clinical information systems (CIS) such as electronic patient records, are often designed to support hands-on care for individual patients, but are not well suited for analyses on an aggregated level, for example on group of patients with same disease.

Patients who present with cancer have three basic options for treatment. The first and the most conventional treatments utilize chemotherapy, surgery and radiation. Second are a wide range of alternative therapies like Ayurvedic treatment of cancer, and third is a combined approach. There are benefits and challenges regardless of which decision is made. Conventional treatments for cancer have varying success rates. For some cancers, when caught early, conventional therapies do have a high success rate. Success decreases as the cancer progresses.

Cancer usually spreads very fast and a patient can meet death in less than 6 months. Therefore, remedial measures need to be undertaken as soon as cancer is detected in the body. Various remedies available for cancer either try to put a check on the duplicating process of the mutant cells at genetic level or kill the entire collection of affected cells.

The process, whether done chemically or through radiation, always runs the risk of affecting the neighboring normal cells. Further, there are always significant side effects involved, which include hair loss, skin rashes, body pain, loss of body weight, weakness and debility, loss of appetite, diarrhea, bleeding and impotence. Presented paper studies the impact of Ayurveda treatment on cancer in following terms

- I. Success rate in specific type of cancer.
- II. Success rate in specific stage of cancer.
- III. Which treatment is applicable (suitable) depends on type & stage of cancer.

**2. THE AYURVEDIC PERSPECTIVE**

The word 'cancer' may be new to the 5,000 year old Indian system of medicine, Ayurveda, which relies on natural substances for healing. But ancient Ayurvedic classics are aware of the clinical features, resembling cancer, with the names such as *Apachi*, *Gulma*, *Granthi*, and *Arbuda*. The following are the names of select conditions mentioned in Ayurvedic classics that have relevance to cancer manifestations in modern medicine.

**TABLE 1: MODERN MANIFESTATIONS OF CLINICAL FEATURES DESCRIBED IN AYURVEDIC TEXTS**

<i>Manifestations in Ayurveda</i>	<i>Manifestations in Modern Medicine</i>
<i>Pandu</i>	Leukemia
<i>Apachi</i>	Hodgkin's Disease
<i>Stanarbuda/Agantuja Stanaroga</i>	Breast Cancer
<i>Raktagulma</i>	Tumors of Uterus / Ovary
<i>Rakta, Mamsaja, Medoja, Oshta Roga</i>	Carcinoma of Lips
<i>Kachchapa, Raktarbuda, Mamsa Sanghata</i>	Carcinoma Palate
<i>Swarabhanga</i>	Tumors of Larynx
<i>Rakta pitta, Pandu</i>	Various Type of Leukemia

### 3. WHAT AYURVEDA CAN DO?

The excruciating experience of dying cancer patients can be ameliorated by making use of Ayurvedic principles. Ayurveda can be helpful in the management of cancer in many ways such as—prophylactic, palliative, curative and supportive. Ayurvedic medicines help to improve the quality of life of the patients as listed below:

Ayurvedic preparations can act as an adjuvant or a co-therapy along with chemotherapy or radiotherapy. It is also helpful in post-surgery care.

- Ayurvedic medicines help to minimize the side effects of these therapies.
- Ayurveda helps in reducing the therapeutic dose of the various drugs used as proved in some studies using cow urine.
- Ayurvedic preparations help to slow the progress of cancer in cases where chemotherapy, radiotherapy or surgery is contra-indicated, due to some reasons and patients have no other choice.
- The cell-protective activity of drugs prescribed in *rasayana* therapy helps to improve comfort and the quality of life of individuals with cancer.

According to Ayurveda the definition of any disease is dosh, dushya, sammurchana, janito vyadhi i.e. when tridosha (Vatha, Pittha and Kapha) single or in combination become pathological and when they intensely get mixed with one or more dushya i.e. one of the seven datu's (ras, rakta, mouse, med, asthi, majja, shukra) disease (vyadhi) occurs. One more very concise definition of disease is 'कुपितानाम हि दोषानाम शरीरे परि, धावताम यत्र संघा ख वैगुण्यात व्याधी ही तत्रोपजायते'

When tridosha become prakupit and there is khavaigunya (pathology in a system) i.e. viguna strotas and prakupit dosha unites then disease is formed, this is applicable to cancer also. In Ayurveda three types of major treatments are described

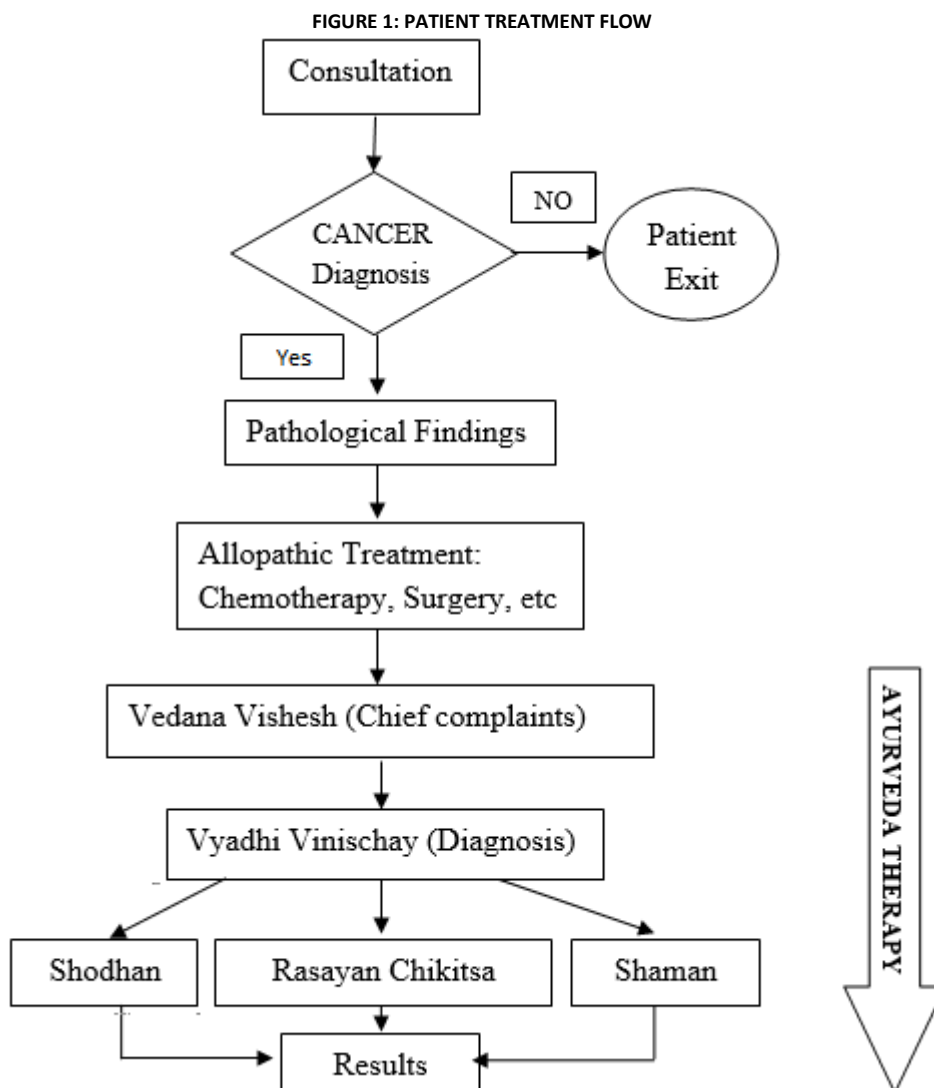
1. **Shaman:** It is a medicinal treatment which brings prakupit dosh to normal state and it also involves specific aahar (diet) and vihar (activity).
2. **Shodhan (i.e. Panchkarma):** This is procedural treatment which eradicates prakupit dosha from body and it involves five types of therapies (charak and sushrut) as illustrated in fig.2.
3. **Rasayana chikitsa:** It restores sapta datu and system to normal state.

### 4. FLOW OF CANCER TREATMENT

In this phase the patient is submitted to a series of examinations of pathological anatomy, clinical pathology, radiology, among others, to detect the localization and evolution of the illness.

After these examinations, if the localization, stage and diagnosis of the cancer identified. Only then treatment of cancer that corresponds, predominantly, to a surgery, applications of radiotherapy and chemotherapy initiate as shown in figure 2.

Figure1 also depicts that if the patient is taking Ayurvedic treatment as an alternative therapy along with the cycle of chemotherapy or any allopathic treatment suggested by oncologist.

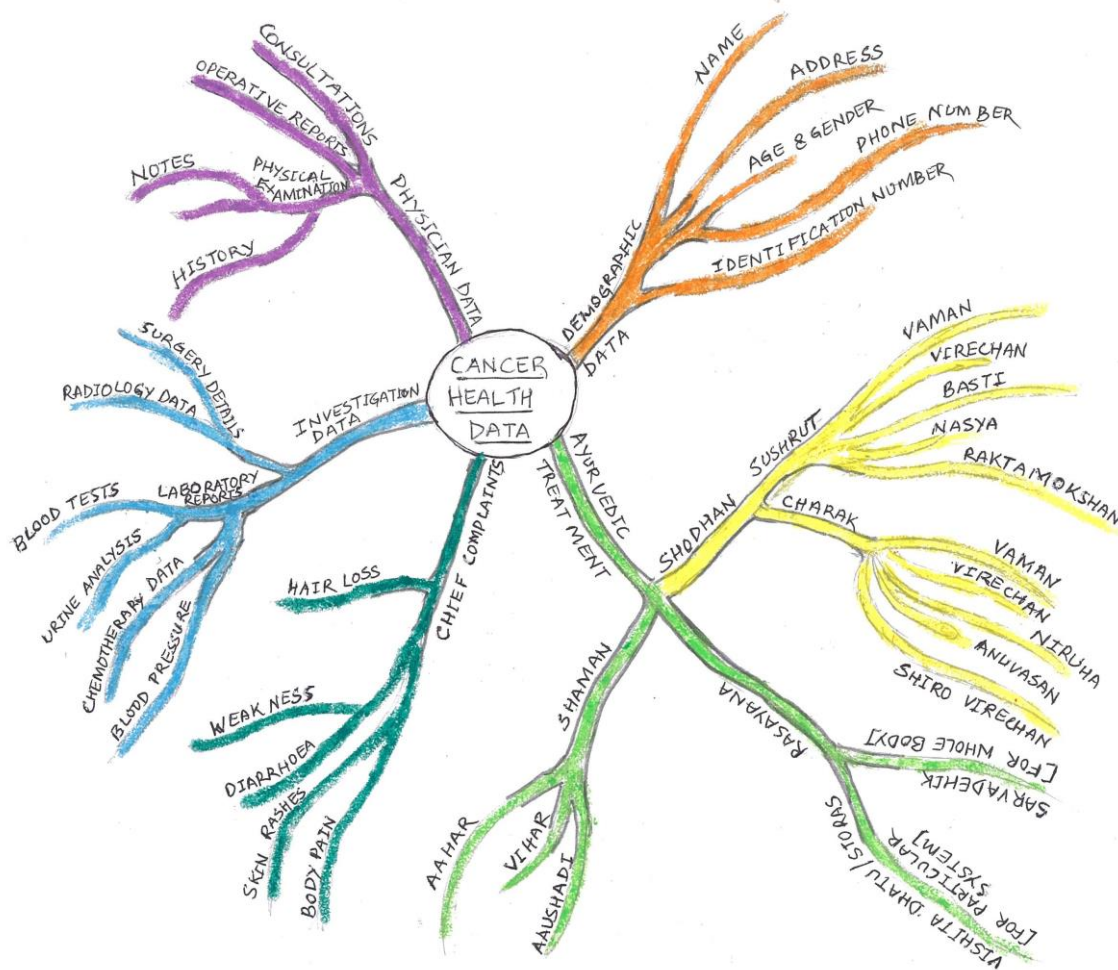


### 5. BUILDING CANCER DATA WAREHOUSE

Ayurvedic healthcare processes of cancer patient involve a series of patient visits for treatment or a series of outcomes. The modeling of outcomes associated with these types of healthcare processes is different from and not as well understood as the modeling of standard industry environments. The process of cancer patient in healthcare can be thought of as a value circle as illustrated in figure 2 the center of this circle are data related to patient various treatment.

The treatment is measured or generated by all the processes around the circle shown in Figure 2. This is quite different from typical processes in other industries, which usually follow a linear chain model in which a product moves through a series of steps from raw material to finished goods or from customer order to delivery.

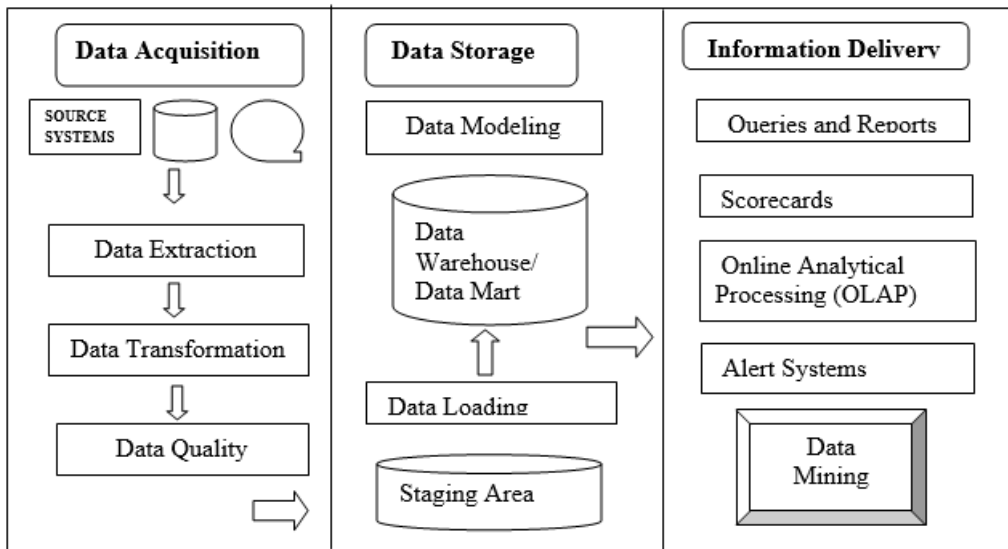
FIGURE 2: COMPONENT OF CANCER HEALTH DATA



6. ARCHITECTURE DESIGN OF DATA WAREHOUSE

Figure 3 illustrates the overall architecture of the propose healthcare data warehouse specific to Cancer. Data is imported from several sources as mention in Figure 2 and transformed within a staging area before it is integrated and stored in the production data warehouse for further analysis.

FIGURE 3: DATA WAREHOUSE ARCHITECTURE



Source: Data Warehousing – Fundamentals for IT Professional by Paulraj Pooniah Page 185

In general, all data warehouse systems have the following architecture:



**DATA ACQUISITION****SOURCE SYSTEM**

This represents the different data sources that feed data into the data warehouse. The data source can be of any format -- plain text file, relational database, other types of database, Excel file, etc., can all act as a data source as shown in Figure 1 and 2.

**DATA EXTRACTION LAYER**

Data gets pulled from the data source into the data warehouse system. There is likely some minimal data cleansing, but there is unlikely any major data transformation.

**DATA TRANSFORMATION**

Transform extracted data into appropriate formats. Provide default value as specified.

**DATA QUALITY**

Assist in locating and correcting data errors. Help resolve data inconsistencies in load images.

**DATA STORAGE****Data Modeling**

Enable developers to create and maintain data models for the source systems and the data warehouse target databases.

**Data Loading**

Load transformed and consolidated data in the form of load images into the data warehouse repository.

**Staging Area**

This is where data sits prior to being scrubbed and transformed into a data warehouse / data mart. Having one common area makes it easier for subsequent data processing / integration.

**INFORMATION DELIVERY****Queries and Reports**

Allow user to produce canned, graphic-intensive, sophisticated reports. It helps users to formulate and run queries.

**Scorecards**

It provides comparison of current performance against target and past performance. Focus on clarity and ease of use.

**Alert System**

It provides alerts from the data warehouse database to support strategic decision.

**OLAP Layer**

This is where OLAP cube is built from the data warehouse which is used further as a basis for various kinds of analysis

**7. CONCLUSION**

The Ayurvedic healthcare industry is one of the oldest, fastest-developing and information-rich industries for take advantage from this information we have proposed this cancer data warehouse to integrate between the operational database and medical files and therefore the analysis on data makes easy. Then we can analyse the cancer disease, the cost of treatment for this disease, Death rate in specific type of cancer and the impact of a specific Ayurvedic treatment that helps

- I. In eliminating toxins through Panchkarma
- II. Restoring healthy digestive power function and
- III. Rejuvenation through Rasayana

Building data warehouse encounter a several challenges such as the following:

1. Data integration plays the most critical role in a data warehouse Building.
2. Data should be extracted from physical medical files, such as patient medical records, blood tests, urine test results, x-ray results, CT scan results etc., or retrieved directly from the operational medical system.

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## INVESTMENT AVENUES AND FACTORS AFFECTING INVESTORS DECISION IN INDIA

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### ABSTRACT

*The investment behaviour of investors has drastically changed over the years with the diversification of the financial services sector that has provided wide range of opportunities to invest. Savings form an important part of the economy of any nation. An investor is a person who sacrifices the present in order to reap the benefits for the future. The benefits may be in the form of bonus, dividends, capital appreciation, retirement benefits and many other benefits. Usually, one invest to ensure liquidity, to hedge against inflation, minimize the risk, to maximize the returns, one needs to invest and earn returns on their investment to make a provision for an uncertain future. Invest early, invest regularly and invest for long term is golden rule for all the investors.*

### KEYWORDS

investment, investor behaviour, investment avenues, diversification of investment.

### INTRODUCTION

Every individual wants his saving to be invested in a secure way. There are various means of investment options available. The extent of investment fund choice varies widely from individual to individual on the basis of various factors. Investment is defined as the application of money or other assets in the hope that in the future it would appreciate or generate more income. According to economics, investment is the utilization of resources in order to increase income or production output in the future.

### OBJECTIVES

The objective is to determine the various investment avenues available and look into various factors that affect the investment decision.

### INVESTMENT AVENUES

There are various investment avenues in India:

1. Savings Account and Current Account
2. Public Provident Fund
3. Fixed Deposits
4. Mutual Funds
5. Life Insurance
6. Postal Savings Scheme
7. Government Securities
8. Equity Shares
9. Real Estate
10. Bonds
11. Gold
12. Corporate Fixed Deposits
13. Commodities Market
14. National Saving Certificate
15. Money Market

**1. SAVINGS BANK ACCOUNT**-This is an account into which small savings are deposited into bank by the customers. This account is meant for the benefit of middle class and low income group people. A Saving Bank Deposit Account can be opened by any person with a minimum deposit which varies from bank to bank. The special feature of this account is that deposit can be made in this account for any number of times in a week but withdrawals are imposed by banks to discourage the habit of frequent withdrawals. The rate of interest repayable by the banks on such deposits is very low as compared to fixed deposit accounts. Interest is allowed in minimum balance standing to the credit of an account during the period.

Saving Bank Account may be opened with or without cheque facility. With cheque facility, the account holder has to maintain a higher balance in his account. The pass book, deposit slips, cheque book or withdrawal forms are issued to the customer.

**Current Account**- It is opened by businessmen. Since this account renders continuous services so it is known as current account. It gives the flexibility to deposit and withdraw money any time during working hours. It is known as demand deposit as the bank is obliged to pay the money on demand.

Bank does not pay any interest on the deposits in this account because it has to be ready to meet its commitments towards the account holders. Overdraft facility is the main feature of this account. Account holder can arrange with the bank to withdraw more than his deposits in the account.

**2. PUBLIC PROVIDENT FUND**- Public Provident Fund scheme is a popular long term investment option backed by Government of India which offers safety with attractive interest rate and returns that are fully exempted from Tax. Investors can invest Rs. 500 to maximum Rs. 1, 50,000 in one financial year and can get the facilities such as loan, withdrawal and extension of account. The scheme is fully guaranteed by the Central Government.

### INTEREST RATE

The Ministry of Finance, Government of India announces the rate of interest for PPF account every quarter. The current interest rate effective from 1 October 2016 is 8.0% per annum (compounded annually) which was revised from 8.10% effective from 1 April 2016; interest will be paid on 31 March every year.

### DURATION OF THE SCHEME

Original duration is 15 years. Thereafter, on application by the subscriber, it can be extended for 1 or more blocks of 5 years each.

### PPF TAX CONCESSIONS

Annual contributions qualify for tax deduction under Section 80C of income tax. The tax benefit is capped at Rs 1, 50,000 per financial year. Contributions to PPF accounts of the spouse and children are also eligible for tax deduction.

Contribution to PPF account is eligible for tax benefit under Section 80C of the Income Tax Act. Interest earned is exempt from income tax and maturity proceeds are also exempt from tax.

**3. FIXED DEPOSITS (FD)** - A fixed deposit account is a type of savings account in which money is deposited for a specified period of time and at a fixed rate of interest. They are considered to be very safe investments. Fixed deposits offer higher interest rate than savings accounts.

Bank issues a Fixed Deposit Receipt that has to be surrendered to the bank at the time of renewal encashment. The rate of interest differs from bank to bank. A customer can withdraw the amount before the due date and this is known as premature withdrawal. In such case, interest is paid at a rate applicable at the time of withdrawal. Bank can charge penalty for premature withdrawal.

One of the advantages of having Fixed Deposit is that customers can avail loans against FDs up to 80 to 90 percent of the value of deposits. Tax is deducted by the banks on FDs if interest paid to a customer at any bank exceeds Rs. 10,000 in a financial year.

**4. MUTUAL FUNDS-** A mutual fund is an investment fund that pools money from many investors to invest in diversified securities such as stocks, bonds, money market instruments and similar assets. All mutual funds are registered with SEBI. On the basis of objective mutual funds are categorized as equity funds/growth funds, diversified funds, sector funds, index funds, tax saving funds, debt/income funds, liquid funds/money market funds, gift funds, balanced funds. And on the basis of flexibility we can categories them as open-ended funds, close-ended funds and interval funds.

Net Asset Value (NAV) represents a fund's per share market value. It is often associated with mutual funds.

$NAV = (\text{Value of Assets} - \text{Value of Liabilities}) / \text{number of units outstanding}$ .

Mutual funds give the flexibility to diversify the risk and offer a variety of schemes that will suit the needs of the investors. Mutual funds do not require a great deal of time or knowledge from the investor because they are managed by professional fund managers. This can be a big help to an inexperienced investor who is looking to maximize their financial goals.

**5. LIFE INSURANCE-** It is a contract between the insurer and insured and, where the insurer promises to pay a designated beneficiary a sum of money in exchange for a premium, upon the death of an insured person or on the happening of the event.

It provides the benefits of savings and security i.e. it not only provides for financial support in the event of untimely death but also acts a long term investment. It also enables to avail income tax exemption under Section 80C. Even insurance companies provide the advantage of taking a policy loan in case of any emergency. There are certain basic forms of life insurance. The different types of life insurance policies include: 1) Term Insurance 2) Whole Life Policy 3) Endowment Plans 4) Unit Linked Insurance Plans 5) Money Back Policy

**6. POSTAL SAVING SCHEMES-** There are various schemes available in post offices, like National Savings Scheme, Kisan Vikas Patra, Savings Account, Recurring Deposit Account, Time Deposit Account, Monthly Income Scheme Account, Senior Citizen Savings Scheme Account, Sukanya Samridhi Account. Some scheme offer tax saving benefits and some gives tax free returns. These are safe investments one can opt for.

**7. GOVERNMENT SECURITIES (GILT EDGED SECURITIES)-** These are the securities issued by the Reserve Bank of India on behalf of the Government of India to raise funds for government expenditure. They are usually considered low risk investments because they are backed by taxing power of a government. There are many types of government securities issued by RBI:

1. Dated securities with a fixed maturity date
2. Zero coupon bonds
3. Partly paid stock
4. Floating rate bonds
5. Treasury bills

The various benefits of issuing government securities are:

1. No tax deducted at source
2. Transparency in transactions and simplified settlement procedures through CSDL/NSDL.
3. Higher leverage available in case of borrowings against G-Secs.
4. Greater diversification opportunities
5. Greater safety

**8. REAL ESTATE-** The Indian retail sector achieved great prominence with the liberalization of the economy. The real estate industry's growth is linked to developments in retail, hospitality and entertainment industries, economic services and information technology, entry of MNC retailers and India's population below 30 years of age having exposure to global retail are expected to drive demand for organized retail.

The Indian real estate market is expected to touch US\$ 180 billion by 2020. The housing sector alone contributes 5-6 per cent to the country's Gross Domestic Product (GDP). In the period FY 2008-2020, the market size of this sector is expected to increase at a Compound Annual Growth Rate (CAGR) of 11.2 per cent. Retail, hospitality and commercial real estate are also growing significantly, providing the much-needed infrastructure for India's growing needs. According to data released by Department of Industrial Policy and Promotion (DIPP), the construction development sector in India has received Foreign Direct Investment (FDI) equity inflows to the tune of US\$ 24.19 billion in the period April 2000-March 2016. (As per Indian Brand Equity Foundation)

**9. EQUITY SHARES-** Investing in direct equity enables to ownership in a company. The extent of ownership in a company depends on the number of shares one owns in relation to the total number of shares available.

One can start investing in Indian equities by participating in primary markets and also by purchasing securities from secondary markets. Investing in direct equity is termed risky and one needs to diversify the risk by investing in multiple securities from various sectors. Equities carry the maximum risk and may also provide with maximum returns.

**10. BONDS-** A bond is a debt security, in which the issuer owes a debt to the bond holder and is obliged to pay interest (coupon) and to repay the principal at a later date. Corporate bonds function just like the government bonds and the only difference is that they are a bit riskier compared to government bonds. Returns offered by corporate bonds are higher compared to government bonds.

**11. GOLD-** Gold has got emotional value and India is the largest consumer of gold in the world and is acquired in the form of jewellery. Most of the people in India buy physical gold. Gold has liquidity in any part of the world. Today people invest in gold ETF (Exchange Traded Funds) and even investing in gold funds.

**12. CORPORATE FIXED DEPOSITS-** They are issued by corporations and just like bank fixed deposits. They are a bit riskier compared to bank FD's as most of these corporate deposits are unsecured and hence offer higher interest rate.

**13. COMMODITY MARKET-** A commodity is a normal physical product used by everyday people during the course of their lives. The leading commodity exchanges in India are MCX (Multi Commodity Exchange) and NCDEX (National Commodity and Derivatives Exchange). Forward Markets Commission (FMC) is the regulatory body of commodity market.

**14. NATIONAL SAVING CERTIFICATES (NSC) -** It is issued by Department of Post, Government of India. They are risk free avenue of investment. NSCs qualify for rebate under Sec 80C of Income Tax Act. The minimum amount that a person can invest in an NSC is Rs. 100. There is no maximum limit of investment and certificates can be kept as collateral security to get loan from bank.

The maturity date for these certificates is set to 5 of 10 years from the date of purchase. The interest will not be paid to the holder till such time as the investment matures. There are two types of NSC that are available at the post office.

1. NSC Issue VIII- The rate of interest is 8.5% per annum
2. NSC Issue IX-The rate of interest is 8.8% per annum

**15. MONEY MARKET-** It is a market for those instruments which have a maturity period of less than one year. The surplus funds for short periods with the savers are mobilized through the market and made available to the entities for utilization by them. The players in money market are Bankers, Reserve Bank of India (RBI) and Government.

The various types of money market instruments are:

1. Treasury Bills
2. Certificate of Deposit
3. Commercial Paper
4. Bills of Exchange
5. Inter Bank Term Money
6. Inter Bank Participation Certificate
7. Inter Corporate Deposits
8. Call Deposit

**FACTORS AFFECTING INVESTMENT BEHAVIOUR**

Investor's choice of investment will vary from person to person and there are various factors which affect the investment behaviour of individuals are as follows:

1. **Return on investment:** The expected rate of returns is crucial factor as it will guide the choice of investment.
2. **Risk Tolerance:** The ability of the investor to take risk affects the investment choice.
3. **Investment Horizon:** The duration of investment whether short term or long term will determine investment choice.
4. **Tax Exposure:** Investors in higher tax brackets prefer such investments where the return is tax exempt.
5. **Investment Need:** Depending upon the returns at the time of maturity helps to determine how much one needs to invest every month or year.
6. **Current Trend in the Economy-** The prevailing trend in the economy also has an impact on investment choice.
7. **Availability of Funds-** The amount of surplus funds the investor is willing to invest will determine his investment choice.
8. **Fiscal Policy-** Various policies of the government relating to tax concession on investment have influence on investment choice.

**CONCLUSION**

Investors have a variety of investment avenues such as Savings account in bank, Fixed Deposits, Government Securities, Public Provident Fund, Bonds, Shares, Mutual Funds, Investment in Gold, Real Estate etc. All the investors invest their surplus in the above mentioned avenues depending on their risk taking attitude. Investors can avoid risk by opting for the best investment options available. Diversification of investment will enable investors to spread the risk. There are various factors that influence the investor's decision to invest in various financial products. He should understand the past performance of the relevant assets before investing, also consider the risk factor, the returns expected and amount of surplus money he would like to invest and also tax concessions available before investing. The regulatory bodies like SEBI (Securities Exchange Board of India) and RBI (Reserve Bank of India), IRDA (Insurance Regulatory Development Authority) play a major role in protecting the interest of the investors.

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## LUCKNOW CYCLE TRACKS: A PROJECT THAT WENT LIKE A BOMB OR SIMPLY BOMBED?

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#### ABSTRACT

*As a lead participant in India Smart City Challenge -a competition inspiring innovation in cities to improve the lives of citizens, Lucknow (Uttar Pradesh) certainly has an edge over the other participants. One important reason for Lucknow being in the list of smart cities is its 102 kms long cycle tracks constructed in different parts of the city. Inspired by the Netherland, Mr. Akhilesh Yadav, who himself is an environmental engineer, conceptualized this plan to battle the ever increasing traffic, deadly accidents and increasing pollution and subsequently protect the environment, nurture health, prevent accidents, reduce pollution, provide safe mode of transportation to citizens and make Lucknow a Cycle Friendly city. The prime purpose behind conducting this study was to find out and understand people's perception towards cycle paths and ascertain the level of congruity between government's initiative of constructing cycle tracks in the city and people's receptivity in terms of its apt usage. A random survey was conducted among 100 people of Lucknow to find out their opinion about the separate cycle paths and the issues involved with it. The study highlighted that nearly 97 % people are aware about cycle paths and almost 77% people consider it as a great initiative. However, one striking fact revealed from this study was that only 24% people use cycle path everyday/ regularly which hints towards unidentified issues and hurdles present on these tracks. The study also focused upon identifying those issues and suggesting feasible solutions. The study concluded that the initiative is certainly great and one of its kind but the government needs to chalk out effective strategies to battle the bottlenecks and promote cycling to make Lucknow as one great cycling friendly city. Due to financial and time constraints, this research is rather limited and the results of this context may not be applied to other.*

#### KEYWORDS

smart city, cycle tracks, perception, safety, environment, attitude and behavior, societal change.

#### INTRODUCTION

In India, Cycle has been the backbone of transportation, especially in rural and town areas. Almost 65% people living in Indian villages use bicycle as an important means of transport. In fact, it is an integral part of many people's life or rather we can call it a specialist's accessory or a symbol of poor man's lifestyle. It is a low maintenance ride and people do not really worry about having the latest model of bicycle. It is more like a reliable and economically feasible companion to them and the older the camaraderie, the better the relationship between the cyclist and the cycle. On the other hand, in case of two and four wheelers, a single damage may incur huge expense on the vehicle owner. Further, cycling has many other positive benefits like sound health, less expenditure, low maintenance cost, reduction in diseases and other health ailments, decreasing air pollution and control on the emission of dangerous gases and energy and money saving. Cycle is a very economical ride with no side effects. India, particularly in Uttar Pradesh, lacs of people use cycle for their daily commuting to work, to access markets, school and other places at a very less expense. So, in a way, cycling has got immense benefits and if a nation wants to develop and sustain mobility, cycling should be promoted in a big way.

Uttar Pradesh, over the last few years, has been progressing in leaps and bounds. The scenario seems to be rapidly changing over here, with no dimension of development being overlooked. The construction of cycle tracks in different parts of the state is a testimony of its development and progress. The Master Plan framed for the construction of cycle tracks in different cities of Uttar Pradesh is mentioned in Table 1. Among all the cities of Uttar Pradesh, Lucknow is shown to get the highest number of cycle tracks. It is expected that these 26 Tracks of 102 kms in different parts of Lucknow city would curb the problems arising out of pollution and prevent deadly accidents.

**TABLE 1: APPROVED CYCLE TRACKS IN DIFFERENT PARTS OF LUCKNOW**

S. No.	Cities/ Janpad	Number/ Sankhya	Length in Kilometres	Expenditure in Lacs	Task completed	Task left	Remark
1	Lucknow	26	102.81	8885.17	14	12	
2	Agra	1	18.00	3940.59	-	1	Completion date for all the mentioned work is 12/2016
3	Itava	2	26.35	650.42	-	2	
4	Barabanki	1	0.85	77.90	1	-	
5	Faizabad	1	7.60	459.26	-	1	
6	Mathura	1	8.00	2325.65	-	1	
	Total	32	163.61	16338.99	15	17	

Source: PWD Uttar Pradesh, Lucknow Office

#### LUCKNOW CYCLE TRACKS

One of the fastest growing and the largest city, Lucknow, is the capital of Uttar Pradesh. During the last few years, this city has witnessed immense growth and rapid development due to which, practically, most of the open space available has been occupied for construction of residential, commercial and office buildings. Increase in population density of city has resulted into increased pressure on management of services, facilities and amenities. Out of 32 lacs people, around 1.5 lac people use bicycle as a major means of transport. The most common users of bicycle are school students and daily wagers. With the increase in population, the city has paved a way for steady rise in industries and other factors of development leading to Economic growth, which, as a result, has increased the purchasing power of people as they are buying private vehicles. Everyone who can afford can buy a vehicle. There is no such a law to restrain them from doing so. It has resulted into heavy unbalance on the main road which is flocked by all sort of vehicles from cycles to heavy motors. The unbalance and chaos on the main road has led to many accidents and pollution. The urbanization and development in the city is not able to strike a balance with the receding/ depleting eco-system and the available resources.

To battle these bottlenecks, apart from constructing cycle tracks at various locations, the government has actively promulgated the use of non-motorized vehicles like cycle for small distance travel. In an attempt to persuade people to use cycle and cycle tracks, the **LCT (Lucknow Cycle Transport)** system was construed by the government to serve cyclists by providing them a direct, safe route to their destination and encourage cycling to save environment, prevent accident and make this cycle friendly. To promote cycling, the government of Uttar Pradesh has taken several initiatives like hosting a National Level Cyclist Competition in 2015, distributing 2.5 lac cycles to labour class and the poor, compulsory cycle tracks for upcoming housing projects, installing a 59-foot tall bicycle sculpture in the sprawling Janeshwar Misra Park in Lucknow, deputing men in khaki riding bicycles to keep a tab on bad guys planning a heist in the meandering lanes of Lucknow, investing 167.93 crore rupees for the construction of an eight-lane velodrome in the Guru Govind Singh Sports College, Lucknow, creating a Wats App groups where more than 2000 schools and colleges are linked up and exempting cycle from Value Added Tax (VAT) to a certain limit

Despite the government leaving no stone unturned to promote cycling in a big way among people, these cycle paths still remain deserted and unused at several locations.

**POLLUTION IN LUCKNOW CITY**

Vehicular traffic is the main source of particulate air pollution in Lucknow city. The number of different categories of vehicles registered with RTO (Regional Transport Office) Lucknow is: 18,64,556 as on 31.03.2016 which is 9.06% higher over the last year.

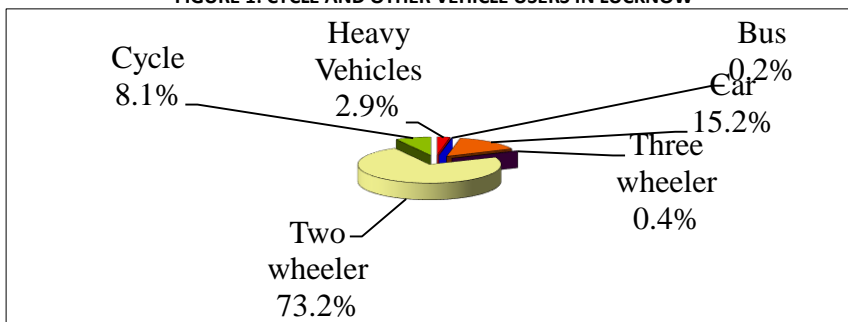
**TABLE 2**  
**Statement Of Area covered by Vehicle on Road**

Type of Vehicles	No. of Vehicles	factor	PCU	Area (SqM)	Area (SqKM)	% Area of Vehicles	% Area occupied on Roads
Multi Axle Trucks	3514	9.0	31626	458577.00	0.46	2.52	19.91
Truck	3389	4.5	15251	221132.25	0.22	1.21	
Bus	3306	3.0	9918	143811.00	0.14	0.79	
Tractor	23679	4.0	94716	1373382.00	1.37	7.54	
Tractor + Trailor	1580	4.5	7110	103095.00	0.10	0.57	
Others	4159	3.0	12477	180916.50	0.18	0.99	
4 W+	17541	3.0	52623	763033.50	0.76	4.19	
<b>Heavy Vehicles</b>	<b>57168</b>	<b>3.9</b>	<b>223721</b>	<b>3243947.25</b>	<b>3.24</b>	<b>17.80</b>	
Car	9153	1.0	9153	132718.50	0.13	0.73	70.88
3 Seater	4360	1.0	4360	63220.00	0.06	0.35	
6 Seater	3202	1.5	4803	69643.50	0.07	0.38	
Car	244121	1.0	244121	3539754.50	3.54	19.42	
Jeep	26019	1.0	26019	377275.50	0.38	2.07	
Van	439	1.0	439	6365.50	0.01	0.03	
3W	3413	1.0	3413	49488.50	0.05	0.27	
2 W	1361787	0.5	680894	9872955.75	9.87	54.17	
<b>Light Vehicles</b>	<b>1652494</b>	<b>0.6</b>	<b>973202</b>	<b>14111421.75</b>	<b>14.11</b>	<b>77.43</b>	<b>70.88</b>
<b>Cycle</b>	<b>150000</b>	<b>0.4</b>	<b>60000</b>	<b>870000.00</b>	<b>0.87</b>	<b>4.77</b>	<b>4.37</b>
<b>Vacant Area</b>				35580738.00	18.23	100.00	<b>91.54</b>
							<b>8.46</b>

Source: PWD Uttar Pradesh, Lucknow Office

A graphical representation of the above mentioned table is presented below: The graph clearly shows the steep rise of 73% in light vehicles whereas cycle is just 8%. Despite the infrastructure and the increasing pollution level in the city, cycle users are very less. It's quite challenging to encourage people to use cycles and cycle paths. People having cycles also use the main road for daily commuting.

**FIGURE 1: CYCLE AND OTHER VEHICLE USERS IN LUCKNOW**



Source: PWD Office Lucknow

**REVIEW OF LITERATURE**

**CYCLING AND SAFETY:** Cycling, as compared to any motorized vehicle is safe and convenient. There is less injury risk involved in cycling, in case of any mishap. The following literature reviews attempt to demonstrate and support it. A study done by John Pucher and Ralph Buehler in their paper titled "Making Cycling Irresistible: Lessons from the Netherlands, Denmark and Germany" mentions how riding bicycle for daily commuting is safe and convenient in the Netherlands, Denmark and Germany and suggests that the construction of separate cycle paths along-side the main roads is highly important to achieve high levels of cycling among people. Conor CO Reynolds, M Anne Harris, Kay Teschke, Peter A Crompton and Meghan Winters in their paper titled "The impact of transportation infrastructure on bicycling injuries and crashes: a review of the literature" studied about the role of proper infrastructure and its impact on injury and crash risk. The study revealed that there is higher risk involved in using main roads, multi-use trails whereas separate off-road bike lanes/ cycles paths were associated with low risk. Another study by Kay Teschke, M. Anne Harris, Conor C. O. Reynolds, Meghan Winters, Shelina Babul, Mary Chipman, Michael D. Cusimano, Jeff R. Brubacher, Garth Hunte, Steven M. Friedman, Melody Monro, Hui Shen, Lee Vernich, and Peter A. Crompton in their paper titled "Route Infrastructure and the Risk of Injuries to Bicyclists: A Case-Crossover Study" presents a comparative study of cycling injury risk of 14 route types and other route infrastructure features and concludes that there is less risk involved in having a bike/cycle specific infrastructure as compared to the busy main roads. Proper bike transportation system will lower cycle injury rates, nourish people's health and promote cycling in a big way. Anne C. Lusk, PhD, Patrick Morency, MD, PhD, Luis F. Miranda-Moreno, PhD, Walter C. Willett, MD, DrPH, and Jack T. Dennerlein, in their paper titled "Bicycle Guidelines and Crash Rates on Cycle Tracks" revealed that the risk associated with bicycle crashes is lower in US cycle tracks than the crashes happening on road ways and supports the construction of cycle tracks for convenient and safe commuting. Another paper titled "How to make more cycling good for road safety?" by Fred Wegman, Fan Zhang and Atze Dijkstra highlights the importance of planning and designing safe and separate cycle facilities for promoting cycling. The study again highlighted the higher risk involved in cycling on main roads which are over flocked by speeding vehicles leading to accidents and deaths.

**CYCLING AND INFRASTRUCTURE:** Not much research is available in this area. However, with this amount of study done, it can be said that making a city cycle friendly requires good infrastructure and proper cycling facilities can be a major factor for encouraging cyclists and ensuring their safety. Cycling, for sure can be good, provided, the cyclists have a safe pathway for them. Cycling on main road is more risky and unsafe due to which lot of accidents take place on daily basis.

Improving facilities in this direction by providing extensive infrastructure to the cyclists will go a long way in promoting cycle friendliness, improving health and ensuring safety of the cycle riders. John Pucher and Lewis Dijkstra mentioned in their paper titled "Promoting Safe walking and cycling to improve public health-Lessons from the Netherlands and Germany" that the fatalities and injuries were more in case of American pedestrians and cyclists than the Dutch and Germans, because Dutch and Germans used cycle tracks/ networks for cycling. In the same light, another research by Anne C Lusk, Peter G Furth, Patrick Morency, Luis F Miranda-Moreno, Walter C Willett, Jack T Dennerlein in their paper titled "Risk of injury for bicycling on cycle tracks versus in the street" suggests that the risk of injury on separate cycle paths is comparatively much lesser than bicycling on streets and hence the construction of separate cycle paths for cyclists should be encouraged. Additionally, Beth Thomas and Michelle De Robertis in their paper titled "The safety of urban cycle tracks: A review of the literature" found out that one way cycle tracks are safer than two-way tracks at intersections. By bringing in some tweak in the intersection method, constructing cycle tracks can be safer for cyclists. John Pucher and Ralph Buehler in their another paper titled "Why Canadians cycle more than Americans: A comparative analysis of bicycling trends and policies" found out that the Canadians, despite their cold climate, cycle nearly 3 times more than the Americans and one of the prime reasons for this is extensive cycling infrastructure and proper training programs for cyclists. John Pucher, Ralph Buehler and Mark Seinen in their other research paper titled "Bicycling renaissance in North America? An update and re-appraisal of cycling trends and policies" Cycling has increased in both USA and Canada since the year 2000 and the striking fact revealed here was that these cities have greatly expanded their cycling infrastructure giving us an indication around the significance of proper cycling infrastructure for encouraging cycle riders.

**CYCLING AND HEALTH:** Cycling is associated with many benefits, particularly health and physical fitness. Though not much concrete research is available in this area, however, a study by Jennifer Dill in her paper titled "Bicycling for Transportation and Health: The Role of Infrastructure" highlights the importance of well-connected neighborhood streets and proper cycling infrastructure for encouraging more and more American citizens to do bicycling and thus improving physical fitness. Another study by Kjartan Sælensminde in the paper titled "Cost-benefit analysis of walking and cycling track networks taking into account insecurity, health effects and external costs of motorized traffic" presents the cost-benefit analysis in terms of health, fitness and safety from walking and cycling track networks in three Norwegian cities and concludes that the benefit accrued from investment done in developing cycle networks is almost 4-5 time higher than the investment done in developing some other mode of transportation system. Such kind of investments could be very beneficial to society at large. P L Jacobsen, F Racioppi, H Rutter in their paper titled "Who owns the roads? How motorised traffic discourages walking and bicycling" investigated the result of traffic on level of walking and bicycling and concluded that proper interventions are required to reduce traffic speed and volume in order to promote walking and bicycling and thus resulting in public health gains. Research paper titled "Promoting walking and cycling as an alternative to using cars: systematic review" by David Ogilvie, Matt Egan, Val Hamilton and Mark Petticrew revealed that participants commuting actively in the trial experience witnessed short term improvements in health and fitness indicating the importance of cycling and walking.

**OBJECTIVES**

The objective behind conducting this study was to study people’s perception about these newly constructed cycle paths and see if there is some congruity between the government’s initiative of constructing cycle tracks in the city and people’s receptivity in terms of apt usage of tracks.

**METHODOLOGY**

A survey was conducted in different parts of the city to ascertain the usefulness of these tracks. The selection of respondents was a random process and the sample size was 100 people. The target of this study was to approach maximum number of people, but due to time and finance constraint, the study was limited to 100 respondents. The objective behind interviewing these people was to know the live experiences and difficulties of people using these cycle paths. Subsequently, another prime purpose was to find out whether the newly constructed cycle tracks are being utilized in the right way or it is just a waste of government’s time, money and resources. To find out an answer to these two questions, 100 people from different strata of society were randomly selected and the following questions were asked from them. Some respondents were a little fearful of the questions. Hence, in order to make the survey easy for the respondents, most of the questions were limited to Yes/ No response. Some respondents were also not comfortable answering lengthy questions. Hence questions related to problems and suggestions were provided with some options and space was offered to people who wanted to talk at length. The response received helped in creating a useful framework for developing this paper further.

For an easy interpretation of the survey results, the answer to every question is presented through a histogram, the details of which are mentioned in the next section Findings and Interpretations.

**FINDINGS AND INTERPRETATIONS**

**INTERPRETATION OF CASE 1**

The first case centered on finding out whether people are aware about the newly constructed cycle tracks or not. The answer was solicited in Yes /No form. The table and histogram below represents the findings:

**TABLE 1: CYCLE TRACK AWARENESS**

Bin	LABEL	Frequency
1	yes	97
2	no	3

In the above histogram and table, 1 stands for ‘Yes’ and 2 is for ‘No’.

From the above table, it can be seen that almost 97% people are aware of the cycle tracks and just 7 % are not aware. This shows that a good number of people are well informed of the government’s initiative. But there are still some who have no clue of the cycle tracks. Although the number is less, but the results may vary with the increase in sample size.

**INTERPRETATION OF CASE 2**

The **second question** focused upon finding out whether this initiative of Uttar Pradesh government is good or not. The answer to this question was again limited to Yes/ No form to stay specific.

Findings and Interpretations are explained through following table:

**TABLE 2: INITIATIVE-GOOD?**

Bin	LABEL	Frequency
1	yes	77
2	no	23

In the above histogram and table 1 stands for ‘Yes’ and 2 is for ‘No’.

From the above table, it can be seen that 77% people consider the construction of cycle paths a good initiative of the Government. However, 23% people feel that it just a waste of time, money, man-power resources and therefore they do not consider cycle tracks a good initiative of the government.

**INTERPRETATION OF CASE 3**

The **third case** digs into the details of number of people riding bicycle. The question asked was “Do you ride a cycle?” and the answer was again limited to ‘Yes’ or ‘No’ form.

Findings are explained through following table

TABLE 3: USE OF CYCLE

Bin	LABEL	Frequency
1	yes	58
2	no	42

In the above histogram and table 1 stands for 'Yes' and 2 is for 'No'.

From the above table, it can be seen that 58 % people said that they ride bicycle which is a positive indication. However, the fact remains that non- riders are no less and it is almost 42% which is not positive. These people have got bicycles but they do not ride them. This needs to be addressed, if the tracks have to be utilized properly.

**INTERPRETATION OF CASE 4**

The **fourth case**, focuses upon finding out how many people actually ride cycles on the tracks and not use the black top or main road. To ascertain the answer to this question, "Do you ride cycles on cycle paths or main road?". The respondents were supposed to answer in 'Yes' or 'No'.

The findings are explained through following table:

TABLE 4: USE OF CYCLE TRACK

Bin	LABEL	FREQUENCY
1	yes	71
2	no	29

In the above histogram and table, 1 stands for 'Yes' and 2 is for 'No'.

From the above table it can be understood that almost 71% people ride bicycles on cycle tracks whereas 29% people ride cycles on main roads.

**INTERPRETATION OF CASE 5**

The **fifth case** emphasizes upon the frequency of cycle tracks usage by cycle riders. The findings are explained through following table:

TABLE 5: DEGREE OF USE OF CYCLE TRACK

Bin	LABEL	FREQUENCY
1	everyday	24
2	never	21
3	once a month	7
4	sometimes	48

In the above histogram and table, 1 stands for 'Everyday', 2 is for 'Never', 3 is for 'once a month' and 4 is for 'Sometimes'.

From the above table it can be seen that most of the people are 'Sometimes' user of the cycle track. It is also noticeable that number of people never using the cycle track and number of people using it every day are almost same, which indirectly hints at the problems and issues involved in using cycle tracks daily/ regularly for commuting in the city.

**INTERPRETATION OF CASE 6**

The **sixth case** tries to find out the reason people do not prefer cycle tracks and ride bicycles on main roads. The findings are explained through following table:

TABLE 6: REASON FOR AVOIDING CYCLE TRACK

Bin	LABEL	FREQUENCY
1	disconnectivity	19
2	lack of lighting	5
3	obstructions	55
4	others	21

In the above histogram and table, 1 stands for 'Disconnected cycle paths', 2 is for 'Lack of lighting', 3 is for 'Obstructions' and 4 is for 'Any other reasons'. From the above table, it can be easily understood that the main reason behind people not using the cycle tracks is hurdles in the way/ on cycle paths. Some people also consider that disconnected paths, risky intersections on cycle paths and improper lighting prevented them from using the tracks. Some people also gave their own views for this question.

**INTERPRETATION OF CASE 7**

The **seventh case**, underscores different suggestions received by respondents for encouraging more and more people to ride bicycles on these paths. In order to prevent distraction and avoid communication barriers, certain options were provided to the respondents.

The findings are explained through following table:

TABLE 7: SUGGESTIONS FOR IMPROVEMENT

Bin	LABEL	FREQUENCY
1	awareness	13
2	proper linking	26
3	Remove obstruction and hurdles and regular maintenance of tracks	44
4	other	17

In the above histogram and table 1 stands for 'Awareness', 2 is for 'Proper Linking', 3 is for 'Removing hurdles' and 4 is for 'Any other suggestions'

From the above table, it can be seen that most of the people suggest that the hurdles on cycle paths should be removed. Proper connectivity between tracks is also suggested by good number of people. Some people also suggested that there should be a provision to send complaint letter directly to CM and so on.

**Some more dignitaries from the city were interviewed to understand their perception about the same.**

**Mr. Rajshekhar, Former District Magistrate Lucknow, said,** "No one can deny that it is the best mode of transport. It's a very unique project and first of its kind in India and especially the objective behind this is to provide a safe pathway for the cyclists. So, this is a new beginning of the good way of local transport and a healthy way. Many people have shifted from the conventional way of transport like bike, scooter etc. to a cycle. And now it has become a healthy symbol of the transport." This mode of transport will certainly help in reducing the air pollution.

**Mr. V K Singh, Chief Engineer, Central zone, Lucknow, Public Works Department: also the Nodal person for this project said,** "Cycle is a good mode of transport and cycle track project is a great initiative but it is clutched by some bottlenecks which are Cyclists and Pedestrians do not feel their ownership on the main road. By ownership I mean a sense of security. The tracks are not linked with each other due to the non- availability of sufficient road width at some places. The most important one is the Encroachment by local vendors, sellers, residents, etc. Local residents find it very problematic because their houses are situated by the sides of cycle tracks.

**RESULTS**

From the above survey results, it is clearly evident that investment made by the government is not considered a waste by general public as nearly 77% people appreciate the concept of cycle tracks in Lucknow. However, a major concern which arises out of this study is that almost 58% people like to use these tracks for riding bicycles and remaining 42% people do not like to use cycle tracks and only 24% people use the tracks daily. A deeper probe into the same concern highlighted the main causes of not using these tracks. The most important of all is hurdles on tracks in the form of potholes, trees planted in the MIDDLE of these tracks,



uneven construction, vendors, squatters and hawkers blocking the paths for commercial activities, stray animals using the paths as shelter, local residents parking their vehicles on these paths and lack of regular maintenance of the tracks. The second important cause of not using cycle tracks is disconnectedness of tracks at various locations. This disconnectedness causes too much inconvenience to the riders as they have to ascend and descend these tracks several times before arriving at their destination. Hence the riders find the black top/ main road more comfortable for them.

## CONCLUSION

The study clearly indicates that Lucknow Cycle Tracks Project is considered a great initiative, a wonderful concept by maximum number of people. For promoting more and more people to use cycle tracks, proper infrastructure is very important. To an extent, Lucknow city has already got it but the chink in the armor in form of several hurdles which discourage cycle riders from using it, can be worked upon and removed by taking appropriate action. This project was inspired by cycle paths in the Netherlands. Today, Netherlands has got one of the best cycle transport facilities in the world. However, to come to this level, the Netherlands took 20 years and in case of Lucknow it is just 2 years of progress. With time, the bottlenecks may be removed and more and more people can be motivated to use these paths. Hence the government should chalk out effective strategies to remove various hurdles from tracks and motivate more and more people to ride bicycles and use tracks for their safety.

## RECOMMENDATIONS

Keeping in mind the issues raised in this study, the government should launch more awareness programs through TV/Radio/Social media platform and simultaneously work on battling the bottlenecks present on these cycle paths. Since 93% of communication impact is visual, more and more advertisement could be done through several media and particularly the endorsement by roping in some celebrity can be a great way to start off. Frequent training/ awareness programs for cyclists and non-cyclists and including local residents, cycle association for keeping a close watch on the miscreants will help cyclists in a big way.

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## DETERMINANTS OF TAX COMPLIANCE BEHAVIOR: AMONG CATEGORY "A" AND "B" TAXPAYERS IN HOSANNA TOWN

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### ABSTRACT

*Tax compliance issue is a major problem in revenue generation by government in African countries, Ethiopia especially. Our country tax mobilization was also the lowest among sub-Saharan African countries and thus, this study was conducted with the aim of identify and analyze factors of tax compliance behavior of taxpayers and identify the major factor that face Hosanna town tax administration. The survey research design was used in conducting investigation. Survey data for this study were collected based on structure questionnaires from a sample of Hosanna Town business income taxpayers by distributing the total sample Stratified sampling based on settlements area to three sub cities namely Addis ketem, Gofare mada and Sechi duna using proportional sampling techniques and then simple random sampling was used. The primary source of data was used and two hundred and seven six (276) copies of self-administered question were distributed. The number of questionnaires completed and returned was two hundred and twenty-eight (228), constituting 83% response rate. Four explanatory variables were used in the multiple regression model. The p-value was used to test the significance of the study variables. The results showed that perception on government spending; perception on equity and fairness of the tax system; and business tax rates are factor that positively significantly affect tax compliance. However, a referral group (friends, relatives) was negatively significantly affect tax compliance. Therefore, researcher recommended the efforts made to improve taxpayer' perception on government spending, so as to improve voluntary tax compliance and consequences improve government revenue generation.*

### KEYWORDS

business taxpayers, regression model, tax compliance.

### 1. INTRODUCTION

**T**ax, in the simplest form, can be explained as "a compulsory legal levy payable by an economics unit to the government without any corresponding entitlement to receive define and direct quid pro quo from the government for the contribution made" (H, Bahtia. 2003). The basic functions of this economic burden imposed on citizens by the states is to provide source of funds used for development projects such as provision of infrastructure like good roads, stable power supply, stable water supply etc.

The issue of tax compliance towards tax system has evoked great attention among many revenue authorities in the World. However, it is debatable on what has done towards the study of taxpayers' behavior towards tax system in developing countries. as they concentrate more in studies which would increase their budgets "bottom-line" in terms of huge revenue collection and enforcement efforts at the expense of studies on taxpayers behavior which would make increase in this tax revenue to be realized and enforcement efforts work. Perhaps the less developed countries are not to blame as they run on "budget deficits" hence, scarce resources to see through such studies that are perceive as adding no direct value to revenue collection.

Compliance of taxpayers is one of the concerns related to raising public finances. An important issue for any government and revenue collecting authority is to obtain knowledge and understanding of the reasons for taxpayer non-compliance in order to maximize voluntary compliance in a self-assessment environment. However, measurement of the magnitude of intentional and unintentional non-compliance can be difficult as it involves estimating levels of uncollected tax OECD (2004). Government needs financial resources to act as a government and play a role that is expect from it by the public (Bhatia, 1976; James, 2000). Therefore, what the government gives it must first take away.

According to Fischer, et al., (1992) defined tax compliance as the reporting of all incomes and paying of all taxes by fulfilling the provisions of laws, regulations and court judgments. Another definition of tax compliance is a person's act of filling the Income Tax Form, declaring all taxable income accurately, and disbursing all payable taxes within the stipulated period without having to wait for follow-up actions from the authority. Singh, (2003) explained that taxpayers need to prepare all the relevant information in the Income Tax Form within the period given, and the form must report accurate tax liability in accordance with the need of laws, regulations, and court judgments. Those who fail to adhere to taxation laws intentionally or otherwise shall considered as having committed an offence.

Jackson and Milliron (1986), as cited in Palil (2010), listed 14 main factors that have influenced tax compliance as discussed by various researchers. These factors are age, gender, education, income, occupation or status, peers' or other taxpayers' influence, ethics, legal sanction, complexity, relationship with taxation authority, income sources, perceived fairness of the tax system, possibility of being audited and tax rate. Various researchers have listed factors that influenced tax compliance such as demographic, income, compliance cost, and tax agents, in addition to moral or ethical factors (Singh, 2003; Kasipillai et al., 2003). Kirchner (2007) and Loo (2006), listed five main factors that have influenced tax compliance in which they approached tax compliance from an interdisciplinary perspective, which represents a wider perspective of tax compliance determinants compared to other researchers. These are economic factors such as; tax rates, tax audits and perception on government spending: Institutional factors are role (efficiency) of the tax authority/government, simplicity of tax return and administration, probability of detection. Social factors such as ethics and attitude, perception on equity and fairness and changes on current government policies, referents groups (family and friends). Individual factors such as personal financial constraint, awareness on offences and penalty and others factors (demographic) factors are age, income level, culture, education and gender.

Tax compliance has been an important subject of research in a large number of developed and a number of developing countries. Since each country has, its own approach to managing tax compliance levels and each has different tax laws and regulations, the factors influencing tax compliance behavior appear to vary among countries (Palil, 2010). Therefore, the purpose of this study is to assess the determinant of tax compliance in Ethiopia particularly in Hosanna town taxpayers. In addition to this, the relationship between some factors of tax compliance and tax compliance will be examine in the study.

### 2. EMPIRICAL LITERATURE REVIEW ON FACTORS WHICH HELP TO IMPROVE TAX COMPLIANCE AMONG BUSINESS TAXPAYERS

In the body of literature, perceptions of government spending, perception on equity or fairness, Business tax rates and referral groups (family, friends. etc.) have been recommended as main strategy for improving Tax compliance among business profits taxpayers as it is described below:

The following is a brief review of the literature with regard to the determinants of tax Compliance behavior.

#### 2.1. PERCEPTIONS OF GOVERNMENT SPENDING

Tilahun and Yidersal (2014) on their study of the Determinants of Tax compliance behavior in Ethiopia: The case of bahir Dar city taxpayers –using one sample T-test, findings revealed that significantly affect tax compliance behavior. Further the study recommended on the perception of government spending on improving tax compliance. Similarly, Beza (2014) on his study of Determinates of taxpayer's voluntary compliance with taxation in East Gojjam Ethiopia, to improve voluntary tax compliance the study recommended that government should increase the numbers of infrastructures like education, water etc. on people issue. Hence, this finding has posited hypothesis which states that:

**H1: Perceptions of government spending has positively impact on tax compliance among Business income taxpayers in Hosanna town.**

2.2. BUSINESS TAX RATES

Kirchler, (2007) claimed that reducing tax rates is not the only policy that has the potential to discourage tax evasion but the tax rate is an important factor in determining tax compliance behavior although the exact impact is still unclear and debatable. Clotfelter also suggests that there was a significant relationship between tax rates and evasion due to tax rates used as an instrument that can manipulated for policy goals in particular. Raising marginal tax rates will be likely to encourage taxpayers to evade tax more (Knoblett, 2001; Torgler, 2007). while lowering tax rates does not necessarily increase tax compliance (Trivedi, Shehata, and Mestelmen, 2004; Kirchler, 2007) This uncertainty and conflicting issue for example reducing tax rate to increase compliance has attracted the attention of tax researchers aiming to come up with more certain and concrete evidence of the impact of tax rates on evasion.

Other studies of rational compliance decisions however, perceived that tax rates have a mixed impact on tax compliance or predict that increasing tax rates will increase compliance behavior (Kirchler, Hoelzl and Wahl, 2008).

In contrast with various studies found that increasing tax rates encouraged noncompliant behavior or produced mixed findings (Park and Hyun, 2003). Porcano (1988) claimed that tax rates have no effect on tax compliance while most experimental studies found that increasing tax rates leads to tax evasion (Park and Hyun, 2003). Since the impact of tax rates was debatable (positive, negative or no impact on evasion), Kirchler et. al. (2008) and Mc Kerchar and Evans (2009) suggested that the degree of trust between taxpayers and the government has a major role in ascertaining the impact of tax rates on compliance. When trust is low, a high tax rate could have perceived as an unfair treatment of taxpayers and when trust is high, the same level of tax rate could be interpreted as contribution to the community (Kirchler et. al, 2008). In summary, evidence suggests tax rates have mixed impact on tax compliance i.e decreasing tax rates does not necessarily always increase compliance (Kirchler et. al., 2008) and increasing tax rates will not necessarily always decrease compliance behavior. Hence this finding has posited hypothesis which state that:

**H2. Business tax rate has positively impact on tax compliance among business tax payers in Hosanna town.**

2.3. PERCEPTION OF EQUITY OR FAIRNESS

Fairness and equity an individual is concerned about the fairness of their actions, and wants to treat in relation to his merits, efforts and needs (Kirchler et. al., 2008). If he feels that his tax burden is higher than other people within the same are income group, his tax compliance probably decreases more widely at group levels; taxpayers want a fair treatment of their group relative to other income groups. If a specific group perceives that their tax liability is higher than other groups, then tax evasion might occur among the group members Spicer and Becker, (1980) as cited by Palil, In contrast, if the society perceives that the tax system is equitable and fair, voluntary compliance expected to increase. With regard to procedural justice, the main elements for perceived fairness are neutrality of procedures used, trustworthiness of the tax authorities, and the polite, dignified, and respectful treatment of taxpayers as individuals or groups. (Tyler and Lind, 1992) Brooks (2001) as cited by Lemessa states that fairness has always been widely regarded as the most important criteria in judging a tax system. The problem of unfairness is that a tax system allows taxes to shift from dishonest to honest taxpayers. The fairness of a tax system may also have perceived in different ways by the taxpayers and tax authorities. What is fair in the eye of the tax authorities may not have the same image in the mind of the taxpayers.

Wenzel (2003) suggested three areas of fairness from the taxpayers' point of view (social psychology): 1) distributive justice (viewed as the exchange of resources i.e. benefit and cost); 2) procedural justice (viewed as the process of resource distribution) and 3) retributive justice (viewed as the appropriateness of sanctions when norm breaking occurs).

With regard to procedural justice, the main elements for perceived fairness are neutrality of procedures used, trustworthiness of the tax authorities, and the polite, dignified, and respectful treatment of taxpayers as individuals or groups (Tyler and Lind, 1992). Taxpayers expect that tax authorities will provide sufficient information about the tax law and regulations so that they can complete their tax return as accurately as possible. It argued therefore that increased information about tax law and regulations could increase fairness perception and compliance (Wartick, 1994). Retributive justice, unreasonable and intrusive audits and unfair penalties lead to stressful and dissatisfied taxpayers (Spicer and Lundsted, 1976). Unfavorable retributive justice perceptions could lead to non-compliant behavior and consequently increase tax evasion and inflate the tax gap.

**Table 1.** Below shows, that comparison of the studies that conducted with various researchers on similarly area of these studies presented below. The justification part of this study address that findings are still debatable among different researcher. Hence, we looking at the determinants of tax compliance behaviors there seem to be a disagreement in the findings (sign). In some variables are as follows: some of the studies are summarized below.

TABLE 1: EMPIRICAL STUDIES IN ETHIOPIA

Author(s)	Coverage	Sample area	Methodology	Results
Lemesssa (2007)	Dire Dawa City administration	Only category "C" taxpayers	Descriptive statistics	The results showed that tax fairness and equity, organizational strength of the tax authority, awareness level of the taxpayers, socio-cultures factors, and provision of social services by the government were the determinants of taxpayers' voluntary tax compliance.
Beza (2014)	East Gojjam-Ethiopia	Category "A", "B" and "C" taxpayers	Descriptive statistic and Pearson correction and chisquare	The results showed that there is no difference in their tax compliance behavior between males and females, As well as between category of A, B & C taxpayers and only perception of fairness and attitude towards taxation have positive and significant correction with tax compliance.
Tilahuna and yidersal (2014)	Bahir Dar City-Ethiopia	Category "C" taxpayers	One-way ANOVA, Two-sample and one sample T-test.	The results revealed that perception on government spending; perception on equity and fairness of the tax system; penalties; personal financial constraint; change on current government policies; and referral group (friends, relatives etc.) are factors that significantly affect tax compliance behavior. However, gender and probability of audited have no significantly impact on tax compliance behavior.
Tadesse and Goitom (2014)	Mekell city-Ethiopia	Rental income taxpayers	An ordered probit model	The results indicated that tax compliance influenced by the probability of audited, financial constraints, and changes in government policy. Other variable such as perception of government spending, perception of equity and fairness, penalties, role of the tax authority and tax knowledge not significantly corrected with tax compliance.
Dereje (2015)	Hadiya Zone, Hosanna town	Business profit taxpayers category 'A' and "B"	Used ordinary least square (OLS) multiple regression analysis, One-way ANOVA and one sample t-test	The results revealed that tax compliance behavior was influenced by the tax rates; perception of government spending; perception of equity and fairness were the major factors that positively and significantly influenced tax compliance. However, referral groups (friends, relatives etc.) influenced tax compliance negatively but significantly.

TABLE 2: GLOBAL EMPIRICAL STUDIES

Rizal Palil, Abdul Hamid & Hizam Hanafiah (2013)	Malaysia	Multiple regressions (Ordinary Least Squares, OLS).	The result indicated that probability of being audit, perception of government spending, the role of tax authority had positively affect tax compliance. However, tax rates(negative association) not only become another factor that affects tax compliance behavior in relation to the SAS in Malaysia in the present study, but also the most significant determinant
Rizal Palil(2010)	University of Birmingham.	Inferential statics and Multiple regression model	The results indicated that tax compliance had influenced specifically by probability of being audited, perceptions of government spending, penalties, personal financial constraints, and the influence of referent groups.

The above two authors reported different outcomes on determinates of tax compliance. Among the factors perceptions of government spending, probability of being audited, personal financial constraints, influence of referent groups, the role of tax authority had significant and positive impact on tax compliance (Palil, 2010), and Hamid & Hanafih (2013). But palil, Hamid & Hanafih (2013) findings tax rates is negatively impact on tax compliance. Thus, this difference calls a research to examine the relationship among the factors for tax compliance and the tax compliance behavior.

**3. STATEMENT OF THE PROBLEM**

An important issue for any government and revenue collecting authority is to obtain knowledge and understanding of the reasons for taxpayer non-compliance. However, measurement of the magnitude of intentional and unintentional non-compliance can be difficult as it involves estimating levels of uncollected tax, which by its nature not detected by the revenue authority. The amount of tax lost through evasion is potentially enormous particularly in developing countries like Ethiopia. Consequently, to prevent the erosion of government revenue, further research is required into understanding taxpayer attitudes and behavior. According to the information, the researcher obtained from Hosanna Town Tax Administration Authority, most of the business taxpayers are not committed to paying their tax obligations on time, regardless of the existing income tax proclamation. This clearly shows that tax compliance factors have contributed for not committed to pay tax liability for tax authority on time in the town (Hosanna Town Administration annual report, 2014). According to GTP (2010) forwarded by MOFED, there is a plan for increasing tax to GDP ratio to 17 percent in the five years plan. Although the tax revenue has increased in real terms over the last three years, it still remains low compared to the tax revenue generating capacity of the economy, the financing requirements of the country's development programs and the average performances of sub-Saharan countries. (MOFED, 2014). In the report this ratio is about 12 percent, this shows that the tax to GDP ratio has decreased. According to MOFED, this is specifically due to the prevalence of a high number of non-compliance business communities. Therefore, our country's tax mobilization is also the lowest among most African countries. Thus, attention may not give toward understanding the determinants of tax as a prerequisite for increasing public revenue in Hosanna Town. Hence, the following factors, which determine that why tax payers, decide or not to comply, which are perceptions of government spending, perceptions of equity and fairness, the impact of referral groups and tax rate. Hence, this study mainly assesses the determinant of tax compliance in Ethiopia with a particular emphasis on Hosanna town.

**4. OBJECTIVES OF THE STUDY**

The general objective of this study is to identify and analyze determinants of tax compliance behavior of taxpayers and to identify the major problems that face Hosanna Town tax administration system in Hadiya Zone. Its specific objectives were:

1. To identify the factors affecting tax compliance behaviors in Hosanna Town taxpayers
2. To analyze the relationship between tax compliance and factors of tax compliance
3. To assess the major problems faced by the taxpayers in the tax compliance behavior with determinants in Hosanna Town taxpayers.

Accordingly, the following research hypotheses were formulated to test the relationship among the factors of tax compliance and tax compliance behavior. The possible relationship between these variables and taxpayer's compliance behaviors is considered in the context of four main research hypothesis are stated in the alternatives forma which are described as follows:

- H1:** There is significant relationship between taxpayers' perception of tax equity and fairness with tax compliance behavior
- H2:** There is significant relationship between taxpayers' perception of government spending and tax compliance behavior.
- H3:** There is significant relationship between business income tax rate and tax compliance behavior.
- H4:** There is significant relationship between referent groups (friends, relatives) and tax compliance behavior.

**5. RESEARCH DESIGN AND METHODOLOGY**

**5.1. RESEARCH DESIGN AND METHODOLOGY**

The study used quantitative (survey) research approach. The primary data used to analyze the effect of the factors of tax compliance on tax compliance behaviors of the Business profit taxpayers.

**5.2 DATA TYPE, SOURCE, AND COLLECTION**

Primary data was used in this study. The primary data was collected by questionnaire and interview. The following data were obtained from the respondents: Business taxpayer's demographic characteristics like age, sex, level of education, Social factors such as perception on equity and fairness and Referent group Economic factors such as perception on government spending and business tax rate

**5.3 SAMPLING DESIGN**

Depending on the nature of respondents, the study used two sampling design methods: the stratified random sampling and purposive method: the stratified sampling used because heterogeneous of taxpayers and purposive sampling method used to select proper tax officials from whom relevant information gathered. For responding to questionnaire, by considering each category of taxpayer as strata stratified random sampling is applied, formation of strata also performed based on the geographical location that is the number of sub cities considered as single strata. These are: Sechi duna, addis kifle ketem and Gofari mad. Whereas for the interview purpose purposive sampling was employed and so the researcher purposely selected the coordinators of each core work process and the revenue office head for interview purpose used.

**TABLE 3: PROPORTIONATE SAMPLE SIZE FROM EACH STRATUM**

No	Sub-city name	Sub-city population	Description	Proportionate of sample size from stratum $S_n = (P_s \div P) * N$	
				Taxpayers	
1	Sechi duna	458	CA(158),	44	
			CB(300)	84	
2	Gofare mada	420	CA(144),	40	
			CB(276)	78	
3	Addis ketem	106	CA(36)	10	
			,CB(70)	20	
4	Hosanna	984	Total	276	

Source: survey result, 2015, Note that: CA (category "A"), CB (category "B") taxpayers

**TABLE 4: LIST OF MEASUREMENT OF VARIABLES AND SCALE**

NO	Variables	Proxy	Unit of measurement	Items of measurement
1	Tax compliance behavior	TCB	Ordinal scale(1-5 Likert scale)	From survey data
2	Age	AG	Ordinal scale (1-8) group	From survey data
3	Gender	Gen	Nominal scale (0-1) binary.1if male, 0 for female )	From survey data
4	Education	EDL	Ordinal scale (1-6) group	
5	Perception on government spending	PGS	(1-5 Likert Scale) Ordinal	From survey data
6	perception on equity and fairness	PEF	(1-5 Likert Scale) Ordinal	From survey data
7	Referral group (Friends, relatives etc)	RFG	(1-5 Likert Scale) Ordinal	From survey data
8	Tax rate	TR	(1-5 Likert scale) ordinal	From survey data

Source: compiled by researcher

TABLE 5: DESCRIPTION OF VARIABLES

Variable	Symbol	Descriptions
Tax compliance	Tc	The total score derived from a set of 15 questions. The minimum total score for each respondent is 15(1 mark times 15 questions, where 1=non-compliant) and the maximum total score is 75(5 times 15 questions, where 5=very compliant).
Tax rates	TR	Taxpayers' perception on the tax rates The minimum score is 3 and the maximum is 15
Perception of government spending	PGS	Taxpayers' perception on how the government spends taxpayers' money or redistributes the tax collection The minimum score is 4 and the maximum is 20
Perception of equity and fairness	PEF	Taxpayers' perception on equity and fairness on tax system (ability to pay tax, tax paid increase with the amount of the tax base). The minimum score is 7 and the maximum is 35
Referral groups	RGS	Referent groups (family and friends) having in tax authority paly on significant role in determining people's intentions and behavior. The minimum score is 1and the maximum is 5

6. DATA PROCESSING AND ANALYSIS TECHNIQUES

6.1 ECONOMIC REGRESSION

The econometric regression model used for analyzing the data is using multiple regressions (Ordinary Least Squares (OLS). Because the data fulfill the assumption of CLR(Classical Linear Model) and OLS regression is particularly powerful as it relatively easy to check the model assumption such as linearity; constant variance and the effect of outliers using simple graphical methods (Gujarat , 2004) and the researcher is used statistical packed for social sciences is 20.0 version (SPSS20.0) software for data analysis. Strength of the relationship between dependent and independent variables tested using correlation – co efficient (r) and according to this research, it has applied the OLS model; then the dependent and independent variable presented.

MULTIPLE LINEAR REGRESSION MODEL

Multiple regression analysis used to test for relationship and strength of relationship on each factors for improving taxpayers tax compliance. The p-value of explanatory variables was used to test the research questions at 1%, 5% and 10% significance level. The multiple linear regression model for TC (tax compliance) is shown on equation below. These models were run by SPSS 20.0 software. The four variables are used to analyze of tax compliance behavior in Hosanna town. The adopted regression models are presented are follows:

$$tc_i = \alpha + pgs_{\beta_1} + pef_{\beta_2} + rgs_{\beta_3} + tr_{\beta_4} + \epsilon$$

Whereas, TC= tax compliance

PGS=perception of government spending

PEF= perception of equity and fairness

RGS= referral groups,

TR=tax rate,

$\epsilon$  is the error term

7. RESULTS AND DISCUSSIONS

TABLE 6: MODEL OUTPUT

Model output					
	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.081	.066		1.230	.220
Tr	.098	.021	.195	4.734	.000
pgs	.112	.023	.315	4.813	.000
Pef	.107	.005	.907	22.088	.000
Rgs	-.173	.031	-.249	-5.626	.000

Source: SPSS output from survey data,

DISCUSSION AND FINDING OF REGRESSION MODEL

This research examining factors that affect taxpayers' behavior in Hosanna town and four determinants of tax compliance were examined in this study, namely, perceptions of government spending, the impact of referral groups, tax rate and perceptions of equity and fairness.

The finding implies that the significantly factors affecting tax compliance in Hosanna at the time of this study include perception on equity and fairness (positive), tax rate(positive), referral groups(negative) and perception on government spending(positive). Perception on equity and fairness was found to be the main explanatory factor with a bet coefficient of  $\beta=.907$ , followed by tax rate .195 and perception of government spending ( $\beta=.315$ ), and referral groups ( $\beta=-.245$ )

1. PERCEPTION OF EQUITY AND FAIRNESS

With regard to the perception of equity and fairness, previous studies (for example, Jackson and milliron (1988), Beza (2014) and Tilahun and Yidersla (2014) have found that a positive perception on equity and fairness but some other studied found that contradicting results, such as spicer (1976) and songa and Yarbrough (1978). In this study researcher found that significant value of the perception on equity and fairness is acted 0.00 at 5%. This imply that the perception on equity and fairness affect compliance and the coefficient of the regression is positive (.907), thus the hypothesis is accepted. As far as high perception of equity and fairness could encourage tax compliance, the Hosanna town revenue authority is imposition business income tax based on ability to pay tax, which is vertical equity tax, paid increases with amount of the tax base).

2. PERCEPTION OF GOVERNMENT SPENDING

With regard to the perception of government spending, previous studies (for example, Beza (2014), Tilahun and Yidersal (2014) have found that a high perception of government spending would encourage taxpayers to be more compliant (positive relationship). In this study, the significant value of the perception of government spending acted at 0.00 at 5%. This imply that the perception of government spending significant affect tax compliance and the coefficient of the regression is positive (.315), thus, the hypothesis is accepted. As far as high perception of government spending could encourage tax compliance, the government of Hosanna town is wisely spending the Zonal revenue, for example, for basic like education, Health and safety and public transportation and Hosanna revenue authority should be increasing controlling activity of misuse resource.

3. TAX RATE

With regard to the tax rate, previous studies showed that tax rate a mixed impact on tax compliance. According to existent studies, decreasing tax rates will not necessary increase compliance (kirchler etal, 2008), while increasing tax rate will not necessary decrease compliance (Allingham & Sandmo 1972). In this study, the significant value of tax rate acted at 0.00 at 5%. This imply that the tax rate of business income tax rate significant affect tax compliance and the coefficient of the regression is positive (.195), thus as researcher expected hypothesis is accepted. Tax rates are also positively significant determining in influencing tax compliance behavior in Hosanna Town. The result indicate that high tax rate can potentially increase tax compliance behavior as higher income earners will be reluctant to comply because they will have to pay higher income tax and they are taxed by preparing of book of account rather than by estimation method.

#### 4. REFERENT GROUPS (FAMILY AND FRIENDS)

With regard to the referent groups (family and friends), previous studies (for example, Allingham and Sandmo (1972), Tilahun and Yidersal (2014) have found that a referent groups would encourage taxpayers to be compliant (positive relationship) but some other studies found contradicting results, such as higher referent groups would potentially decrease tax compliance creating a negative association Tadesse and Goitom (2014). In this study, the significant value of referral groups acted at 0.00 at 5%. This imply that the referral group significant affect tax compliance and the coefficient of the regression is negative (-.249) thus as researcher expected hypothesis is rejected. Researchers therefore reject the hypothesis that there is negatively significant determining in influencing tax compliance behavior in Hosanna Town.

## 8. CONCLUSION AND RECOMMENDATIONS

### 8.1 CONCLUSIONS

- Based on findings it concluded that the perception on government spending is significantly determinants of tax compliance behavior: which means as far high perception of government spending could encourage tax compliance, it is advocated that Hosanna Town Revenue authority should increase wisely spending taxpayer money on public services.
- The other significant determinant that found to tax compliance behavior was referent groups (family and friends). If taxpayers refer to a compliant taxpayer, then the tendency to commit tax evasion is lower, but if a taxpayer to a non-complaint taxpayer, they might become a non-complaint taxpayer as well. Conclude that cultivating personal awareness of compliance is very important so that they less influenced by these factors (family and friend's members' level of compliance and decrees the referral influence by implementation of code of ethics of the institutions.
- With regard to tax rate to the business income could make taxpayers non-compliant because they might attempt to reduce taxable income not to arrive high rate. If the taxpayers are aware of the offence and the consequence of non-compliance, they may not cheat (evade). On the other hand, if the taxpayers are unaware of the implications of being dishonest, they may cheat because they presume that they will not detected and could some money. Finally, conclude that business income taxes rates in Hosanna make complaint to taxpayers.
- Based on regression result perception of equity and fairness on tax system has significant impact on tax compliance. Hence, tax authority should give attention to this area. In addition, the tax authority should provide Perception of equity and fairness by means that as tax base increase as tax rate incase which called vertical equity should increase the level of tax compliance in Hosanna Town. Taxpayers' perception on compliance improves when taxpayers believe the tax system is fair and equity, they believe that they receive something valuable for their payments and when society shows no tolerance for tax evasion.
- Finally, overall results of demographic factors showed that sex, age and educational level have significance impact on tax compliance. Multiple regression results show that tax rates; perception of government spending; perception of equity and fairness have positively related with tax compliance and significantly influenced tax compliance. However, referral groups (friends, relatives etc.) influenced tax compliance negatively but significantly impact.

### 8.2 RECOMMENDATIONS

In the light of the major findings of this study and conclusion, the following recommendations suggested:

#### 8.2.1 GOVERNMENT CONCERNED RECOMMENDATIONS

- Giving training to taxpayers and tax authority employees on taxation helps to create common and better understanding on the major points like, the legal aspects of taxation, how to organize their financial statements (reports) and how they can they work hand in hand for their common goal.
- The government (Revenue authority) should respond positively by wisely spending taxpayers' money and fulfilling the nations' (taxpayers') basic needs, including infrastructure, medical allocation, and education, in order to increase taxpayers' confidence in the government. Unnecessary expenditures by the government will cultivate tax non-complaint behavior according to the results of the present study.
- As far as high perception of equity and fairness could encourage tax compliance, it is advocated Hosanna Revenue authority should be maintaining fairness and equity among taxpayers it should treat all taxpayers based on his/her ability to pay and fair way with the aim of increasing tax compliance.
- Compliance behavior towards the tax system may affected by the behavior of an individual's reference group such as relatives, neighbors, friends and political associates. Thus, they explain people's actions by examining the forces that impinge on the positions that they occupy within the system.
- Researcher recommended the efforts made to improve tax determinants of tax compliance as first task to improve voluntary tax compliance and consequences improve government revenue generation.

#### 8.2.2 RECOMMENDATIONS FOR FURTHER STUDY

- Further, it is recommended that this kind of study should be conducted at the national level to gain a better understanding on compliance determinants in the country. Therefore, interested researchers can extend the same topic by incorporating more variables for example: institutional factors for example; the role of the tax authority; individual factors are; penalty rates and enforcement; personal financial constraint, tax knowledge and probability of audit into the model that are affect taxpayers' voluntary compliance behavior.
- Another possible research would be to change the sample population to category "A", Category "B" and Category "C" taxpayers by increasing the sample size and then make a comparative study between taxpayers with book of accounts and taxpayers who have no book of accounts; to find out if there are any significant difference between these groups of taxpayers' behavior towards taxation

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## THE EFFECT OF FACEBOOK ADVERTISING ON NIGERIAN STUDENTS' PURCHASING BEHAVIOUR

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### ABSTRACT

*Social Media functions as a valuable source of a wide range of information on variety of subjects and encourages mass dissemination of information. This enables advertisers, companies and marketers to strike on social media in order to get access to their target customers. Facebook is the leading social network nowadays with over 1 billion users worldwide. Advertisers use Facebook as a tool for introducing various products and services to the public. The aim of this study is to examine the effect of Facebook advertising on Nigerian students' purchasing behaviour. The research analyses the influence of Facebook advertising in purchasing behaviour and decision process focussing on how Facebook advertising creates awareness about brands or products as well as how friend recommendation and celebrity endorsement determines purchasing behaviour. Survey method has been used for this research using questionnaire to collect data from 389 respondents by random sampling using Likert - scale. Findings from the study revealed that Facebook advertising influences Nigerian students' purchasing behaviour as well as their decision process. Furthermore, the study figures out that using celebrities for product promotion or aiming at reaching target consumers for marketers is not an appropriate for Nigerian market, because the findings indicate respondents are not giving value to advertising endorses by celebrities.*

### KEYWORDS

facebook advertising, purchasing behaviour, social media.

### INTRODUCTION

 Social media are commonly used nowadays in order to connect people together all over the globe via internet. The connection may be through social networks, forums, blogs or media sharing websites. People can now have a conversation online, also called interactive dialogue, with anybody and on any subject, permitting them to share their experiences and valuable information. From business or marketing perspective, Social Media Marketing has offered a large variety of new opportunities for companies to promote their brand, products and services. People are actively connecting with each other and talking about their experiences, sharing their opinions about products, brand and services they have tested or even just heard about. This study is aims at exploring how social media advertising specifically Facebook effect Nigerian students' purchasing behaviour.

Connecting to the social media sites or network helps people all over the globe to connect for different purposes. For instance, we can connect with other people, organisations, ideas and information that were not available to us before the invention of social media. This is the new way of understanding other people's character and behaviour, and it also helps in getting first-hand information without being distorted by mainstream media.

### LITERATURE REVIEW

#### SOCIAL MEDIA

The importance humans attach to communication has led to search for avenues to communicate with people all around the world at the same time during any given time. Hence the invention of different technologies enhances communication both at the interpersonal and mass communication levels. The latest and recent of these inventions is the 'Social Media'.

Social Media sites are the place where millions of people interact and exchange ideas. Therefore, advertisers see Social Media as an avenue where they can meet their target or potential customers. The aim of advertising is to increase commercial profits and the demand of the consumers. The concern of this research is on the effect of advertising via Social Media specifically 'Facebook' on Nigerian students' purchasing behaviour. Facebook is a popular free social networking site that allows users to create profiles, upload pictures; videos, send messages and keep interact with friends and family.

Before the use of internet and social network sites became popular, communication over long distances were very minimal. With the invention of the World Wide Web the internet became a global network and use of social network sites played a vital role in shaping the world to become 'information age' or new media age. Social Media network embraces a mixture of on-line media platforms using social networking sites such as Facebook, Twitter, and LinkedIn, video-sharing sites such as YouTube, and photo sharing sites such as Flickr and Picasa (Kesavan, Bernacchi, and Mascarenhas, 2013: 59). Speedy expansion in the use of Social Media across the globe shows that companies can use it to develop their product and service to tally consumer's interest (Mir, 2012).

People with common interest interact on social network sites and sometimes create community which give them opportunity to solve their problem or any matter arise. Social networking sites have emerged as vital communication channels used by individual consumers to produce content, distribute items, share ideas, voice out his or her opinions, and use information and knowledge (Heinrichs, Lim, 2011).

The use of Social Media nowadays is incredible, the massive volume of data provided by Social Media will provide challenges and opportunities. (Hensel and Deis, 2010: 88). Meanwhile, Social Media provide avenues and opportunities that tally with the interest of twenty-one centuries, emerging life without Social Media; some of the benefit or the aim of globalization will not be achieve. Many industries use Social Media to burst their marketing, and also help to meet the demand of their customers. Social Media technologies are disrupting the broadcast 'one-to-many' media model, consumers have opportunity to give feedback. (Barefoot, Szabo, 2010). This means that Social Media is a two-way communication in which sometime customers participate in company decision process.

#### SOCIAL MEDIA ADVERTISING

Advertisement can be a tool for the introduction of various products and services to the public; the aim of advertising is to increase commercial profits and the demand of the consumers. Wells et al define advertising as: "Advertising is paid persuasive communication that uses non-personal mass media-as well as other forms of interactive communication-to reach broad audiences to connect an identified sponsor with a target audience" (Wells et al, 2007: 5). Nevertheless, advertising is the primary tool to make people aware about the product or service and try to persuade people to go for the product. Wells et al, highlights key concepts of advertising, which they describe as the fundamental elements of advertising. These are: strategy, creative idea, execution and media. Strategy is the Advertising logic; creative idea is the central idea of the advert that catches attention; execution is the implementation while media is the use of channel to communicate.

In today's sophisticated world, Social Media sites have become an avenue where companies can extend their marketing campaigns to a wider range of consumers. Social Media Marketing is the most recent marketing concept and every business owner wants to know how Social Media can generate value for their companies. Social Media Marketing is about understanding how new technology is making it easier for people to connect socially with their social networks and how business can make profit from that perception (Parker, 2011: 1). When company advertising their product on Social Media, they are doing two things; advertising the product and company. For example, many company holders produce different product, when advertising a single product of the company people are likely to know more about the company and its other product.

Social Media advertising is considered to be one of the viral advertising or word-of-mouth marketing. For instance, online users use to tell their offline friends about the product or services they come across in Social Media, and share the page or product to online users; as a result of this the advertising will go viral. Social Media advertising is a powerful communication force and significant marketing tool to sell product, services and ideas. Companies use Social Media to advertise



their products and services, and reach large number of audience at relatively cheap price (Mon, 2013: 43). When advertising message is very effective users will talk more and more about it, and this will make the advertising message to become viral.

Whatever type of business you have i.e. small, medium or big business you can reach your target customers or potential customers via Social Media, because Social Media consist different calibre of people. "Whether you are part of a small, medium, or giant business, or are an individual entrepreneur, your customers are using Social Media, and there's no reason you shouldn't be, too. It costs almost nothing, it's easy to get started, and it can have an enormous financial impact on your business" (Zerralla, 2010: 8).

Social Media advertising is relatively cheaper, it's very important for small and medium entrepreneur to use Social Media to create awareness and boost their business, because customers use Social Media to seek information about the product or service. You don't need to have a big company before joining social media medium and small company also count.

#### **BACKGROUND OF FACEBOOK**

Mark Zuckerberg in collaboration with Andrew McCollum and Eduardo Saverin launched Facebook with aim to change social interaction; Facebook started on the Harvard University campus. Within twenty-four hours of going live, 1,200 Harvard students had signed up, within weeks students from Stanford and Yale wanted in (Croft, 2007). More than half of the students create an account. The network was extended to other Boston Universities and finally all US universities (Phillips, 2007).

In February 2004 Facebook was originally founded and restricted to Harvard University students only. In March 2004 the privilege was extended to colleges and university students, users can create a personal account; add other users as friends, and exchange messages, photos and comments when they update their profile; Facebook users may join common interest user groups, organized by workplace, school, college, or other characteristics. Facebook allows anyone who is at least 13-year old to become a registered user of the website (Edosomwan, 2011: 4). This means that anyone below 13 years old is not eligible to register with Facebook. Facebook continue to grow and the company update the site to maintain status. For instance, On May 2006 Facebook introduces additional networks, allowing people with corporate email addresses to join; in 2007 Facebook create a platform which allow outside programmer develops tools for sharing photos, taking quizzes and playing games; in 2008 Facebook introduces 'Chat'; February 2009 Facebook introduces 'Like', allowing people to endorse other people's posts by clicking like; 2010 Facebook launches location feature, 'check-in' allowing people to share where they are with their friends (Associate Press, 2014). Many things introduce within 10 years to improve Facebook site. According to Facebook statistics page, "Facebook is accessed by 1.19 billion active users every month as of September 30, 2013" (Facebook Statistic, n.d). On January, 2014 marketing charts rated Facebook as leading social network with 57.9%. "Facebook.com is a comprehensive and encompassing clustering of networks based on universities and colleges, high schools, work places, and geographic areas." (Ginger, 2008).

#### **FACEBOOK ADVERTISING**

Facebook is the leading social network nowadays with over 1 billion users worldwide. Thus, advertisers use Facebook as a tool for introducing various products and services to the public. "Facebook gives companies and brands direct access to customer thoughts, feelings, reactions, responses, and Likes" (Cister, 2010). Facebook is daily destination for millions of people. Companies and advertisers get this advantage to advertise their products and services on Facebook in order to meet their target consumers, or rather potential customers. Advertising on Facebook became popular nowadays. Thus, it is imperative to conduct a research and find out the influence of such advertising and how it affects purchasing behaviour. The assumption of this research is that many students engage in using Facebook surfing for various purposes and gratification. Moreover, it's a well-known fact that Young adult particularly students are the 'active users' of Facebook; and in one way or the other they come across with Facebook Advertising on their pages.

Facebook Adverts are designed to help advertisers show people adverts they find interesting and relevant, from the initial stage Facebook was not mean for advertising, it builds to connect Harvard students, regardless of the reason of building Facebook, the personal information Facebook collect is very important to advertisers. (Marshall, Maloche, n.d). This shows that when Facebook was created the main purpose was to connect between students but it starts growing among students and beyond. Within short period of time Facebook generate large number of users from different calibre of people; this help advertisers and companies to find their target customers or potential customers.

Advertising on Facebook are exceptional, it shown to precise groups of highly engage people on personal computer and mobile phones. When advertising is well created and well targeted, it may get more comments, likes and shares. When users like, comment or share on advert his/her friends may see the Ad and making it more powerful. The more a company or advertisers promote posts and create targeted Ads to specific groups of people, the more likely users are likely to see when they visit their Facebook page. The most important benefits of Facebook advertising to companies or marketers are: targeting specific audience, reaching out to more people, brand awareness and generating sales. The most important thing for the company here is that; create good advertising which may attract users and identify the target group.

The strength of Facebook to advertisers is the availability of information about users. Facebook asks people to register with their real name and provide relevant personal data such as hometown, current city, favourite books, activities and other demographic data that advertisers thrive on to target consumers (Todi, 2008: 11).

#### **IMPORTANCE OF THE STUDY**

People are interactively connected with one another, social media interaction allows for the accelerated flow of information for grass-roots struggles, as well as a free medium of communication to date. Therefore, social media help in narrowing the world into a 'globalized' society. Connecting to the social media sites or network helps people all over the globe to connect for different purposes. For instance, we can connect with other people, organisations, ideas and information that were not available to us before the invention of social media. This is the new way of understanding other people's character and behaviour, and it also helps in getting first-hand information without being distorted by mainstream media. The study will help in contributing to the existing literature on how social media especially Facebook influence purchasing behaviour.

#### **STATEMENT OF RESEARCH PROBLEM**

Social Media advertising or Social Media marketing is an innovation which forces companies, business tycoons, advertisers to change their marketing strategies from traditional way to modern way, because people shun from patronising traditional media. It's very difficult to escape from advertising messages nowadays since Advertising Agencies are continuously sending out messages on a daily basis. Such messages affect consumers' purchasing behaviour, decision process and increase consumption. An increase in consumption culture is wide spread globally as studies revealed that advertising is a creator of false needs, a manipulator of consumers' minds and an industry as powerful as it can alter culture. Due to the huge impacts of advertising in our lives, it is widely believed that, the purchase and use of goods can convey social identity

#### **OBJECTIVES**

The main objective of this study is to examine the effect of Facebook advertising on Nigerian students' purchasing behaviour. In order to do so, this research will try:

1. To analyse the influence of Facebook advertising in purchasing behaviour and decision process.
2. To examine how Facebook advertising create awareness about brands or products.
3. To examine how friend recommendation and celebrity endorsement determine purchasing behaviour.

#### **RESEARCH QUESTION**

How do the Nigerian students perceive Facebook advertisement on their purchasing decision?

**HYPOTHESES**

- H1: Gender is an important factor on how students perceive the effectiveness of Facebook advertisement  
 H2: Education level of the students is an important factor on the perceive effectiveness of Facebook advertisement  
 H3: Geographical difference is important factor on the perceive effectiveness of Facebook advertisement  
 H4: When the monthly average household income of the students increases their perception on the effectiveness of Facebook advertising decreases

**METHODOLOGY**

In order to achieve the aim of this research, 'survey research method' was adopted, and it is most suitable for this research because it allows for the study of a fair random representation of the entire population. Survey method is mostly used to assess thoughts, ideas, opinions and feelings. "Surveying is a research method that we use to get information about certain groups of people who are representative of some large group of interest to us" (Berger, 2000: 187). Scheuren describe survey method as: "...the word 'survey' is used most often to describe a method of gathering information from a sample of individuals" (Scheuren, 2004: 9). This also aptly describes what this study aims at doing.

The method is therefore appropriate to this study which aims at collecting data on student's purchasing behaviour and decision processes in relation of Facebook advertising. The survey was conducted online. A total of 400 questionnaires were distributed to respondents via mail, and 389 questionnaires were filled-in and returned online. The eleven questionnaires that were not filled, were removed from the data being analyzed leading to 389 questionnaires being used.

**RESULTS AND DISCUSSION****RQ 1: How do the Nigerian students perceive Facebook advertisement on their purchasing decision?****TABLE I: MEAN VALUES OF QUESTIONNAIRE ITEMS**

Item	Mean	SD
Facebook advertising influences my purchasing behaviour	2.7326	1.13994
Facebook adverts prompt me to purchase a product unintentionally	2.9254	1.17846
Facebook advert change my purchasing decision process	2.9177	1.20925
I often made decision base on Facebook advert	2.9486	1.25074
When intend to buy expensive product, I check advert to see the risk involve	3.3239	1.18972
I bought only expensive brands that are advertised On Facebook	2.3985	1.13886
I bought only cheap brands that are advertised On Facebook	2.5656	.98124
Do you think Facebook is useful when looking for opinions about what products to purchase	3.6069	1.15610
I click on advert message to seek information About new product or brand	3.2674	1.35292
Only read advert on product or brand that I'm familiar with.	<b>2.3702</b>	1.10609
Only read advert on product or brand that I'm not familiar with.	3.2416	1.09507
I subscribe Facebook advert base on friend Recommendation	2.6401	1.10250
I sometimes purchase a product, when a friend likes, comment or share	3.2468	1.13781
I check on adverts base on celebrity endorsement	3.3830	1.06723
I check on adverts, and sometimes purchase a Product, when a celebrity likes or comment	<b>3.6838</b>	1.22696

For the general research question "how do the Nigerian students perceive Facebook advertisement on their purchasing decision?" the statistics above shows that; Nigerian students are not subscribed advertising messages or try to purchase when celebrities like or comment. The mean is 3.6838 which is the highest with SD of 1.22696, the mean value is negative based on the coding data from strongly agree to strongly disagree (1- 5) that is from lowest to highest.

Moreover, the result indicates that the minimum number of mean is 2.3702 (SD=1.10609). The mean value is visibly closer to the positive end from the negative end. The Nigerian students read advertisement messages on product or brand that they are familiar with. This indicates that Nigerian students has less curiosity about unfamiliar brand or products, and in most cases consumers in general patronized advertisement from famous product or brand; and most of the famous brand or products are produced by big name companies, consumers specifically young adults associate themselves with such companies. Therefore, Nigerian students joined the band-wagon of reading advertisement on popular and familiar product in Facebook. Putting all these together, it could be said that; Facebook advertisement influence Nigerian student purchasing decision.

**H1: Gender is an important factor on how students perceive the effectiveness of Facebook advertisements.**

The assumption is that; gender is an important factor on how students perceive the effectiveness of Facebook advertisement. The assumption is rejected based on the finding of the study; the result shows that there is no difference between genders in terms of effectiveness of Facebook advertisement 0.2 value proved that male and female do not differ in this sense. Thus, we can conclude that gender is not an important factor of determining purchasing decision among Nigerian students, the purchasing pattern between male and female is almost the same as research revealed.

Even though, the perceive effectiveness of Facebook advertisement is the same between men and women in Nigerian context. but the way they perceive information is differing, men do not pay much attention on cosmetics and fashion while women does.

**H2: Education level of the students is an important factor on the perceive effectiveness of Facebook advertisement**

According to the finding, graduate students perceive effectiveness of Facebook advertisement more than high school, college and bachelor students. This hypothesis is accepted; educational level is an important factor on the perceive effectiveness of Facebook advertisement, this is because graduate students are using internet more for their academic activities and also for leisure like using social media Facebook inclusive, as a result of that they perceived effectiveness of Facebook advertisement more compare to high school and bachelor students. Also the level of maturity contributes to this; most graduate students are belonging to twenty-five years and above.

According to the literature consumer level of education effect his purchasing pattern and perception of Facebook advertisement is not the same between education levels, as the study indicate graduate students has high perception on Facebook advertisement followed by bachelor students. To sum it up, the study proved that, level of education is an important factor on the perceive effectiveness of Facebook advertisement

**H3: Geographical difference is an important factor on the perceive effectiveness of Facebook advertisement**

The average of the differences of the mean between north and south is 0.3, the number is negligible. Base on the finding the assumption is not supported; the result shows that there is no difference between north and south in terms of effectiveness of Facebook advertisement. 0.3 values proved that north and south do not differ in this sense. Thus, we can conclude that geographical zone is not an important factor of determining purchasing decision among Nigerian students, the purchasing pattern between north and south is almost the same as research indicate.

**H4: When the monthly average household income of the students increases their perception on the effectiveness of Facebook advertising decreases**

The correlation coefficient is a measure that determines the degree to which two variables movements are associated.

TABLE II: CORRELATION COEFFICIENTS FOR THE INCOME

		Correlations		
			Income of respondents	Facebook advertising influences my purchasing behaviour
Spearman's rho	Income of respondents	Correlation Coefficient	1.000	-.410**
		Sig. (2-tailed)	.	.000
		N	389	389
	Facebook advertising influences my purchasing behaviour	Correlation Coefficient	-.410**	1.000
		Sig. (2-tailed)	.000	.
		N	389	389

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The correlation analysis result obtained show with a figure -.410; indicate that there is moderate correlation between income and student perceived influence purchase on Facebook. The figure shows in negative value (-.410) but based on the coding system its positive value, because the coding start from lowest to highest. (Strongly agree to strongly disagree). The result revealed that when student's income increases; the influence to purchase also increases or his influence increases as his income increases. For instance, if students' income increases from \$500 to \$700 he will have a moderate positive effect of his influence to increase his purchase as he will tend to spend more of his income. However, the increase in students' income assume from \$500 to \$300 will have a negative effect on his influence to purchase, that is he will tend to spend less of his income. Going by the results of correlation analysis the hypothesis is rejected or not supported which says that "When the monthly average household income of the students increases their perception on the effectiveness of Facebook advertising decreases.

## FINDINGS

The findings of the study have shown that Facebook advertising influences Nigerian student's purchasing behaviour and their purchasing decision process, the mean values of the research proved that. Social media provide two way communications between company and consumers, not like mainstream media. Consumers can add their voices; make review about the products and companies respond to the consumer's inquiry and give first-hand information. The study further reveals that using celebrities for product promotion or aiming at reaching target consumers for marketers is not an appropriate in Nigerian market, because most of the respondents are not giving value by advertisement endorsed by celebrities. Furthermore, the study sets four hypotheses to figure out the effectiveness of Facebook advertisement on gender; educational level; geographical zone as well as income.

## CONCLUSION

In today's dynamic and interactive world, the notion of advertising goods and services through traditional media of newspapers, television and radio stations are increasingly changing as the internet creates a forum on which social media networks have joined the wagon to lure potential advertisers to reach out to billions of subscribers. Though Peter Drucker a renowned management theorist describes marketing as "a process in which one knows and understands the customer well to easily produce a product or service that fits his wishes," (Kottler, 2009: 8). This study explores how Social Media especially Facebook impacts on Nigerian student's purchasing behaviour. Like in the traditional media that depends on adverts for revenues and sustainability, so is the Social Media. The basis of the study creates an understanding on how Facebook as social media network impacts on a student's life through its adverts done on the social network whose usage is globally increasing.

## RECOMMENDATIONS

Since Facebook is the destination of mass number of people, it's good for both big and small enterprises to have Facebook page in order to meet their target audience; or prospective customers, it's also important for any organisation whether public or private to provide unit that monitor the activities of Facebook in order to meet consumers or customer's demands; this recommendation is from marketing perspective.

From academic perspective, there is need for academicians to conduct more and more researches about Facebook and social media networks at large because it touches lives of millions. For instance, the studies of negative effect of social media network need to be conducted. Moreover, research need to be done about age and gender i.e. how social media advertising effect age and gender; how age and gender determine purchasing behaviour. Also similar research needs to be conducted by expanding number of samples, since Nigeria is multi-cultural nation with multi-ethnic groups. This research has insufficient time and recurses to go deep into such angles.

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**INFRASTRUCTURE AND TALENT MANAGEMENT IN TECHNOPARK, TRIVANDRUM**

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**ABSTRACT**

*The success of any industry depends on its Employees contribution and commitment. The growth and success of an organisation cannot be measured alone on the profits which it earns, but the talent which an organisation possess in the form of its employee's effectiveness and competencies decides its success. Good working condition, refreshment & recreation facility, health & safety facility, fun at workplace increase the degree of job satisfaction. Infrastructure would undoubtedly contribute to raise the ability and job satisfaction of the Employees. The presence of talented and committed people with will power and the team spirit will, in turn, motivate other employees and positively impact the performance and growth of the organisation. When Talent and infrastructure is effectively managed there would be always a positive impact on Employees performance and organisational efficiency and this paper analyses the strategy adopted in Technopark.*

**KEYWORDS**

infrastructure management, talent management, technopark, organisational efficiency.

**INTRODUCTION**

India is the world's largest destination for the information technology (IT) industry, accounting for approximately 67 per cent of the US\$ 124-130 billion market. The industry employs about 10 million workforces and has led the economic transformation of the country and altered the perception of India in the global economy. India's cost competitiveness in providing IT services is approximately 3-4 times cheaper than the US. India is also gaining prominence in terms of intellectual capital with several global IT firms setting up their innovation centers in India. The Indian IT and ITes industry is divided into four major segments – IT services, Business Process Management (BPM), software products and engineering services, and hardware.

The sector is expected to contribute 9.5 per cent of India's Gross Domestic Product (GDP) and more than 45 per cent in total services export in 2015-16.

Employees today are:

- Interested in having challenging and meaningful work.
- More loyal to their profession than to the organization.
- More concerned about work-life balance.
- Prepared to take ownership of their careers and development.

These challenges make it difficult to capture the minds of today's workforce. Research from IBM and the Human Capital Institute highlights 56 percent of financial performers understand and address employee engagement. This evidences how the cultures built within organizations are attracting and retaining talent.

**INFRASTRUCTURE MANAGEMENT**

Infrastructure management (IM) is the management of essential operation components, such as policies, processes, equipment, data, human resources and external contacts, for overall effectiveness. Infrastructure may enable the management of talent and "Talent Infrastructure" refers to the human, physical and organizational structures that must be in place in order to function both individually and collaboratively to achieve the organisational and individual goal.

Through infrastructure, the firm may provide timely information to recruit and get on board the talent easily. Fulfilling the infrastructure requirements enable the employees to work independently enhancing work-life balance, which in turn increases members' job satisfaction and retains the talent (Chinchilla-Albiol, 2011). Infrastructure may also lead to developing the firm's talent. It improves the relationship with employees by giving them information on goals, performance appraisal, compensation and rewards, and career planning to develop the firm's talent. Finally, communication networks enable the firm to train members online and offer seminars to develop its talent.

**INFRASTRUCTURE MANAGEMENT IN TECHNOPARK**

Renowned as the Country's first IT Park and one of the largest one in India in terms of built up space, Technopark was reputed as greenest IT Park established in 1990. Technopark houses about 290 companies with more than 40,000 professionals. It is an autonomous society promoted by the Government of Kerala.

Though Technopark is committed to Government and the outside society at large and also to the service providers, suppliers, clients, and Industry, it is primarily committed to the Technopark community. It provides high quality of life to the employees of companies, world-class business environment and state-of-the-art Infrastructure. It has a total built-up space of about 4 million sq. ft, which spread over 10 imposing structures besides the majestic Park Centre and ancillary support facilities. All buildings in Technopark bear the names of some of the enchanting rivers of Kerala - Pamba, Periyar, Nila, Chandragiri, Gayatri, Bhavani and Thejaswini. The power and water supply system guarantees a smooth functioning of companies. It offers electricity through internal power distribution system. In addition to the built up-space, Technopark provides network connectivity either directly or through private partners and fire fighting network throughout the campus.

Presence of all essential commercial shops and establishments, ATMs, Banks, post office and guest house within the campus along with a good public transport facility extended by Kerala State Road Transport Corporation. The Technopark club includes a gym, swimming pool, restaurant and sporting facilities, the Technomall and shopping complex. Technopark Technology Business incubator (T-TBI) provides plug and play facilities to start-ups in the IT sector.

The Single Window Service ensures the entrepreneurs setting up a new company in Technopark quickly.

**TALENT MANAGEMENT IN TECHNOPARK**

Retaining talented employees in Information technology industry has been a biggest challenge for many decades. When key software developers quit, they take away with them the critical knowledge of business processes and systems that are essential for maintaining a competitive advantage. Talent management refers to the process of integrating new workers, developing and retaining the current workers and attracting highly skilled personnel to work for the company (Chugh and Bhatnagar, 2006).

The presence of talented and committed people with will power and the team spirit will, in turn, motivate other employees and positively impact the performance and growth of the organisation. Their effectiveness lies in their dedication that influences the work culture of the organisation and results into a strong brand name for company's products (Donahue, 2001). The success of any industry depends on its Employees contribution and commitment (Baum and Kokkranikal, 2005). In today's highly competitive and complex environment, the growth and success of an organisation cannot be measured alone on the profits which it earns, but the talent which an organisation possess in the form of its employees effectiveness and competencies decides its success (Lockwood).

Technopark, Trivandrum believes that they must have the best talent to succeed in the hypercompetitive and complex global economy. There is a relationship between better talent and better business performance. A study from IBM found public companies that are more effective at talent management had higher percentages of financial outperformers than groups of similar sized companies with less effective talent management. [Bassi, L. & McMurrer, D.(2006 April)].

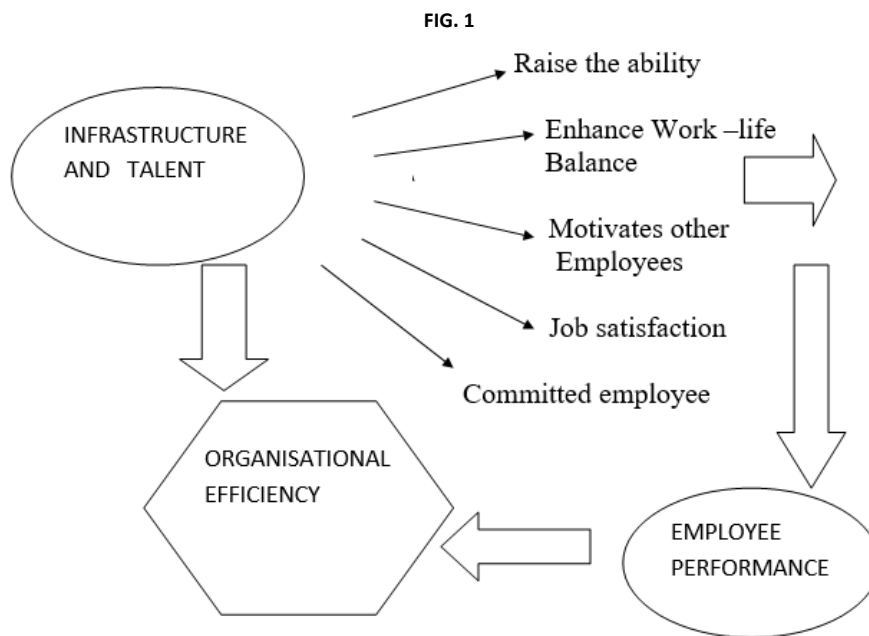
The talent programme offered by the companies in Technopark helps employees to perform more senior role in the organization. It encourages the talent to get involved in all areas of work. The right level of support and encouragement needed to progress at the workplace helps to deal with difficult situations that arise at work. The development opportunity enables to build productive relationships with the peer group and has the flexibility to meet professional circumstances.

**TALENT MANAGEMENT STRATEGIES**

The performance of companies in Technopark has improved with a ideology of “Better talent for Better results”. Leaders with talent- oriented mindset make the best decisions on managing the talent and in turn assist in maximizing organizational effectiveness and efficiency.

Appreciating the performance of an individual helps the leaders in the talent management process. Lack of talented people to develop new thinking and to challenge is a limiting factor in some of the software companies which hinder its growth. The team leaders find the right people, provide flexible working hours, practicing better employee retention policies, Training &Development helps to manage the talent in a better way. Talent Acquisition & Retention is an important part of the talent management process for organisational efficiency and effective

Implementation of Talent Management strategies helps most of the companies to survive in the e-commerce world.



**CONCLUSION**

A satisfied, happy and hardworking employee is the biggest asset of any organisation. Workload, stress, overtime, fatigue, boredom are some factors to increase job dissatisfaction. On the other hand, good working condition, refreshment & recreation facility, health & safety facility, fun at workplace increase the degree of job satisfaction. Infrastructure would undoubtedly contribute to raise the ability of the employees. When Talent and infrastructure is effectively managed there would be always a positive impact on Employees performance and organisational efficiency.

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## INVENTORY MANAGEMENT AT POINTS OF SALE: EXPLORING AND ANALYZING THE TRENDS IN INDIAN PAINT INDUSTRY

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### ABSTRACT

*Managing inventory is an important task of a supply chain manager. Though there are considerable academically discussed models in use, they come with their own set of assumptions. Then how is inventory managed in real-time environment is the question, as these models cannot accommodate all realistic conditions. This study aims to understand and analyze this gap by taking Indian paint industry as an example. The other objective of this paper is to highlight the inventory management trends at points of sale/retailer in Indian paint industry. Because, most of the research studies focused on inventory management practices at manufacturer or distributor level, the author feels the necessity of in-depth study of inventory management trends at retail level, as the impact at retail level is direct on manufacturer/distributor. The study is going to be exploratory in nature and limits its analysis in qualitative perspective only.*

### KEYWORDS

point-of-sale, inventory management, retailer, fns analysis, indian paint industry.

### JEL CLASSIFICATION

M11

### INTRODUCTION

Inventory management plays a key role in an organization's performance. The overhead COGS (cost of goods sold) represents a major chunk of a company's P&L statement. Many academic researchers have established the importance of effective inventory management in a company. To mention a few, A common business principle is that material inventory should be kept as low as possible so as to not to tie up cash. (Anthon P. Botha, 2007).

Excessive inventories have been the death of many a business and very high inventory levels has tipped the scale in our economy (K Anbuvelan, 2005).

But most of the research studies focused on the inventory management practices at manufacturer or distributor level. At retail level, the literature available is limited and even if the literature is available, the depth of the research has not been good enough in eliciting the inventory management concerns. This study aims to bridge this gap by taking Indian paint industry as an example for its subject matter of research.

The recently concluded 53<sup>rd</sup> annual general meeting (AGM) of Indian paint association (IPA) in September 2016 at Kolkata revealed that the market size of Indian paint industry is at INR 43,500 crores. In terms of quantity, the production was estimated to be at 4.25 million metric tons. In India during 2015-16 period, as per IPA estimates, the per capita consumption of paints stands at 3.23 kgs, which is way below than the consumption levels in developed countries. Hence the growth prospects of the Indian paint industry look bright and huge. True to this expectation, the Indian paint industry witnessed a growth rate which is 1.5 times the GDP growth rate of the Indian economy for the past decade. The industry is dominated by organized players like Asian paints, Berger paints, Shalimar paints, Kansai Nerolac, Akzo Nobel, Jenson-Nicholson and Nippon paints, who remained as major brands of the industry.

The above mentioned facts about the magnitude and growth prospects of the Indian paint industry not only justifies the selection of industry and but also the strength and scope of the research findings for practical implementation.

### LITERATURE REVIEW

*"How much inventory to stock? When to order and how much to order?"* This has been a perennial question that is being consistently faced by the businesses since their inception. Also it has been widely discussed in academic research as well as by business practitioners. To address these concerns, there are many inventory management models evolved over a period of time. Few of them which are popular in discussion and practice are,

**Deterministic models:** The Economic Order Quantity (EOQ) model, Sensitivity analysis and price-break Model

**Probabilistic Inventory models:** Single-period inventory models, fixed order quantity model and fixed time period model

Also, inventory control and analysis techniques like ABC analysis, XYZ analysis, VED analysis and FNS analysis play a vital role in understanding, tracking and managing the inventory levels thereby giving a clear picture on *"How much inventory to stock? When to order and how much to order?"*

The objective of this study is to understand and assess the practical application of these models techniques in reality vis-à-vis the academic discussions. Hence an attempt has been made to directly interact with retailers i.e. players at point of sale and understand their inventory management techniques, while managing their working capital as well as level of product availability and cycle service level.

The available literature on these models and techniques has been thoroughly reviewed and the attempts to fit the understanding of the same with respect to the reality, has been carried throughout the research.

### RESEARCH METHODOLOGY

#### SAMPLING

Two different sampling techniques have been employed to select the group of subjects for this study.

- Places of research have been chosen based on selective random sampling technique
- Retail outlets have been chosen based on simple random sampling technique.

#### DATA COLLECTION

Close to 200 retailers representing 7 states in India have been contacted and a survey has been undertaken in Bengaluru, Ranchi, Raipur, Nagpur, Vijayawada, Guntur, Bhubaneswar, Hyderabad, areas closer to Rural markets like Angul, Sangareddy, Medak, and rural stretches around Guntur and Hyderabad, to understand their inventory management practices.

**INSTRUMENT**

An open ended questionnaire has been prepared to collection data from retailers with the help of a survey technique. Following questions constituted the questionnaire which aimed at eliciting the practical reasons influencing the inventory management practices at these retail outlets aka points of sale.

- What is the brand and product portfolio managed by a retailer and what are the motivating factors to maintain so?
- What is the role of advertising and branding of manufacturers on inventory management at your outlet?
- What is the basis of weightage given to hold each brand in terms of stock and capital?
- What is the inventory control system that is adopted?
- What is the role of trade credit on inventory management?
- What is the role of incentives?
- What is the role of display formats and how much inventory gets into display?
- Is product portfolio of each brand a serious concern on inventory management?

**RESEARCH FINDINGS: ANALYSIS AND INTERPRETATION**

The findings of the research have been quite interesting. Few of them have not even been mentioned in the assumptions of the existing models. For example, if one looks at the list of assumptions of economic order quantity (EOQ) model, which are, Relatively uniform & known demand rate, Fixed item cost, Fixed ordering and holding cost and Constant lead time, hardly there's any mention of crucial realistic issues like comparative margins and incentives offered by the industry players, minimum order size, ancestral aspect of the business, duration of trade credit and advertising and branding initiatives of manufacturers, which are playing a key role in deciding the inventory management practices at retail outlet level. These issues may not just limit themselves to Indian paint industry but can very much surface in other industries as well.

The listing and detailed analysis of the findings are as follows.

**1). BRANDING AND ADVERTISING**

- Branding and advertising initiatives by established firms have been playing a key role in not only capturing the market share, but also the mind share of the customer.
- These initiatives drive the customer to the retail outlets and also motivate them to insist the retailer on the availability of the concerned brand liked by him.
- Hence, the major brand that is stocked by the retailer is essentially displayed in the form of a display board to by and large communicate its availability to the potential customers.
- Also, the proportion of retailers stocking multiple major brands is relatively low when compared to the retailers stocking single major brand.

**2). ANCESTRAL BUSINESS**

- Majority of the retail outlets in this industry, who were considered in this study happens to be family run businesses and are in this business for more than two decades atleast.
- The retailers also accepted to the fact that the presence of the retail outlets two decades ago, was limited to selected pockets of the city/town, but this trend has been changing in the past 5 years as there has been a considerable proliferation of retail outlets in this time period.
- The older ancestral outlets have been continuing the legacy of stocking the brands, which were originally stocked by their founders.

**3). MOVEMENT OF GOODS**

- Inventory is held based on movement or sale of goods at Point of sale level.
- FNS analysis technique is very much in practice, knowingly or unknowingly.
- Entry-level (in-terms of quality and price) product category and low-cost unorganized brands have been classified as fast moving with an average shelf life of 2-7 days, medium-level product category has been classified as Normal moving with an average shelf life of 7-14 days and premium-level product category has been classified as slow moving with an average shelf life of 14-30 days

**4). PRODUCT PORTFOLIO**

- This finding has direct dependence on "movement of goods" as discussed above.
- Traditionally, the product variety offered by the paint companies was limited.
- With the entry-level product category becoming a commodity (low-margin, high-volume) market, the major brands came out with medium-level and premium-level product categories with an eye for targeting growing urban population and higher margins.
- Though the movement of goods is the key motivating factor for a retailer to stock the goods, medium-level and premium-level product categories are stocked at a relatively lesser proportion vis-à-vis entry-level product category not only ensure their availability but also for display purpose.
- Clearly, display formats can be used as a tool to influence customers' perceptions about the risk of stock-outs if they decided to wait. Therefore by optimally selecting the display format, a retailer could discourage high-valuation customers from waiting to the clearance sales. (Serguei Netessine, *Christopher S. Tang*, 2009)

**5). MARGINS AND INCENTIVES**

- Any retailer wants to stock and sell goods which give him more margins.
- Asian paints, which has been enjoying a higher brand equity, virtual monopoly and extensive distribution network for quite a long-time, relatively offers less margins and incentives.
- But retailers are forced to stock or choose the Asian paints brand because it is widely demanded by the customers and also widely supplied through an extensive distribution network.
- Margins and incentives have been key drivers for the retailers who are stocking other brands but not Asian paints.

**6). RESPONSIVENESS (LEAD-TIME)**

- The delivery time of goods at Retail outlets is 4-5 hrs. w.r.t. Asian paints and for other players it is within 24 hrs. Because Asian paints rapidly identified lucrative catchment areas and set-up depots to achieve the shortest delivery time (Sagarika Mukherjee, July, 2014).
- On interaction with retailers, they were happy with this swiftness in delivery and low lead times which enabled them to carry low inventory and majority of it is managed at vendor (dealer) level i.e. Vendor Managed Inventory.
- Also, direct delivery at Retail outlet not only enhances supply chain responsiveness but also reduces the sale of counterfeit products under the same brand name.

**7). REPLENISHMENT OF INVENTORY (MINIMUM ORDER SIZE)**

- The outlets which are closely located to these depots order goods as and when required but not on periodic basis.
- Retailers which are far off from these depots order goods on a periodic basis for two reasons though the delivery time is within 24 hours.
- One, immediate replenishment is ruled out on account of distance and two, a minimum order should be placed with the dealer, who is concerned to justify his transportation costs. But it increases the inventory carrying cost to the retailer.
- In order to ensure Level of product availability and cycle service level these retailers come forward to bear this cost.

**8). CUSTOMER SERVICE**

- Customer service here refers to the service offered by the manufacturer/distributor to retailer
- This has been a subjective issue and there are no visible uniform trends observed with respect to any particular brand.
- It has been observed that the customer service is purely dependent on the distributor in the concerned geography.

- Though customer service has been a key factor in choosing/stocking a brand, it has not been unique to any major brands available in the market.

#### 9). SHORT DURATION OF TRADE CREDIT

- Low fixed capital is employed for manufacture of paints. The working capital requirements are huge (V.C.Malshe and Meenal Sikchi, 2008).
- The operational nature of the paint industry is highly working capital intensive with 40-45% of the funds being employed by working capital (Ramanuj Mazumdar, 2004).
- So, neither the manufacturer nor distributor can offer higher duration of trade credit to the retailer.
- The standard duration of trade credit in practice in this industry is 21-25 days depending on the brand and geography.
- So, the retailers stock the goods depending on their movement but not in bulk, with quick replenishment times coming to their rescue.

#### CONCLUSION

The findings of the study reveal that apart from the existing assumptions of the popular inventory models, there are other realistic issues as well, which should be taken into consideration while planning and managing inventories. Though this study focuses on retail outlets alone, distributors and manufacturers of the same supply chain should also consider these issues as they directly percolate at their ends and impact their businesses. This study also highlights that a retailer has a significant impact on sales apart from the planned branding and advertising initiatives of the manufacturers.

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**POTENTIAL OF JAMMU AND KASHMIR TOURISM: SPECIAL REFERENCE TO MUGHAL ROAD AREA**

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**ABSTRACT**

*The tourism industry in Jammu and Kashmir has colossal potential from tourism point of view for regional, national and international tourists. There are number of locations which are untapped and can be developed as a major tourist destination, having all the natural as well as the cultural resources and historical importance for attracting tourists. During the ancient times, the Mughal Road was abuzz with traffic of the caravans of Mughal Emperors and their armies to keep control of Kashmir. It was used for travel to the Kashmir valley for administration and hence named – (Mughal Road). The Mughal road area has a rich cultural heritage and geographical diversity to attract tourists in the state, like other tourist destinations i.e. Phalgam, Gulmarg, Sunnamarg, Dal Lake etc. which attracts a large number of tourists both domestic and international. Keeping in view the chronic public demand the construction of the Mughal Road will boost commercial avenues in the backward districts of Shopian, Poonch and Rajouri, exploit the tourism potential of the study area and improve the economic conditions and life style of the people. This research paper is mainly based on the secondary data to draw attention towards this new explored potential tourist area. In this research paper an attempt has been made to highlight the tourism potential of Mughal Road followed with some suitable suggestions based on the research findings for the sustainable development of tourist potential area of Mughal Road.*

**KEYWORDS**

heritage, mughal road, potential, untapped.

**INTRODUCTION**

Tourism is a speedily growing industry around the globe. In the new millennium, the human residents of the mother earth would have a ravenous urge for travelling and undertaking tours of various types. People want to visit unknown places, interact with new races and have experiences, which were hither to out of their reach. Travelling and exploring the world is a natural tendency of all human beings. Negi, Singh, Joginder. (2007), brings together in some detail that promoting tourism in rural areas can pave the way of rural development. Since infrastructure development in these areas will boost their economic activities; because virgin land or less known explored areas have been attracting curious tourists these days. Choi & Sirakaya. (2005), the success of tourism depends on the active support of the local population, without which the sustainability of the industry is threatened. Residents should be the focal point of the tourism decision making process. As we know that tourism industry is a service based industry and many players/stakeholders play/contribute their roles/parts to complete the whole process of tourism development at a destination into a successful process. Tanja, Ranjit. (2006), that provides a comprehensive view of the issues involved in destination management. Ahmad, Iqbal, (2005), (2007), his studies have made an attempt to trace, Kashmir- the land of different cultures, identical monuments, roofed shrines, temples, historical monuments, archaeological sites, festivals, wazwaan and magnificent handicrafts has a very rich potential for boosting the states tourist industry.

**OBJECTIVES**

1. To highlight the potential of Mughal Road from tourism point of view.
2. The route besides bringing the people of hilly regions, closer to the valley has offer to travelers in terms of built as well as natural heritage.
3. Mughal Road has the enormous potential for tourism development, has not been fully and judiciously exploited.

**RESEARCH METHODOLOGY**

In the present research paper both secondary and primary sources of data formed the crux of the study. However, secondary data has been used to a large extent. Secondary data will be collected from various magazines, journals, research papers, newspaper's (especially J & K's Daily English newspaper-Greater Kashmir and Excelsior) and tourism literature published by various governmental and non-governmental organizations. The primary data will be gathered through personal interviews/discussions with concerned authorities, experts, tourism entrepreneurs, service providers and especially field trips to various potential tourist places of Mughal Road.

**TOURISM RESOURCE POTENTIAL OF MUGHAL ROAD**

The road was historically used by Mughal emperors to travel and conquer Kashmir during the sixteenth century. It was the route used by Akbar the Great to conquer Kashmir in 1586, and his son Emperor Jahangir died while returning from Kashmir on this road near Rajouri. The road originated in Jhelum town of Punjab province (now in Pakistan) and then touched Kotli (in Pakistan Occupied-Kashmir), Thanamandi (Rajouri District) and finally Chandimarih located in Pir Panjal mountains and one branch crossed over to Shopian via Hurpora. Mughal Road is the road between Bafliaz, a town in the Poonch district, to Shopian district in the Kashmir valley. The road is 84 km long, and situated in Jammu and Kashmir. It passes over Pir Panjal Mountain range; at altitude of 11,500 ft (3505m) that is higher than Banihal pass 9,291 ft (2832m). The road brings the Poonch and Rajouri district closer to Srinagar. The distance between Srinagar and Poonch will be reduced from 588 km to 126 km. It makes for alternate route to Kashmir valley from the rest of India, other than over-crowded Jammu-Srinagar Highway through Jawahar Tunnel (Banihal Tunnel-National Highway 1A). It passes through a wild life sanctuary characterized with young folded mountains, deep gorges, waterfalls, scenic beauty and alpine pastures; the Mughal road area provides great opportunities for the domestic and international tourists. The road passes through Buffliaz, Behramgalla, Chandimarih, Poshana, Chattapani, Peer Ki Gali, Aliabad, Zaznar, Dubjan, Heerpora and Shopian. The Mughal Road area is 56.8 Km from Srinagar International Airport via Pulwama and 186.3 Km from Jammu Aiport via Rajouri. The various enroute tourist places of Mughal Road area:

**SHOPIAN**

A town of some magnitude on the south-west side of the valley of Kashmir. It is situated on the right bank of the Rembiara, a wide but shallow stream, and lies 46.67 km (29 miles) south of Srinagar, on the high road which crosses the Pir Panjal pass. Shopian (now district) gives its name to one of the three zillahs in the Miraj division of Kashmir, and is the tehsil station of the Batu pargana, within which it is situated; it was called Shahrah, or the king's highway, in the time of the Moghuls. Agriculture is the main occupation of the people. Horticulture, especially in Shopian, has developed into a very profitable industry. The Shopian is famous for best quality of apple in Jammu and Kashmir. The apple orchards present a glamorous look and healthy climate to tourists. The area is also surrounded by Lahanthour, Sedow, and Hirpore etc. become great tourist pillar.

**JAMIA MASJID SHOPIAN**

The mosque is said to have been built during the Mughal period. Shopian was an important stop over on the Mughal road across the Pir Panjal used by the Mughal to visit Kashmir. The Jamia Masjid in Shopian is one of the famous historical monuments built during the Mughal reign resembling that of Jamia Masjid, Srinagar. This historical and religious place, visited by thousands of peace lovers are one of the star attractions of the Mughal Road.

**RAMBIARA**

The Rambiarā is the widest and a turbulent left bank tributary of river Jhelum, named as Ramanyatavi by Kalhana, the stream emerges from the Rupri ridge of the Pir Panjal with its main feeders originating from Rupri Peak and Bhagsar Lake on the one hand and the Pri-Panjal and Naba Pir Passes on the other (Stein 1899). The Rambiarā passes through many villages of which Hirpore and Shopian is very famous. It collects water from many mountain streams, glaciers, small lakes and springs. Both the bank sides of the tributary are full of forests and apple orchards. There are various places on the bank sides of the Rambiarā tributary i.e. Maharani-tcham, Helipad and Deopura etc. which have lot of tourism potential if the promotion is done on the strategic manner. Maharani-tcham can be exploited for the purpose of mountaineering. Helipad owes a quality of cold breeze while as Deopora is a nice spot for trekking experiences.

**HURPORA**

About 12 km from Shopian Hurpura commands a beautiful scenic view. Hurpur is a beautiful small town. It is about 65 km away from Srinagar. Although these days this village is famous for its tasty potato production, there was a time when Hurpur's fame and glory had spread throughout the Mughal Empire. Mughal emperors Akbar, Shah Jehan, Jahangir, Aurangzeb, Farukhsiyar and Dara Shikoh used to stay in this village during their visits to the valley. Mughals also built a glorious inn at Hurpura, which remained in a good condition for a long period after them. Travelers used to take rest in this inn. The standing ruins of the inn are still seen in the upper part of the village. History records that Sura Varman one of the most famous ministers of Avantivarman who credited with many glorious foundations, also built a small town at the then known Salt route on the foothills of Panchal and named it as Surapura. The town happened to be the last station on the route from valley side, so the minister is recorded to have also raised a heavy watch tower at this town Sultan Zain-ul-Abidin is learnt to have brought many labourers from Banbergali Rajouri in his period and established their colony at Surapura. He is said to have named the town as "diamond city" why Hurpura was also known as diamond city is not known yet. There are also no records of any diamond to have been found at the site. Besides changing the name of the town, the king is also known to have built a gateway at Hurpura and dedicated it in the name of Allah by naming it as "Illahi-Darwaza." During the Mughal period Hurpura emerged as a major town which welcomed the royal caravans to this glorious valley. It also served as the base camp for the travelers on the Pir Panchal route. Its significance continued up to the Dogra period or till the construction of Jhelum valley route. Hirpore is unique in scenic and climatic beauty and also get a taste of intellectual nature, i.e. more interested in its heritage beauty. The Hirpore is fully decorated with forests, apple orchards and glorious heritage properties attracted tourists of different tastes.

**HIRPORA WILDLIFE SANCTUARY**

(3330'-33°42'N Latitude and 7433'-74°3'E Longitude) falls in the Shopian District of the Kashmir Valley and is one of the only two protected areas in Jammu and Kashmir, where you can get to see the largest wild goat of the world-the Markhor (*Capra falconeri*). Besides, the sanctuary is home to around 20 other species of mammals and 125 species of birds, which have been found in and around Hirpore Wildlife Sanctuary based on the information available as a result of periodic surveys and bird watching trips over last 10 years. Hirpore wildlife sanctuary has a unique geographical identity, climate, vegetation etc. and may delights to offer to the wildlife enthusiasts and bird watchers.

**DABJIN**

An encamping ground on the Pir Panjal route, between Aliabad Sarai and Hirpur; it lies on the left bank of the Rembiara, about 3 miles west of Hirpur. There is no village or any shelter near it, and neither coolies nor supplies are procurable. The Dabjin is another famous health resort on road side of Mughal Road. The potential spot gives pleasant charming with vast hilly area include with lush green forest. In the centre of the spot there is a small spring where local people coming for bathing who have many diseases such as itching, scabies etc. Dabjin is a famous health resort and rich in medical tourism attracts large number of local tourists from time immemorial.

**SUKHA SARIA**

Above the village Hurpura the Mughal Route would cross the Sukha Nallah and takes left bank of this stream, crossing over the Panchal valley the route would take you to Dubijan. Where from it would pass from the zigzag paths of Panchal Mountain. The inn is situated at the bank of this Nallah called Sukha Saria. The history regarding this inn reminds us of Afghan period, it was super imposed over a Mughal construction by an Afghan administrator, when the later ruled Kashmir. This Saria is an open meadow and gives a glorious look to the travelers. This Sarai has also followed the same plan and style which the other Sarais of the route exhibit. The remains of an old inn, known as Sukha-Sarai (inn) offers tourists a serene picturesque to explorers, researchers etc to a large extent.

**ALIABAD SARAI**

A halting place to the north of the pir panjal pass. The Sarai, which offers accommodation to the travelers, stands alone in wild and dreary solitude, and during the wintry portion of the year is buried in snow and unvisited. It is situated about half-way up the side of a lofty range of mountains, which forms one side of a long, deep, and narrow valley, traversed by a torrent which flows from the Nandan Sar. Aliabad Sarai is situated on the left bank of Nallah Panchal below the feet's of Ratinpeer Mountain. The records suggest that earlier the Sarai was built by Mughal emperor Jalal-ud-Din Mohammad Akbar. He had built it for the conveyance of the travelers who used to arrive to Kashmir via Pir Panchal route. However, records further suggest that the Sarai was later on restored by another king Shahjahan who named it after his faithful governor Ali Mardan Khan; as such the Sarai came to be known as Aliabad Sarai. This inn stood at a place where the day's journey usually ended and a traveler spend his night at this Sarai during the Mughal period. The monumental heritage site presents glamorous look of Mughal architectural style may attract large number of tourists.

**PIR PANJAL**

A pass lying over the Panjal range, which is crossed by the old Mughal road between Poshiana and Aliabad Sarai. Europeans, however, frequently use the name to denote the whole chain of mountains enclosing the valley of Kashmir on the south-west side. The highest peaks in this part of the range exceed 15,000 feet, and their summits are generally covered with snow. The summit of the Pir Panjal pass, which has an elevation of 11,400 feet, is distant about 6 miles east of Poshiana and 5 miles south-west of Aliabad Sarai. The ascent of the pass on the west side, although steep, is tolerably smooth and wide; on the east side it lies over a sloping grassy plain, about half a mile wide; on the west side of the pass there are two stone huts, called Chedikana and Rasikund, built in the time of the Mughals as refuges for travelers during storms, and an octagonal stone tower, loop-holed on all sides, crowns the summit. Near this tower are some huts, one of which is occupied by a fakir during the summer months, and hard by is the grave of a Mohamedan fakir, named Pir Panjal, from whom the pass takes its name. The Pir Panjal pass is closed for about three and a half months, and opens for foot passengers about the middle of April, and if the weather be fine for horses, about a month later. The highest peak of the Mughal Road area covered with snow during most of the months of the year, making it exhilarative to the tourists.

**PEER GALI**

Mughal route drives through a vast sloping meadow called daldal lower and upper daldal and takes on the top of Pir Panjal, called peergali. From here we can enjoy and see Poonch area. Peergali serves as an entrance gate. It carries the holy shrine of Sheikh Karam Sahib (RA). The shrine houses the grave of sofi saint, who is said, was a born Hindu and embraced Islam at the hands of a Sayyid. The Urs at this Zairat is celebrated every year in harvest season and participants include the people of far-flung areas of Poonch District. At peergali, Mughal route takes a sloping turn. The vast spread meadows and pastures and the holy shrine attracts visitors of both peace lovers and nature lovers.

**CHITTA PANI**

A stream which rises on the western slopes of the Pansal range, at the foot of the pass of that name, north-west of Aliabad Sarai; after its junction with the Nuricham stream near the village of Bifliage, the united waters form the Suran river, which flows in a north-westerly direction towards Punch. The bed of this stream is very stony; after heavy rain it becomes an impetuous torrent. Between Baramgalla and Poshiana the road into Kashmir by the Pir Panjal route runs along the bed of the stream, which here lies between lofty and precipitous mountains. The panorama of the Chitta Pani stream is very famous in the Mughal Road area is a unique tourist magnet.

**POSHIANA**

A village situated about 48.28 km (30 miles) north-east of Rajouri, on the west side of the Pir Panjal pass; it lies on the side of a narrow glen high above the right bank of the Chitta Pani stream. The village lies considerably beneath the limit of forest, but there are very few trees near it. The green slope on the side of which it is built, and whose summit is 700 or 800 feet above it, affords a pasturage for sheep and goats; but the extend of cultivation is nearly confined to turnips; and

poshiana owes its existence entirely to its situation on the highway to Kashmir, on which, or on the plains, it is dependent for supplies of grain. There is an old and ruined Sarai a little above the left of the road, and within a few hundred yards of the village. Poshiana is deserted by its inhabitants during the winter months, when it is enveloped in snow. This village does not afford much accommodation for the traveler, there are some usual pitch tents on the flat roofs of the houses and some cottages built of wood and plaster and negligible percentage of packa houses. Some space might perhaps be found above the west side of the village. In summer, supplies are procurable and rich grass is plentiful, but water is scarce. From Poshiana two paths lead over the Pansal range into Kashmir, viz., the high road which crosses the Pir Panjal pass, and a foot-path by the Chitta Pani pass; this later route is impracticable for laden animals. Poshiana has a huge potential for rural tourism i.e. culture, traditional, lifestyle, cuisine etc. will attract the large number of tourists who wants to taste the rural life.

#### **GIRGAN DHOK**

It is bewitching valley of seven lakes- Sukhsar, Neelsar, Bhagsar, Katorasar, Kaldachnisar and Nandansar is a worth visiting site for its exceptional natural beauty. This valley is located about 70 kms from Poonch town. This area is also important from trekking point of view. Neel Sar, Nandan Sar, Katora Sar are among the fascinating high altitude lakes. Several trekking expeditions used to come in this valley and trek to these lakes. Its scenic beauty and serene lakes lured tourists from all parts of the globe.

#### **NOORI CHAMB**

The delightful site near Behram Galla is famous for its beautiful waterfall and splendid beauty. A famous water fall in the Poonch District (Mughal road) also connected with the Mughal Emperors is located in the north east of Behram Gala. This water fall is another scenic spot which has tremendous tourist potential. The fall of the stream gives rise to dense clouds of water vapours which engulfs the area and spread all over. It is claimed that in the past there used to be a 90 metre fall from the elevated mound. With the passage of time the stream cut into the rock and the mound and the height of the fall became much shorter. It is said that Noor Jehan, the queen of Jahangir used to stay here and take bath in the waters of the fall, while on the way to Kashmir. She had a mirror besides the fall to have her make-up after the bath. So, besides several tourist spots the mention of Noori-Chamb is very important. It is basically a brilliant water-fall where Noor Jahan, the wife of Emperor Jahangir learnt to have built a Sheesh-Mahal for herself; however, no remains of any such mahal (palace) are visible at the site, except for the impressions of a mirror on a standing rock. It has been the most loving place of this queen as such it is named after her name and called the Noori Chamb. Historians believe that Jahangir stayed there for at least 13 times. The delightful and beautiful water fall warrants exploitation from a tourist's point of view.

#### **BUFFLIAZ**

From chandi marh the route leads to Buffliaz, another beautiful hilly spot situated on the foothill of Peer Rattan range, 39 kms east of Poonch town. It is picturesque situated on the side of the hill, about 400 feet above the right bank of the Suran River. A legend states that it was here that the Alexander the great lost his white colour horse called Bafill. The place adopted the name and got pronounced as Buffliaz and crosses over to Dera Gali Pass and then slopes down to Thanamandi. The beautiful hill spot as a powerful magnet for tourists.

### **RESEARCH FINDINGS**

The present study has found some issues responsible for the tardy growth of tourist attraction in the area. These are listed as under:

#### **CONSERVATIONISTS APPROACH**

The road is being constructed through an eco-sensitive zone. Conservationists believe that Mughal road will fragment the habitat of the highly-endangered Markhor goat. Road construction activity in itself would result in cutting of many trees, which in turn would have a cascading effect on the associated biota. Besides, traffic on the road may cause death of many animals that utilize verge habitats or try to cross the road.

#### **HERITAGE RESOURCE CONSERVATION CONCERN**

Most of the monuments located on this route are still unpreserved and unprotected, while few of which been declared as protected ones, are yet get any basic conservation infrastructure. The construction of the route is very important but preserving its historical identity is more important. There are certain people who fear that the construction of this route may disturb the history of this route and damage its monumental glory.

#### **LACK OF VISITORS AMENITIES AND SERVICES**

Visitor amenities and services exist both on-site as well as offsite. On site amenities and services include: Drinking water, Toilets, Public telephones, Postal services, Emergency medical services, and Garbage removal and disposal. Off-site amenities include: Accommodation of various kinds, Restaurants, Retail activities, Services such as car repair, email, Recreational facilities, Entertainment possibilities, Health-care, etc.

#### **NO SEPARATE TOURISM DEVELOPMENT AUTHORITY**

The half of the area comes under the Poonch district and the another half under the Shopian district, the division of the area may have hindered the growth of providing the co-operation and co-ordination for the promotion of Mughal road tourism.

#### **POOR PUBLICITY**

Lack of publicity is another factor which may be responsible for the growth of tourism in Mughal Road area. Mughal road introduces a new tourist destination to complete the product line, but the publicity of this destination shall not get coverage in any travel and hospitality related newsletters, magazines or journals.

#### **LACK OF MARKET COMPETITION**

Exploration of Mughal road tourist area is becoming a new entrant in tourism, so it has a cut throat competition with other tourist destinations within the state and outside the state to attract large number of tourists both domestic and international.

#### **ABSENCE OF MUGHAL ROAD ON THE TOURIST MAP**

Although the rich treasures scattered throughout the Mughal road area has not been brought on the tourist map of the state. The location on the tourist map itself becomes an attraction to both domestic and foreign tourists.

#### **IGNORANCE OF THE PEOPLE**

The Mughal Road as an alternative highway linking Kashmir to Jammu saving people from disgusting halts and unending waits when slight drizzles result in erosions and landslides on various places enroute the present National highway. The road will benefit the specific areas i.e. Rajouri, Poonch and Shopian which remained cut of direct contact with valley for last 57 years. Mughal route is merely a surface communication.

### **SUGGESTIONS**

In the present research paper some of the scholarly suggestions which may go a long way in making tourism in Mughal Road area economically viable, socially acceptable and ecologically sustainable are as follows:

#### **Preservation of Environment**

Only after the thorough study of environmental impact of tourism projects will be permitted in ecologically sensitive zones of Mughal Road. Additional responsibility will be fixed on investors to ensure that norms in regards to disposal of solid waste, Sewerage and silage, plantation of trees, drawing of ground water and observing architectural guidelines are adhered to. While clearing projects it will be ensured that more greenery is provided in the selected areas without hampering traditional assets of the local population.

#### **Protection and Preservation of Cultural Heritage Sites**

The various tourist spots scattered all along this historic highway awaits the attention of the concerned authorities. Several of the constructions have preserved their courtyards and other ornamentation's and few while losing their structural form have carried only their ruins. The steps are needed to be taken up for the immediate restoration of the heritage sites of this historic route.

#### **Arrange for Adequate Accommodation**

The tourists visiting the state of J&K is not asking five star hotels. What they are asking a place which is homely. The concerned tourism authority in the area should identify service providers, get the house holders registered in Mughal road area i.e. in enroute villages who would be owners of one, two or even three bed rooms

and convert them into living 'modules'. Construction of Huts, Rest-houses, setting of Tourist Village and Camping Sites etc. is a welcome step to provide adequate accommodation in the area and is eco-friendly, just as Department of Forest done in Sukh Sarai area and Top peer Ki Gali.

#### **Publicity and Information**

The State Government should make separate Tourism Development Authority for the Promotion of Mughal Road Tourism. That will be provided sufficient funds by the Government to bring out informative Brochures, films, slides, maps, etc. The authority will also open information counters at important places i.e. Railway station Jammu, Srinagar, Srinagar International Airport and places of tourist interest in phases.

#### **Mughal Road on the Tourist Map**

For commoners it is merely a base route and unfortunately till it is not in the checklist of tourist itinerary, so it hindered the growth and development of tourism in the area. Therefore, special attention shall deal towards the concerned destination on the basis of priority being on the checklist of tourism document.

#### **Public participation**

A mass awareness programme about the benefits of tourism will be launched by the State Government. In addition, local groups will be encouraged to act as information disseminating agencies in hilly areas of Mughal road and to help in spreading localized tourism. Similarly, Gram Panchayats and the local people will be asked to provide suitable hoardings, literature, information and guide services at the site.

#### **Development of a New Tourist Centre**

Tourism at present in Jammu and Kashmir is concentrated only in a few traditional centers visibly Phalgam, Gulmarg, Sonamarg, and Dal Lake etc. These centres have had their due share of development and therefore, the entire tourist traffic has been flocking to these few centres. To develop untapped tourist potential of Mughal road area as a new tourist centre with a careful consideration of special features of the area and its available infrastructure in order to maintain a sustained growth of traffic.

#### **Adventure Tourism**

The Mughal road has huge adventure tourism potential. There is a need for creating facilities for adventure tourism in the Mughal road area, which are economical and well within the reach of all classes of tourists. There is a need for establishing trekking routes and to identify places for water sports. The areas of mountaineering, wild-life and winter sports need to be clearly identified.

## **CONCLUSION**

Mughal Road area has enormous resource potential for tourism. Its colourful history, rich heritage, variegated landscape, diverse ethnic stock, lush green forests, variable wildlife, snow-covered peaks, giant glaciers, high altitudes, adventure treks, perennial streams, gushing springs, invigorating climate, pollution free rural surroundings and strategic location provide everything that a tourist may look for to pass his holidays. The enormous evergreen, deciduous vegetation and alpine pastures enhance the beauty of the the area and they provide the basic raw materials for a healthy tourist industry. Instead of all these attractions, the lack of infrastructure slows down the pace of Mughal Road tourism development. The growth and development of any industry be it service or manufacturing, to a large extent is linked with government policies, cooperation and monitoring. The state government of Jammu and Kashmir is trying its best to explore the tourism resource potential of Mughal road. But without the support of major actors like locals, service providers, training centres, educational centres, NGO's of the region it will be difficult to bring this aim to the grounds of reality.

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## GENERAL ASSESSMENT OF MGNREGA IN HIMACHAL PRADESH: A STUDY OF MANDI DISTRICT

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**ABSTRACT**

*There are certainly numerous harms in adopting the biological norms come within reach of the study of the problem of poverty. At the outset, nutritional requirements vary according to levels and patterns of living and dietary habits. Besides variations at individual level, these also vary due to geographic and climatic seasons. Once more, within each region and climatic zone, energy prerequisites differ due to age, sex and type of employment, secondly, the translation of minimum nutritional needs into minimum food requirements depend on the choice of food items and thirdly, it is very complicated to satisfy minimum requirements for non-food items. In view of these problems, one may agree with martin assertion that almost every procedure in the subsistence level definition of poverty can be reasonably challenged.*

**KEYWORDS**

impact of MGNREGA, rural upliftment, livelihood security, effectual implementation.

**INTRODUCTION**

Poverty and unemployment have been the bane of India since long. Their reduction has been one of the major goals of India's development planning since the beginning of the planning era in 1951-52 and the planning process has been sensitive to the needs of rural poor. Accordingly, the government of India has launched various programmes from time to time aimed at alleviation of poverty and unemployment, and creating adequate livelihood opportunities for the poor through provision of employment and public services. Poverty and unemployment are interrelated problems and have a two-way relation, that is, one is both the cause and effect of the other. Poverty in India is not merely an economic phenomenon but a social one as well. While poverty is outcome of multiple deprivations, its measurement has largely dealt with economic deprivation (income consumption expenditure). The recent body of literature highlights the multidimensionality of poverty and also the heterogeneity of the poor. It also highlights the need to go beyond income poverty by using indices of human development and overall welfare. Since the determinants of poverty and unemployment are interrelated, a comprehensive approach is needed to address these two problems.

Poverty alleviation schemes and programmes have been in place for a long time now. The programmes and schemes have been modified consolidated, expanded and improved over time. The targeted programmes fall into four broad categories (a) self-employment programmes; (b) wage employment programmes; (c) public distribution system (PDS); and (d) other social welfare oriented programmes, such as National Social Assistance Programmes (NSAP), the Aam Admi Bima Yojana (AABY) and the Rashtriya Swasthya Bima Yojna (RSBY).

There are numerous Centrally Sponsored Schemes (CSS) belonging to all the four categories. The CSS are designed by the centre, administered by the Ministry of Rural Development, but implemented by the State Governments, which generally contribute 25 per cent of their cost. In this direction MAHATMA GANDHI NATIONAL RURAL EMPLOYMENT GUARANTEE ACT (MGNREGA) is a praiseful step of the Government of India to provide employment in rural areas who need and seek employment under the Programme. In addition, some State Governments have their own schemes. The multiplicity of the programmes is advocated on the grounds of multidimensionality of poverty and regional variations in the efficacy of the delivery system. There is also a recognition that it is problematic to close a scheme even if it is cost ineffective because of adverse publicity and political fallout associated with the closure.<sup>1</sup> Through this paper an attempt has been made to evaluate the general assessment of MGNREGA in four blocks namely Balh, Drang, Gohar and Sundernagar of Mandi district of Himachal Pradesh through various heads. For this purpose a sample of 616 respondents has been selected which comprises 480 Programme Beneficiaries (PB), 80 Panchayat Office Bearers (POBs) and 56 Programme Implementation Officials (PIOs).

**OPINION REGARDING SUFFICIENCY OF MAIN PROVISIONS OF MGNREGA**

MGNREGA aims at providing 100 days of wage employment to every rural household whose adult members volunteers to do unskilled manual work. Except this, there are some other provision under MGNREGA such as, provision of working facilities to the workers at the worksites, unemployment allowance, accidental allowance and transparency etc. Hence, it is imperative to know that, whether these provision are sufficient or not. In this respect, data has been obtained from the sample respondents, Programme Beneficiaries, Panchayat Office Bearers and Programme Implementation Officials. The data so collected has been illustrated in table 1.1

**TABLE 1.1: RESPONSES OF RESPONDENTS REGARDING SUFFICIENCY OF MAIN PROVISIONS OF MGNREGA**

Responses	Wage Rate	100 Days of employment	Working facilities	Unemployment allowance	Transparency	Right MGNREGA	Under	Accident Allowance
Sufficient	41 (8.54)	79 (16.45)	137 (28.54)	128 (26.66)	141 (29.37)	124 (25.83)		58 (12.08)
Not Sufficient	439 (91.45)	401 (83.54)	343 (71.45)	352 (73.83)	339 (70.62)	356 (74.16)		422 (87.91)
Can't Say	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)		0 (0.00)
Total	480 (100.00)	480 (100.00)	480 (100.00)	480 (100.00)	480 (100.00)	480 (100.00)		480 (100.00)

FIG. 1.1: RESPONSES OF RESPONDENTS REGARDING SUFFICIENCY OF MAIN PROVISIONS OF MGNREGA

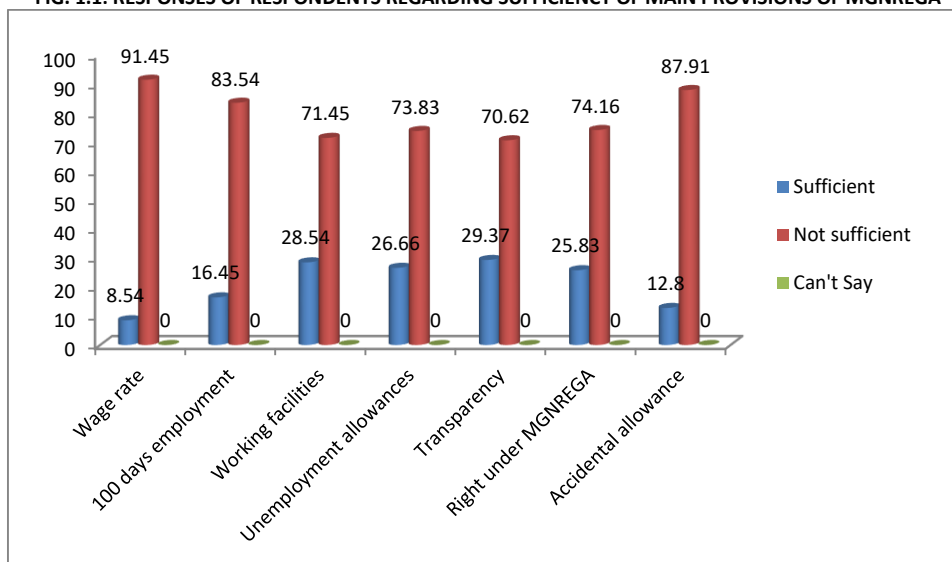


Table 1.1 reveals that, the majority of respondents were of the opinion that, above mentioned provisions were not adequate. Whereas 91.45 per cent of the respondents reported that, wage rate is not sufficient, while 83.54 per cent of respondents were not satisfied with 100 days of employment, 71.45 per cent of respondents were not satisfied with working facilities, 73.33 per cent of respondents were not satisfied with unemployment allowance, 70.62 per cent of respondents were not satisfied with transparency, 74.16 per cent of respondents were not satisfied with the right under MGNREGA and 87.91 per cent of respondents reported that, accidental allowance is insufficient.

The analysis of the above data leads to the conclusion that, though, MGNREGA provide wage employment and other facilities to rural people. But people did not find these provisions sufficient. With regard to the 100 days of guaranteed employment, it was found that, respondents want more days for employment instead of 100 days under MGNREGA.

**RESPONSES REGARDING THE SUCCESS OF MGNREGA**

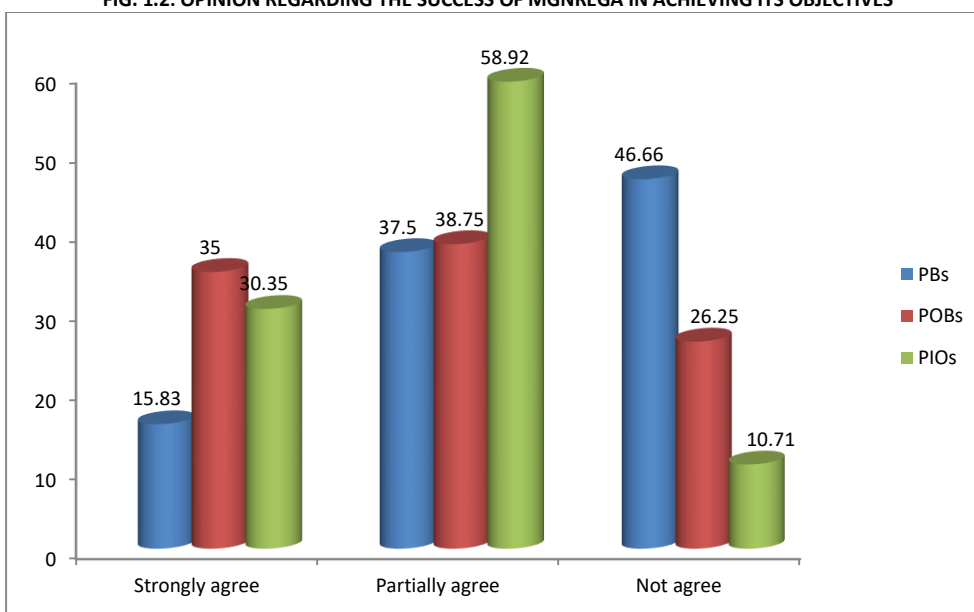
As earlier mentioned that, MGNREGA is a new programme to provide wage employment to the rural poor who are willing to do unskilled manual work. At this juncture, an attempt has been made to know about the success of MGNREGA and data in this respect has been collected and reflected in table 1.2.

The data presented in table 1.2 denotes that, out of total 616 respondents, majority of respondents were either partially agreed (39.61 per cent) or not agreed (40.74 per cent) with the success of MGNREGA in achieving its objective. On the other hand, 19.64 per cent of respondents were of the opinion that, they were strongly agreed regarding the success of MGNREGA in achieving its objectives in the state.

TABLE 1.2: OPINION REGARDING THE SUCCESS OF MGNREGA IN ACHIEVING ITS OBJECTIVES

Sr. No.	Respondents	Grand Total			
		PBs	POBs	PIOs	Total
1	Strongly Agree	76 (15.83)	28 (35.00)	17 (30.35)	121 (19.64)
2	Partially Agree	180 (37.5)	31 (38.75)	33 (58.92)	244 (39.61)
3	Not Agree	244 (46.66)	21 (26.25)	6 (10.71)	251 (40.74)
	Total	480 (100.00)	80 (100.00)	56 (100.00)	616 (100.00)

FIG. 1.2: OPINION REGARDING THE SUCCESS OF MGNREGA IN ACHIEVING ITS OBJECTIVES



Data depicted in above table denotes that, in majority of cases, 40.74 per cent of respondents were of the opinion that, they were not agreed regarding the success of MGNREGA in achieving its objectives. However, 46.66 per cent Programme Beneficiaries, 26.25 per cent of Panchayat Office Bearers and 10.71 per cent of Programme Implementation Official were of the opinion that, they were not agreed regarding the success of the programme. Whereas, 37.5 per cent of Programme Beneficiaries, 38.75 per cent of Panchayat Office Bearers and 58.92 per cent of Programme Implementation Officials were partially agreed. While, 15.83 per cent of Programme Beneficiaries, 35.00 per cent of Panchayat Office Bearers and 30.35 per cent of Programme Implementation Officials were strongly agreed regarding the success of MGNREGA in achieving its objectives.

From the analysis of above data, it can be inferred that, different category of respondents has given their partial agreement to the successfulness of the programme in achieving its objectives. It can be concluded that, MGNREGA has partially successful in achieving its objectives in selected blocks.

**IMPACT OF MGNREGA ON PROGRAMME BENEFICIARIES**

The main objective of MGNREGA is to provide wage employment opportunities to the rural poor. For achieving this objective, Government has been spending a large amount of money on various aspects under MGNREGA. Here, an attempt has been made to assess the social and economic impact of MGNREGA on the programme beneficiaries. Under MGNREGA, the impact on programme beneficiaries has been assessed under two broad headings such as, economic impact of MGNREGA on programme beneficiaries and social impact of MGNREGA on programme beneficiaries.

**OPINION REGARDING ECONOMIC IMPACT OF MGNREGA ON PROGRAMME BENEFICIARIES**

Here, an attempt has been made to know the opinion regarding the economic impact of MGNREGA. In this regard, data has been collected from the programme beneficiaries and reflected in table 1.3.

**TABLE 1.3: ECONOMIC IMPACT OF MGNREGA ON PROGRAMME BENEFICIARIES**

Sr. No.	Statement	Responses			
		To a large Extent	To a Marginal Extent	Not at all	Total
1	Increase in Income	121 (25.20)	243 (50.62)	116 (24.16)	480 (100.00)
2	Increase in disposable Income	101 (21.04)	216 (45.00)	163 (33.95)	480 (100.00)
3	Decrease in debtbness	59 (12.29)	199 (41.45)	222 (46.25)	480 (100.00)
4	Increase income and provides employment on a sustainable basis	59 (12.29)	198 (41.25)	223 (46.45)	480 (100.00)
5	Helps in increasing saving	48 (10.00)	194 (40.41)	238 (49.58)	480 (100.00)
6	Helps in Improving standard of living	79 (16.45)	235 (48.95)	166 (34.58)	480 (100.00)

**FIG. 1.3: ECONOMIC IMPACT OF MGNREGA ON PROGRAMME BENEFICIARIES**

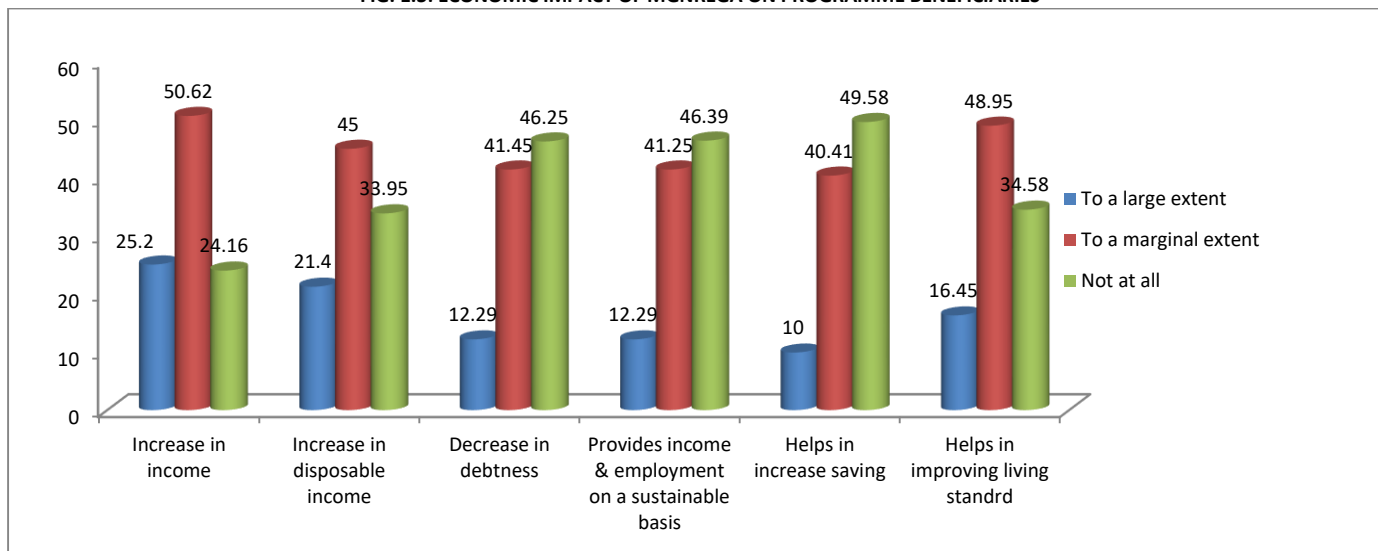


Table 1.3 reveals that, out of total sample programme beneficiaries, in majority of cases, 50.62 per cent of the respondents stated that, MGNREGA has increased the income upto a marginal extent, however, 25.20 per cent reported that, it has increased the income level 'up to a large extent'. And 24.16 per cent recognized that, it has not increased the income level. With regard to the 2nd statement, 21.04 per cent of respondents were of the opinion that, MGNREGA has increased disposable income upto a large extent, 45.00 per cent recognized 'up to a marginal extent' and 33.95 per cent of respondents stated that, MGNREGA has not increased the disposable income.

In respect of the third statement, 12.29 per cent of respondents recognized that, MGNREGA has decreased the debtbness 'up to a large extent', 41.45 per cent of respondents stated 'up to a marginal extent' and 46.25 per cent of respondents recognized that, MGNREGA has not decreased the debtbness. With regard to the fourth statements, 12.29 per cent of respondents were of the opinion that, MGNREGA provides income and employment on a sustainable basis 'up to a large extent', whereas 41.25 stated 'up to a marginal extent' and 46.45 per cent of respondents recognized that, MGNREGA has not provided income and employment on a sustainable basis. In respect of fifth statement, 10.00 per cent of sample respondents recognized that, MGNREGA helps in increasing the saving 'up to a large extent', 40.41 per cent reported 'up to a marginal extent'. However, 49.58 per cent of sample respondents were of the opinion that, MGNREGA is not increasing the saving. In respect of sixth statement, 16.45 per cent of sample respondents were of the opinion that, MGNREGA is improving the standard of living 'up to a large extent', 48.95 reported 'up to a marginal extent' and 34.58 per cent recognized that, MGNREGA is not improving the standard of living in rural areas.

Hence, on the bases of above analysis, it can be inferred that, the impact of MGNREGA on the programme beneficiaries reveals a mixed trend. Out of total six statements reflected in table 6.48, the impact of MGNREGA on the increase in income of the rural households was found satisfactory, whereas with regard to the second and sixth statement, the impact of MGNREGA was found marginal. The impact of the programme was not found satisfactory with regard to the rest of the statements. Thus, it can be concluded that, majority of respondents were not agreed that, MGNREGA has helped in decreasing the debtbness, increasing saving and moreover improving income and employment on a sustainable basis.

**OPINION REGARDING THE SOCIAL IMPACT OF MGNREGA ON PROGRAMME BENEFICIARIES**

The success of any rural development programme is depended moreover, if it brought improvement in the socio-cultural conditions of the rural households. Hence, it is important to know that, impact of MGNREGA on the socio-cultural conditions of its beneficiaries. In this context, the responses of the programme beneficiaries has been obtained on six statements for the evaluation of social impact of MGNREGA on programme beneficiaries, such as, 'The programme helps in enhancing the status in the society', 'It helps in brining equality in the society', 'It helps in bringing social justice, 'It helps in enhancing educational level', 'It helps in solving unemployment problem' and It helps in social transformation. The data so obtained from the programme beneficiaries has been reflected in table 1.4.

**TABLE 1.4: SOCIAL IMPACT OF MGNREGA ON PROGRAMME BENEFICIARIES**

Sr. No.	Statements	Responses			
		To a large Extent	To a Marginal Extent	Not at all	Total
1	It helps in enhancing the status in society	56 (11.66)	223 (46.45)	201 (41.87)	480 (100.00)
2	It Leads towards equality in society	83 (17.29)	221 (46.04)	176 (36.66)	480 (100.00)
3	It helps in bringing social justice	84 (17.5)	209 (43.54)	187 (38.95)	480 (100)
4	It helps in enhancing the education level	93 (19.37)	231 (48.12)	156 (32.5)	480 (100)
5	It helps in solving the beneficiaries on employment problem	101 (21.04)	223 (46.45)	156 (32.5)	480 (100.00)
6	It leads towards social Transformation	108 (22.5)	250 (52.08)	122 (25.41)	480 (100)

Table 1.4 denotes that, out of total sample programme beneficiaries, 11.66 per cent of respondents reported in respect of the first statement that, MGNREGA helps in enhancing the status in society 'up to a large extent', however, 46.45 per cent of respondents recognized it 'up to a marginal extent' and 41.87 per cent of respondents were of the opinion that, the programme is not helping in enhancing the status in the society. In respect of second statement, 17.29 per cent of programme beneficiaries reported that, MGNREGA leads towards the equality in society 'up to a large extent', whereas, 46.04 per cent reported it 'upto a marginal extent' and 36.66 per cent were of the opinion that, MGNREGA is not leading towards equality in the society.

In respect of third statement, 17.5 per cent of sample respondents were of the views that, MGNREGA helps in bringing social justice 'up to a large extent', whereas 43.54 per cent of respondents recognized it 'up to a marginal extent' and 38.95 per cent of respondents recognized that, this programme is not helping in bringing social justice.

In context of fourth statement, 19.37 per cent of sample respondents were of the opinion that, MGNREGA is enhancing the educational level 'up to a large extent', 48.12 recognized it 'upto a marginal extent' and 32.5 per cent stated that, this programme is not helping in enhancing the educational level. With regard to the fifth statement, 21.04 per cent of respondents were of the views that, MGNREGA is helping to solve the unemployment problem of the beneficiaries 'upto a large extent', while, 46.45 per cent recognized it 'upto a marginal extent' and 32.5 per cent of respondents were of the opinion that, MGNREGA is not solving the unemployment problem of beneficiaries.

In addition to the sixth statement, 22.5 per cent of respondents recognized that, MGNREGA is leading towards social transformation 'up to a large extent', whereas 52.08 reported it 'upto a marginal extent' and 24.41 per cent of respondents were of the opinion that, this programme is not leading towards the social transformation. On the basis of above analysis, it can be inferred that, MGNREGA's impact on the socio-cultural conditions of the sample respondents was marginal. With regard to the MGNREGA's impact on enhancing the beneficiary's status in the society, it was found that, MGNREGA did not bring any type of improvement.

**CONCLUSION**

Different kind of facts have been come out to see after the general assessment of the MGNREGA. It can be inferred that, the programme affects the socio economic status and development of rural areas up to a marginal extent. MGNREGA, in its initial stage, has given marginal impetus to the rural poor in the state. If, it is implemented in the same strength as enshrined in the Act, it could prove itself a milestone to the rural people and rural area. At all, MGNREGA was partially successful in achieving its objectives in the selected blocks of Mandi district of Himachal Pradesh. Hence, government should initiate efforts to ensure effectual and proper implementation for the success of this programme.

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## A COMPREHENSIVE SURVEY ON THE EXPORT OF BOVINE MEAT IN INDIA

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## ABSTRACT

The ban on cow slaughter in India has created lots of controversy in the recent past. In this paper, we focus on the effect of these political and social disturbances on the export of bovine meat from India. The aftermath of the decline and the subsequent downfall of the bovine meat industry is also discussed and explored in depth. A major misconception is the notion that beef only refers to cows. A majority of the beef that is produced in India is the meat of the animal called Water Buffalo. According to the U.S. Department of Agriculture, buffalo meat is also categorised as beef. We have performed a comprehensive survey on the production, exportation and the challenges faced by the bovine meat export industry in India.

## KEYWORDS

beef, bovine, buffalo, carabeef, export.

## 1. INTRODUCTION

The bovine meat export industry has proven to be very profitable over the past decade in terms of foreign exchange and the employment of people especially in the rural areas. Our major motivation for this paper is the fact that a country wherein consumption of beef is a very sensitive issue is the leading global exporter of the same commodity. Buffalos in India, apart from producing milk, contribute heavily to the nation's economy in the form of buffalo meat. Hence, after the "White Revolution" we are now poised to achieve the "Pink Revolution". The volume of buffalo meat produced in the country increased from 5,57,000 tonnes in 2008 to 9,36,000 tonnes in 2011. This increase in the amount of carabeef produced in India is testimony to the fact that this is a booming industry. The domestic consumption is very limited when compared to that of other countries. However, there are many problems which are hindering the export of carabeef from India. The structure of the remaining paper is as follows: The literature survey of the beef industry in India is presented in section 2, Our findings and suggestions are presented in section 3, Section 3 contains the conclusion followed by the references.

## 2. LITERATURE SURVEY

## 2.1 BEEF INDUSTRY IN INDIA

Cow-Slaughter in India has traditionally been considered a taboo subject because of the religious beliefs of a majority of the Indian population. This dates back to Ancient India where cows were considered a sign of wealth. Since those times, this topic has been the central point for discussion in many discussions across many political tiers ranging from Panchayats and Gram Sabhas to heated Parliament debates. Post-Independence, numerous bills and resolutions were passed in the Parliament regarding the ban on cattle-slaughter. However, it is interesting to note that till date, there is no nation-wide rule regarding cattle-slaughter. The rules followed in the individual states will be discussed later in the paper. The slaughter of buffaloes is allowed in nearly all the states in India. Socially and politically also, there is not much stigma attached to the slaughter of buffaloes. Moreover, the consumption of bovine meat is very less when compared to the volumes of carabeef that are produced. This leads to a surplus of bovine meat which is then exported to other countries. In the year 2012, India produced a total of 3.643 million metric tons of beef out of which only 1.963 million metric tons were consumed domestically. The remaining 1.680 million metric tons of beef was exported to other countries. India's carabeef exports have increased dramatically since 2009. Between 2009 and 2015, the export of bovine meat grew more than four-folds to reach a net estimate of 4.78 billion dollars.

FIGURE 1: GRAPHICAL REPRESENTATION OF THE EXPORT PATTERNS OF BUFFALO MEAT SINCE 2009

## INDIAN EXPORTS OF BUFFALO MEAT

YEAR	QUANTITY lakh tonnes	VALUE \$ million
2009-10	4.90	1,163.54
2010-11	7.27	1,895.07
2011-12	9.85	2,842.83
2012-13	10.76	3,201.14
2013-14	14.50	4,350.38
2014-15	14.76	4,781.16
2015-16	13.14	4,068.64

Source: Ministry of Commerce

In terms of volume of bovine meat exported, the value nearly trebled from 0.6 million metric tonnes to 2 million metric tons in 2014. This surge in the export and the profitability of bovine meat ensured that beef became the most agriculture-based exported commodity replacing basmati rice in 2014. There are three major

reasons for the sudden increase in the export and the profitability of buffalo meat in India during the last 7 years. The major reason for this sudden boom was the fact that the global prices of bovine meat soared up during this time interval. The Food and Agriculture Organisation’s average bovine meat price index increased by 71 per cent.

FIGURE 2: GRAPH INDICATING THE FLUCTUATIONS OF THE PRICE OF BEEF



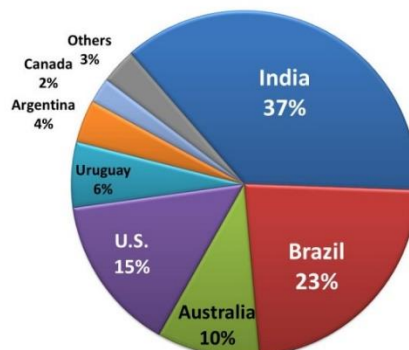
In some places like USA, this rise in the price of beef was further enhanced due to the shrinkage of their domestic cattle populations during this period. However, the general reason for the radical rise in the price of beef is attributed to the fact that from 2004 to 2009, the price of cattle feed increased whereas the price of milk and beef remained the same. The price of milk did not increase despite the increase in the cost of feed because of milk-dried milk imports. Hence, the breeders slaughtered the milked animals also apart from the regular slaughter animals. This resulted in a steady decline in the populations of cattle which further resulted in the drastic increase in the prices of beef from 2009-2014. The next major reason is that during this period, the demand for beef in China increased tremendously. It is observed that the per-capita consumption increased from 2011 to 2014. The prices of beef also increased substantially during this period. Rising prices and rising consumption occurred simultaneously during this time interval in China. Moreover, the Chinese cattle slaughter declined by a margin of 8 per cent from 2008 to 2013. As a direct consequence of the rising demands for beef and the incompetency of the local production, China relied heavily on the imported beef during this period. As shown in figure 4, the main benefactor from China’s conundrum during this period was India. If the volume of undocumented beef imported into China from Hong Kong and Vietnam is taken into account, then the total demand adds up to nearly 417,000 tons of beef in 2014. The beef imports were merely 29,000 tons back in 2009. Thus, China’s drastic increase in demand for beef had a global impact on the price of beef.

FIGURE 3: DRAMATIC INCREASE IN CHINESE BEEF IMPORTS



Source: GTIS, Global AgriTrends

FIGURE 4: COUNTRIES EXPORTING BEEF TO CHINA  
Global Beef Exports to the Greater China Region (China+Hong Kong+Vietnam)



Source: GTIS, Global AgriTrends

The third major reason is the competitiveness and the quality of the buffalo meat produced in India. Due to the fact that buffalo meat is inherently tougher than cow meat, it is used for industrial use rather than direct consumption. Some of the food products that consist buffalo meat are sausages, burgers and other processed food items. It is due to the very same reason that buffalo meat produced in India is cheap compared to the beef produced elsewhere. Beef exporters in India also have the geographic advantage of being closer to the heavy beef consuming markets in West Asia and Southeast Asia.

In 2011, Uttar Pradesh was the major producer of buffalo meat followed by Maharashtra and Andhra Pradesh. The population of buffalos has steadily increased in India. There has been 8.1 per cent increase in their population during 2003 to 2007.

A major problem which the beef industry faces in India is the presence of several illegal slaughterhouses. As of 2004, there were 3,600 legal and 30,000 illegal slaughterhouses across the country. As a matter of policy, meat exported from India should be sourced from abattoirs and meat processing plants registered with APEDA. However, most of the slaughterhouses do not have any accreditation from a recognised authority. This leads to questionable quality of the produced beef. When any commodity exported to a country is found to be below standard by the importing country, then the commodity will no longer be imported from that particular exporting country. Thus, these illegal slaughterhouses pose a serious threat to the entire beef export industry.

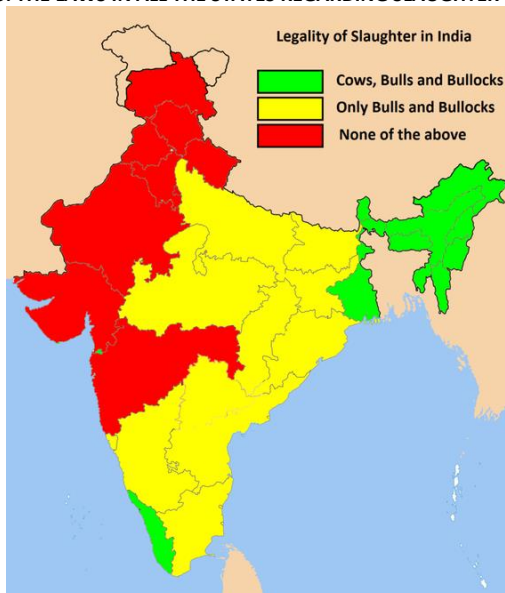
The major exporters of bovine meat from India are: Al-Kabeer Exports Private Ltd.; Arabian Exports Private Ltd.; M.K.R Frozen Food Exports Private Ltd.; P.M.I Industries Private Ltd.

2.2 DOMESTIC CONSUMPTION

Most of the beef consumed in India is produced in Municipal Slaughterhouses. The states in which the maximum consumption of buffalo meat takes place are: Kerala, Andhra Pradesh, Telangana, Uttar Pradesh, West Bengal and Meghalaya. According to the United States Department of Agriculture, in 2011 India produced 3.3 million tonnes of beef out of which 2 million tonnes were consumed locally and the rest were exported. By 2015, the production had increased to 4.2 million tonnes but the domestic consumption was just 2.2 million tonnes. This enabled the export of beef to become a profitable business. However, there is an overall

increase in the demand for buffalo meat in the country. This surge in the demand is more evident in some states than in other states. This is majorly due to the religious and social stigma attached to the consumption of beef in some states.

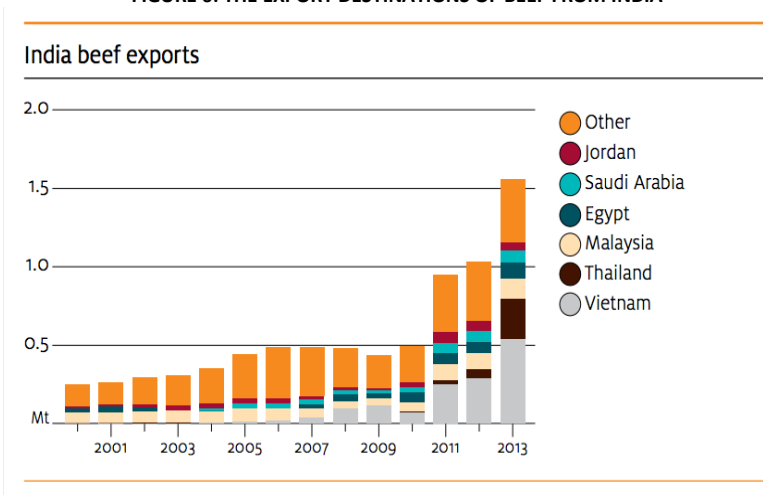
FIGURE 5: THE LAWS IN ALL THE STATES REGARDING SLAUGHTER OF CATTLE



**2.3 EXPORT DESTINATION**

According to the Centre for Monitoring Indian Economy, a majority of the buffalo meat exports from India end up in Asian countries. Nearly 80 per cent is imported by Asian countries whereas 15 per cent goes to Africa. Vietnam is the top importer of Indian buffalo meat followed by Thailand, Malaysia, Egypt, Saudi Arabia and other key markets. Around 40 per cent is exported to Vietnam. A major portion of this beef makes its way to China.

FIGURE 6: THE EXPORT DESTINATIONS OF BEEF FROM INDIA



Source : www.beefcentral.com

**3. FINDINGS AND SUGGESTIONS**

The export of bovine meat from India has proved to be very profitable over the last decade. However, the exports have been dropping since the beginning of 2015. There are many reasons for this decline in the exports. One of the major reasons is the confusion related to beef and bovine meat. In India, the trade and export of beef is banned but there are no restrictions on the trade and export of buffalo meat. This confusion is further enhanced by the fact that US Department Of Agriculture defines buffalo meat also as beef. Due to this conundrum, buffalo meat exporters are unnecessarily targeted by social and political activists. This has heavy repercussions on their business. The next major reason is the decline in the demand for beef by some of India’s main importers like Vietnam. The export to Vietnam dropped to Rs 2,305 crores from Rs 2,934 crores in a matter of 3 months. The next major concern is the report by the World Health Organisation that red meat consumption increases the risk of cancer. This will severely dent the export business of buffalo trade in India in the long-term. Apart from these reasons, it is getting increasingly difficult for the Indian exporters to compete with the Brazilian exporters. Vietnam is slowly moving towards the Brazilian exporters despite the freight expenses. Till 2014, there were only 1623 registered slaughterhouses in the country. This implies that an overwhelming majority of them are not registered and hence not administered by the municipal authorities. This is also a major threat to the Bovine meat export industry. The general public and the political activists must be educated about the difference between Beef and Bovine meat. The local authorities must take strict action against illegal slaughterhouses and uphold the laws pertaining to their state regarding the slaughter of animals.

**4. CONCLUSION**

The decline in the export of bovine meat from India must be looked into seriously. This is because the export of bovine meat generates nearly 30,000 crores annually. According to APEDA (Agricultural and Food Products Export Development Authority), it is the second largest product which is exported from the country after rice. The downfall of this industry will have heavy repercussions on the Indian economy.

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